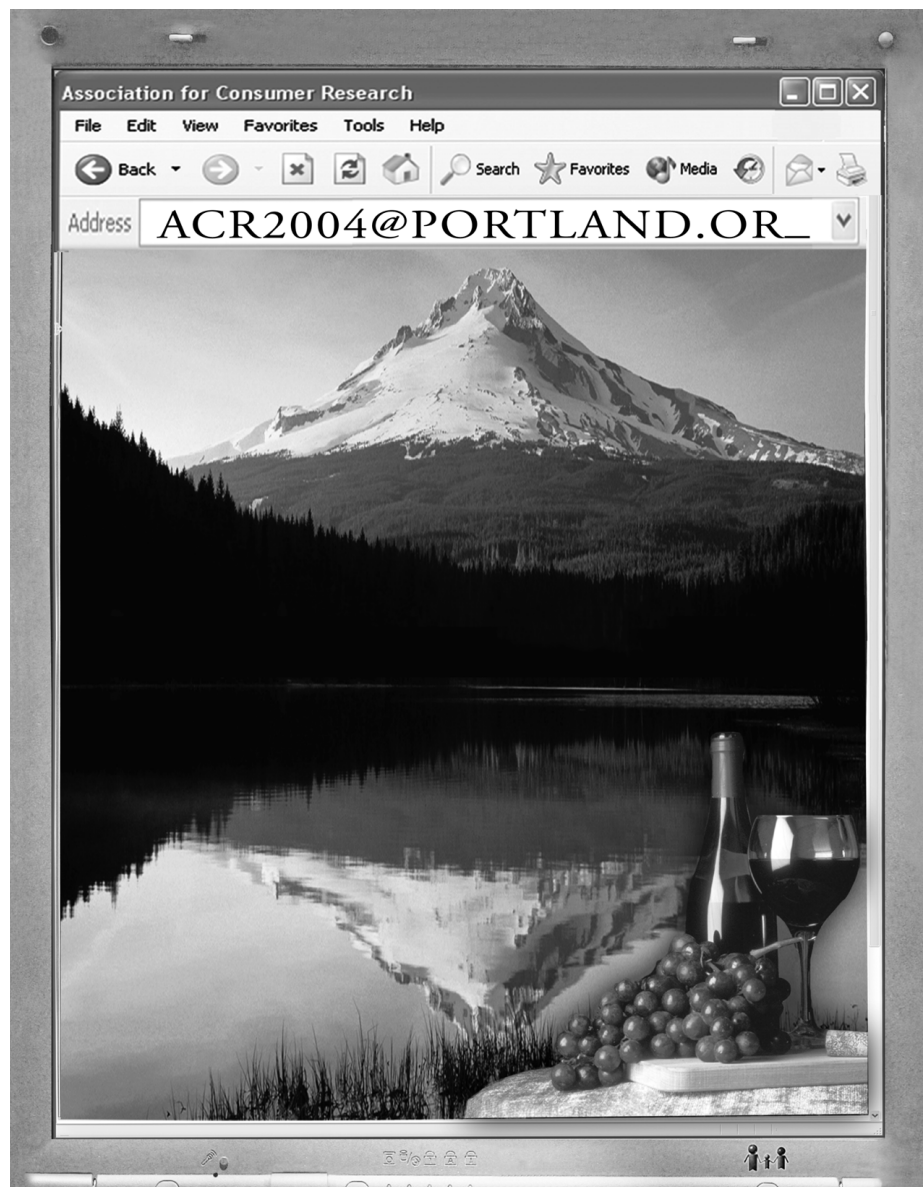


Advances in Consumer Research

Volume
XXXII



Editors
Geeta Menon
Akshay R. Rao

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Geeta Menon and Akshay R. Rao, Editors

Advances in Consumer Research, Volume 32

(Duluth, MN: Association for Consumer Research, 2005)

Preface

The thirty-second Annual Conference of the Association for Consumer Research (ACR) was held at the Portland Hilton & Tower in Portland, Oregon, October 7-10, 2004. This volume comprises reports of the presentations made at the conference at special sessions, competitive paper sessions, the working paper session, roundtables and on film.

The research presented at the conference and reported here is noteworthy for the richness and diversity of perspectives offered on the general issue of consumer behavior. Traditional theoretical approaches drawn from cognitive and social psychology were juxtaposed with newer approaches ranging from judgment and decision making to post-modern work. Substantively, the research addressed a broad swath of topics including political advertising, cross-cultural psychology, and the role of the Internet on commerce and on dating. There was something for everyone in virtually every time slot.

The quality of research presented at ACR continues to be remarkable. As the volume of submissions increases, the conference has tended to expand but the standards regarding selectivity continue to be very high. Fifty-five percent of 84 special session submissions, 46% of 297 competitive papers submissions, and 40% of 114 working papers were accepted for presentation. In addition, 80% of 21 submissions to the film festival were featured at the conference. We will be eternally grateful to our program committee and reviewers for their time and effort in providing valuable and timely commentary that adhered to the highest standards of scholarship and diplomacy. And, Chris Moorman and Linda Price are owed special thanks for putting together an interesting doctoral symposium that included an illustrious set of faculty representing a wide variety of interests and perspectives.

This year's conference featured several innovations. All submissions, review procedures, disposition information, conference registrations, program preparation and presentations, as well as other aspects of the conference that may have been opaque to attendees, were web-based. While several people contributed to making this process work smoothly, the one person who executed all our never-ending requests for more and better procedures and information with grace, aplomb and good cheer was Aleksey Cherfas, a graduate student at the University of Minnesota, Duluth. Without Alex, we would have been completely lost. ACR owes him a tremendous debt of gratitude for having helped bring the conference into the 21st century.

We were also blessed by the munificence of several generous donors. Custom Research Gfk, the General Mills Corporation, the Marketing Science Institute, Portland State University, and the University of Illinois provided generous monetary support that allowed us to host a Newcomers' dessert reception, a wine and beer tasting reception in conjunction with the working paper poster session, a reception to honor Professor Kent Monroe of the University of Illinois on his retirement, wonderful breakfast everyday, and a farewell champagne brunch on the last day. We are grateful to our donors for their generosity.

There are innumerable other people who helped make this conference possible, but none was more central to its success than the tireless Kathy Brown, who managed the liaison with the hotel with a level of competence that was exceeded only by her wit. It is therefore with profound sadness that we report that Kathy was killed in a car accident in December. It is to her memory that we dedicate this volume.

Finally, we would like to acknowledge Debbie MacInnis, President of ACR, whose confidence in us to pull off this task first puzzled and then frightened us. As it turns out, puzzlement and fear are good motivators and we will always be grateful to her for having provided us an opportunity to Co-chair ACR. It has been a remarkable experience.

Geeta Menon, New York University
Akshay R. Rao, University of Minnesota
2004 ACR Conference Co-Chairs and Proceedings Editors

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2004 ACR NORTH AMERICAN CONFERENCE PROGRAM**

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WEDNESDAY, OCTOBER 6
Outside Broadway Rooms
TBA

ACR DOCTORAL SYMPOSIUM REGISTRATION

WEDNESDAY, OCTOBER 6
Timberline Lodge, Oregon
8:00 a.m. - 5:00 p.m.

HCR 2004: BREAKING THE SILENCE - ILLUMINATING THE
INVISIBLE

WEDNESDAY, OCTOBER 6
Broadway Rooms
3:30 p.m. - 4:00 p.m.

DOCTORAL SYMPOSIUM: WELCOME AND PLENARY
SESSIONS

THURSDAY, OCTOBER 7, 2004

THURSDAY, OCTOBER 7
Timberline Lodge, Oregon
8:00 a.m. - 5:00 p.m.

HCR 2004: BREAKING THE SILENCE - ILLUMINATING THE
INVISIBLE

THURSDAY, OCTOBER 7
Salon I
12:00 p.m. - 5:00 p.m.

ACR BOARD OF DIRECTORS MEETING

THURSDAY, OCTOBER 7
Director s Suite
4:30 p.m. - 6:00 p.m.

SCP EXECUTIVE COMMITTEE MEETING

THURSDAY, OCTOBER 7
Plaza Foyer
4:30 p.m. - 7:00 p.m.

ACR REGISTRATION

THURSDAY, OCTOBER 7
Pavilion Ballroom
5:30 p.m. - 7:00 p.m.

ACR WELCOME RECEPTION

THURSDAY, OCTOBER 7
Pavilion Ballroom
9:30 p.m. - 11:00 p.m.

KEITH HUNT NEWCOMERS' DESSERT RECEPTION,
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FRIDAY, OCTOBER 8, 2004

FRIDAY, OCTOBER 8
Plaza Foyer
7:30 a.m. - 8:30 a.m.

ACR CONTINENTAL BREAKFAST OF CHAMPIONS
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GENERAL MILLS

FRIDAY, OCTOBER 8
Plaza Foyer West
8:00 a.m. - 5:00 p.m.

ACR REGISTRATION

FRIDAY, OCTOBER 8
Cabinet Suite
8:00 a.m. - 5:00 p.m.

Film Session
Cabinet Suite

FILM FESTIVAL

Film Festival :

Session Chair(s): Robert Kozinets, Northwestern University
Russel Belk, University of Utah

FRIDAY, OCTOBER 8
8:30 a.m. - 10:00 a.m.

Session 1.1
Pavilion East

Session 1.2
Pavilion West

Session 1.3
Broadway I & II

Session 1.4
Galleria II

Session 1.5
Broadway III

Session 1.6
Broadway IV

Session 1.7
Galleria I

Session 1.8
Galleria III

Session 1.9
Council Suite

SESSION 1

Special Session: Finding Families: Family Identity in Consumption Venues

Session Chair(s): Linda Price, University of Nebraska Lincoln

Special Session: Consumer's Evaluations of Time

Session Chair(s): Lance-Michael Erickson, University of Arizona
Narayan Janakiraman, University of Arizona

Special Session: The Application of Goal Systems Theory to Consumer Behavior

Session Chair(s): Andrew Mitchell, University of Toronto

Competitive Paper Session: Negative Consequences of Communication

Session Chair(s): Frederic Brunel, Boston University

Special Session: Habitual Consumption

Session Chair(s): Kyle Murray, University of Western Ontario

Special Session: Emergent moderators of affective response in consumer behavior.

Session Chair(s): John Pracejus, University of Alberta

Competitive Paper Session: Virtual Consumption

Session Chair(s): Timothy Heath, Miami University

Competitive Paper Session: Choose Now, Regret Later?

Session Chair(s): Rajiv Vaidyanathan, University of Minnesota,
Duluth

Roundtable: Researching Visual Consumption

Session Chair(s): Jonathan E. Schroeder, Royal Institute of
Technology

FRIDAY, OCT OBER 8
Plaza Foyer
10:00 a.m. - 10:30 a.m.

FRIDAY, OCTOBER 8
10:30 a.m. - 12:00 p.m.

Session 2.1
Pavilion East

Session 2.2
Pavilion West

Session 2.3

BREAK

SESSION 2

Special Session: Cognitive Mechanisms That Underlie Reference Price Effects

Session Chair(s): Manoi Thomas . New York University

Special Session: Ordering, Layering, and Mixing Emotions: The Impact on Advertising Response

Session Chair(s): Kirsten Grasshoff, University of Pennsylvania

Special Session: Religion and Consumption: The Profane Sacred

Session Chair(s): Guliz Ger, Bilkent University

Broadway I & II
Session 2.4
Galleria II

Session 2.5
Broadway III

Session 2.6
Broadway IV

Session 2.7
Galleria I

Session 2.8
Galleria III
Session 2.9
Council Suite

FRIDAY, OCTOBER 8
GRAND BALLROOM I
12:00 p.m. - 1:45 p.m.

FRIDAY, OCTOBER 8
2:00 p.m. - 3:30 p.m.

Session 3.1
Pavilion East

Session 3.2
Pavilion West

Session 3.3
Broadway I & II

Session 3.4
Galleria II

Session 3.5
Broadway III

Session 3.6
Broadway IV

Session 3.7
Galleria I

Special Session: Goals and Mindsets in Consumer Choice

Session Chair(s): Alex Chernev, Northwestern University
Ran Kivetz, Columbia University

Special Session: Global Consumption: (How) Does Culture Matter?

Session Chair(s): Cristel Russell, San Diego State University
Ana Valenzuela, San Francisco State University

Competitive Paper Session: Sponsorship & Responses

Session Chair(s): H.Rika Houston, California State University, Los Angeles

Competitive Paper Session: Affective Influences on Consumer Judgments

Session Chair(s): Michael Barone, Iowa State University

Competitive Paper Session: Issues in Decision Making

Session Chair(s): Gilles Laurent, HEC School of Management

Roundtable: Expanding the Boundaries of Consumer Socialization Research

Session Chair(s): Terry Bristol, Arizona State University West
Tamara Mangleburg, Florida Atlantic University

ACR LUNCHEON & PRESIDENTIAL ADDRESS

SESSION 3

Special Session: MSI Sponsored Special Session: Assortment and Variety-Seeking in Consumer Choice

Session Chair(s): Alex Chernev, Northwestern University
Leigh McAllister, The University of Texas at Austin

Special Session: Managing Memories for Emotions: Formation, Retrieval and Protection

Session Chair(s): Rebecca K. Ratner, University of North Carolina
Gal Zauberman, The University of North Carolina

Special Session: Advances in the Investigation and Application of the Anchoring and Adjustment Heuristic

Session Chair(s): Leif D. Nelson, New York University

Special Session: Twenty Years of Consumer Culture Theory: Retrospect and Prospect

Session Chair(s): Eric J. Arnould, University of Nebraska

Special Session: Faulty Reasoning and Gambling Behavior

Session Chair(s): Joseph Goodman, University of Texas at Austin

Competitive Paper Session: "Make or Buy" Issues in Brand Management

Session Chair(s): She-Woong Chung, Singapore Management University

Competitive Paper Session: Brand (Mis)perceptions

Session Chair(s): Torsten Ringberg, University of Wisconsin, Milwaukee

**Session 3.8
Galleria III**

**Session 3.9
Council Suite**

FRIDAY, OCTOBER 8
Plaza Foyer
3:30 p.m. - 4:00 p.m.

FRIDAY, OCTOBER 8
4:00 p.m. - 5:30 p.m.

**Session 4.1
Pavilion East**

**Session 4.2
Pavilion West**

**Session 4.3
Broadway III**

**Session 4.4
Galleria II**

**Session 4.5
Broadway I & II**

**Session 4.6
Broadway IV**

**Session 4.7
Galleria I**

**Session 4.8
Galleria III**

**Session 4.9
Council Suite**

FRIDAY, OCTOBER 8
Salon I & II
4:30 p.m. - 6:30 p.m.

FRIDAY, OCTOBER 8
Grand Ballroom I
6:00 p.m. - 8:00 p.m.

Competitive Paper Session: Decor and Decoration

Session Chair(s): Meera Venkataraman, Suffolk University

Roundtable: Concepts, Concept Development, and Consumer Research

Session Chair(s): John D Branch, Washington University in St. Louis

BREAK

SESSION 4

Special Session: Simple Payments and Complex Rewards: Consumers Preference for Complexity in Payment versus Reward Schedules

Session Chair(s): Tom Meyvis, New York University

Special Session: Using Construal Level Theory to Uncover Cognitive Drivers of Decisions for the Future

Session Chair(s): Sucharita Chandran, Boston University
Manoj Thomas, New York University

Special Session: Speed- and Online Dating: Insights into Preference Construction in Frequent, High Involvement, Personal Decisions

Session Chair(s): Richard Lutz, University of Florida

Special Session: Investigating Negative Self-Conscious Emotions' Impact on Consumer Memory, Processing, and Purchase

Session Chair(s): Heather Honea, San Diego State University

Other: Ferber Award

Session Chair(s): Dawn Iacobucci, *Journal of Consumer Research*

Competitive Paper Session: Virtual Relating

Session Chair(s): Steve Hoeffler, University of North Carolina, Chapel Hill

Competitive Paper Session: Putting Tradeoffs in Context: Stocks and Brands

Session Chair(s): Sekar Raju, University of Buffalo

Competitive Paper Session: Kid Stuff

Session Chair(s): Naresh Malhotra, Georgia Tech University

Roundtable: MSI

Session Chair(s): Leigh McAlister, Marketing Science Institute

JCR EDITORIAL REVIEW BOARD MEETING AND RECEPTION

WORKING PAPER SESSION AND WINE AND BEER TASTING,
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**Session
Pavilion East**

Working Paper Session: Working Paper Session
Session Chair(s): Eric Yorkston, University of Southern California

SATURDAY, OCTOBER 9, 2004

SATURDAY, OCTOBER 9
Plaza Foyer
7:30 a.m. - 8:30 a.m.

ACR CONTINENTAL BREAKFAST OF CHAMPIONS
SPONSORED BY



SATURDAY, OCTOBER 9
Director's Suite
8:00 a.m. - 9:30 a.m.

JCP EDITORIAL BOARD MEETING

SATURDAY, OCTOBER 9
Cabinet Suite
8:00 a.m. - 5:00 p.m.

FILM FESTIVAL

**Session
Cabinet Suite**

Film Festival:

Session Chair(s): Robert Kozinets, Northwestern University
Russel Belk, University of Utah

SATURDAY, OCTOBER 9
Plaza Foyer
8:00 a.m. - 5:00 p.m.

ACR REGISTRATION

SATURDAY, OCTOBER 9
8:30 a.m. - 10:00 a.m.

SESSION 5

**Session 5.1
Pavilion East**

Special Session: Self-Generated Validity Effects in Consumer Research

Session Chair(s): Pierre Chandon, INSEAD
Vicki G. Morwitz, New York University

**Session 5.2
Pavilion West**

Special Session: Rumors, Refutations, and Conflicts of Interest: Problems in Dealing With Unreliable Information

Session Chair(s): Ian Skurnik, University of Toronto

**Session 5.3
Broadway I & II**

Special Session: The Role of Goal-related Associations in Judgment and Behavior

Session Chair(s): Aparna A. Labroo, University of Chicago
Angela Y. Lee, Northwestern University

**Session 5.4
Galleria II**

Special Session: Motivational Influences of Social Context on Consumer Behavior

Session Chair(s): Stefano Puntoni, London Business School
Nader Tavassoli, London Business School

**Session 5.5
Broadway III**

Special Session: You (Still) Can't Always Get What You Want: Why Greater Choice Is Demotivating

Session Chair(s): Kristin Diehl, University of South Carolina

**Session 5.6
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Competitive Paper Session: Cross-Cultural Research

Session Chair(s): Nancy Puccinelli, Suffolk University

Session 5.7

Competitive Paper Session: Friends, Family and Others

Session Chair(s): William Hedgcock, University of Minnesota

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Session 5.9
Council Suite

SATURDAY, OCTOBER 9
Plaza Foyer
10:00 a.m. - 10:30 a.m.

SATURDAY, OCTOBER 9
Salon I
10:00 a.m. - 12:00 p.m.

SATURDAY, OCTOBER 9
10:30 a.m. - 12:00 p.m.
Session 6.1
Pavilion East

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Session 6.9
Council Suite

SATURDAY, OCTOBER 9
Grand Ballroom I
12:00 p.m. - 1:45 p.m.

SATURDAY, OCTOBER 9
2:00 p.m. - 3:30 p.m.

Session 7.1

Competitive Paper Session: Matters of Money
Session Chair(s): David Boush, University of Oregon

Roundtable: Qualitative Data Analysis
Session Chair(s): Melanie Wallendorf, University of Arizona

BREAK

JCP TASK FORCE MEETING

SESSION 6

Special Session: The Influence of Primary and Secondary Goals on Consumer Decision Making

Session Chair(s): Leonard Lee, MIT

Special Session: Me, Myself and My Brands

Session Chair(s): Hope Jensen Schau, Temple University
Cristel Russell, San Diego State University

Special Session: Feeling the Future Now: The Influence of Affect on Preferences, Predictions and Perspectives

Session Chair(s): Vanessa M. Patrick, University of Southern California

Special Session: Contracting for Relationships

Session Chair(s): Susan Fournier, Dartmouth College

Special Session: Interpretive Research: Lessons from the Field and A Report from the World of Practice

Session Chair(s): Alladi Venkatesh, University of California, Irvine

Competitive Paper Session: Issues in Evaluating Products

Session Chair(s): Lisa Klein Pearo, Cornell University

Competitive Paper Session: Me, Myself and My Rock

Session Chair(s): Michael Tsiros, University of Miami

Special Session: Current Research on the Role of Inferred Motives in Consumer Reactions to Influence Agents

Session Chair(s): Rebecca Hamilton, University of Maryland
Amna Kirmani, Southern Methodist University

Roundtable: ACR-Latin America: Fostering Research Opportunities in the Region

Session Chair(s): Silvia Gonzalez, ITESM, Monterrey

ACR LUNCHEON AND BUSINESS MEETING

SESSION 7

Special Session: The Influence of Choice Sets and Screening Processes on Decision Quality

Session Chair(s): Amitav Chakravarti, New York University

**Pavilion East
Session 7.2
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**Session 7.3
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Council Suite**

**SATURDAY, OCTOBER 9
Plaza Foyer
3:30 p.m. - 4:00 p.m.**

**SATURDAY, OCTOBER 9
4:00 p.m. - 5:30 p.m.**

**Session 8.1
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**Session 8.2
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**Session 8.3
Broadway I & II**

**Session 8.4
Galleria II**

**Session 8.5
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**Session 8.6
Broadway IV**

Session 8.7

Special Session: The Many Routes to Price Unfairness Perceptions

Session Chair(s): Kent B. Monroe, University of Illinois, Urbana-Champaign
Lan Xia, Bentley College

Special Session: Reactance Revisited: Why Absence Makes the Heart Grow Fonder

Session Chair(s): Yael Zemack Rugar, Duke University

Special Session: Exploring Experiential Processing in Consumption Contexts

Session Chair(s): Rui Zhu, Rice University

Special Session: Loss Aversion: What is it and what does it mean for marketing?

Session Chair(s): Eric Johnson, Columbia University
Julie Irwin, The University of Texas at Austin

Competitive Paper Session: Food for Thought

Session Chair(s): Ashwani Monga, University of Texas, San Antonio

Competitive Paper Session: Ethnicity and Race

Session Chair(s): Susan Jung-Grant, University of Colorado

Competitive Paper Session: Arousal, Compulsion and Expertise

Session Chair(s): Abhijit Biswas, Wayne State University

Roundtable: New Approaches and Theoretical Synergies in Cross-Cultural Consumer Psychology

Session Chair(s): Kyoungmi Lee, University of Illinois at Urbana-Champaign
Sharon Shavitt, University of Illinois at Urbana-Champaign

BREAK

SESSION 8

Special Session: How Do Consumers and Managers Process Numeric Information? The Role of Numerical Cognition

Session Chair(s): Vicki Morwitz, New York University
Manoj Thomas, New York University

Special Session: Implications of experiential processing

Session Chair(s): Anne-Laure Sellier, New York University

Other: Meet the Editors

Session Chair(s): Kent B. Monroe, University of Illinois

Special Session: Choice Without Preference

Session Chair(s): Itamar Simonson, Stanford University

Special Session: New Approaches for Measuring Consumer Preferences for Really New Products

Session Chair(s): Donna Hoffman, Vanderbilt University

Competitive Paper Session: Goal Pursuit: Successes and Failures

Session Chair(s): Elizabeth Miller, Boston College

Competitive Paper Session: It's a Small World After All

Session Chair(s): Kuan Chiang, Long Island University

**Galleria I
Session 8.8
Galleria III**

**Session 8.9
Council Suite**

SATURDAY, OCTOBER 9
Salon I & II
4:00 p.m. - 5:30 p.m.

SATURDAY, OCTOBER 9
Pavilion Ballroom
6:30 p.m. - 8:00 p.m.

Competitive Paper Session: Consumer Responses to Promotions
Session Chair(s): Haipeng Chen, University of Miami

Roundtable: Rethinking Family Consumption - Tracking New Research Perspectives
Session Chair(s): Karin M. Ekstrom, Goteborg University

2005 PLANNING COMMITTEE

ACR RECEPTION IN HONOR OF PROFESSOR KENT
MONROE,
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SUNDAY, OCTOBER 10, 2004

SUNDAY, OCTOBER 10
Plaza Foyer
7:30 a.m. - 8:30 a.m.

ACR CONTINENTAL BREAKFAST OF CHAMPIONS
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SUNDAY, OCTOBER 10
Director s Suite
7:30 a.m. - 12:30 p.m.

JCR POLICY BOARD MEETING

SUNDAY, OCTOBER 10
Plaza Foyer West
8:00 a.m. - 12:00 p.m.

ACR REGISTRATION

SUNDAY, OCTOBER 10
8:30 a.m. - 10:00 a.m.

SESSION 9

**Session 9.1
Pavilion East**

Special Session: Consumer Activism: Boycotts, Brands and Marketing Communications

Session Chair(s): N. Craig Smith, London Business School

**Session 9.2
Pavilion West**

Special Session: Tracing the Daisy Chain: Post-Purchase Affect and Its Influences on Subsequent Consumption

Session Chair(s): Anirban Mukhopadhyay, Hong Kong University of Science and Technology

**Session 9.3
Broadway I & II**

Special Session: Fluency and Feelings of Attraction, Belief, and Interest

Session Chair(s): Ian Skurnik, University of Toronto

**Session 9.4
Galleria II**

Special Session: The Ubiquitous Influence of Expectations

Session Chair(s): Stacy Wood, University of South Carolina

Session 9.5

Competitive Paper Session: Consumer-Firm Relationships

Session Chair(s): Deborah Heisley, California State University, Northridge

Broadway III
Session 9.6
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Session 9.7
Galleria I

Session 9.8
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Session 9.9
Council Suite

SUNDAY, OCTOBER 10
Plaza Foyer
10:00 a.m. - 10:30 a.m.

SUNDAY, OCTOBER 10
10:30 a.m. - 12:00 p.m.

Session 10.1
Pavilion East

Session 10.2
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Session 10.3
Broadway I & II

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Council Suite

SUNDAY, OCTOBER 10
Plaza Foyer
12:00 p.m. - 1:45 p.m.

Competitive Paper Session: Time and Space: The Final Frontier

Session Chair(s): Rohini Ahluwalia, University of Minnesota

Competitive Paper Session: Issues in Measurement

Session Chair(s): Lilia Ziamou, Baruch College

Competitive Paper Session: Effects of Different Types of Advertising

Session Chair(s): Robin Ritchie, University of Western Ontario

Competitive Paper Session: Brand (In)Equity

Session Chair(s): Lance Erickson, University of Arizona

BREAK

SESSION 10

Special Session: How Well Do We Know Each Other? Theory and Method in Dyadic Prediction

Session Chair(s): Andrew Gershoff, Columbia University

Special Session: Magnifying Effects of Immediate Consumer Experiences

Session Chair(s): Ziv Carmon, INSEAD
Joachim Vosgerau, INSEAD

Special Session: Money, Time, or Blood: How and Why the Salience of Conflicting Identities Affects Consumer Choice

Session Chair(s): Christina L. Brown, University of Michigan

Competitive Paper Session: Where Charity Begins

Session Chair(s): Margaret Hogg, Manchester School of Management, UMIST

Competitive Paper Session: Issues in Information Processing

Session Chair(s): Elizabeth Creyer, University of Arkansas

Competitive Paper Session: Pot-pourri

Session Chair(s): Robin Ritchie, University of Western Ontario

Competitive Paper Session: Slicing and Dicing: Issues in Segmentation

Session Chair(s): Daniel Laufer, University of Cincinnati

Competitive Paper Session: Media Consumption

Session Chair(s): Laurel Anderson, Arizona State University

Competitive Paper Session: Sacred and Prosaic

Session Chair(s): Alok Saklani, HNB Garhwal University, India

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Russel Belk, University of Utah

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1.1 Special Session: Finding Families: Family Identity in Consumption Venues

Session Chair(s): Linda L. Price, University of Nebraska Lincoln
 Discussant: Eric J. Arnould, University of Nebraska Lincoln

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 Stefania Borghini, Bocconi University
 Nina Diamond, DePaul University
 Albert Muniz, DePaul University

Personal Possessions in the Workplace: The Influence of the 'Alternative Family' of the Corporation on Consumption'
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 Russell Belk, University of Utah

1.2 Special Session: Consumer's Evaluations of Time

Session Chair(s): Lance-Michael Erickson, University of Arizona
Narayan Janakiraman, University of Arizona
Discussant: Dilip Soman, University of Toronto

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1.3 Special Session: The Application of Goal Systems Theory to Consumer Behavior

Session Chair(s): Andrew Mitchell, University of Toronto
Discussant: Miguel Brendl, INSEAD

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Session Chair(s): Kyle B. Murray, University of Western Ontario
 Discussant: Kyle B. Murray, University of Western Ontario

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 Gerald Häubl, University of Alberta

1.6 Special Session: Emergent Moderators of Affective Response in Consumer Behavior

Session Chair(s): John Pracejus, University of Alberta
 Discussant: Robert S. Wyer, Hong Kong University of Science and Technology

SPECIAL SESSION SUMMARY

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Janet Borgerson, Stockholm University
Rika Houston, California State University – Los Angeles
Markus Giesler, Witten-Herdecke University – Germany
David Luna, CUNY
Mali Pohlmann, Stockholm University
Laurie Meamber, George Mason University
Søren Askegaard, Southern Denmark University
Janeen Costa, University of Utah
Michael Solomon, Auburn University
Margaret Hogg, Lancaster University – UK
Leighann Nielson, Queens University – Canada
Pauline Maclaren, DeMontfort University – UK
Thomas O’Guinn, University of Illinois
Natasha Tolsikova, University of Maine
Alladi Venkatesh, University of California – Irvine

SESSION 2
FRIDAY, OCTOBER 8
10:30 a.m.–12:00 p.m

2.1 Special Session: Cognitive Mechanisms That Underlie Reference Price Effects

Session Chair(s): Manoj Thomas, New York University
 Discussant: Angela Y. Lee, Northwestern University

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 Manoj Thomas, New York University
 Geeta Menon, New York University

Assimilation and Contrast in Consumer Price Perceptions
 Rashmi Adaval, Hong Kong University of Science and Technology
 Robert S. Wyer, Hong Kong University of Science and Technology

2.2 Special Session: Ordering, Layering, and Mixing Emotions: The Impact on Advertising Response

Session Chair(s): Kirsten Grasshoff, University of Pennsylvania
 Patti Williams, University of Pennsylvania
 Discussant: Patti Williams, University of Pennsylvania

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 Suresh Ramanathan, University of Chicago

Exploring Response Amplification: Polarizing Consumer Responses to Mixed Versus Pure Emotional Appeals
 Loraine Lau-Gesk, University of California, Irvine
 Thomas Kramer, Baruch College

Layered Not Stirred: Negative Mixing for Emotional Intensity
 Kirsten Grasshoff, University of Pennsylvania
 Patti Williams, University of Pennsylvania

2.3 Special Session: Religion and Consumption: The Profane Sacred

Session Chair(s): Güliz Ger, Bilkent University
 Discussant: Colleen McDannell, University of Utah

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 Güliz Ger, Bilkent University

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Teresa Davis, University of Sydney – Australia

Religious Material Culture: Morality, Modernity, and Aesthetics

Güliz Ger, Bilkent University

Richard Wilk, Indiana University

2.4 Special Session: Goals and Mindsets in Consumer Choice

Session Chair(s): Alex Chernev, Northwestern University

Ran Kivetz, Columbia University

Discussant: Ran Kivetz, Columbia University

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Alexander Chernev, Northwestern University

Ran Kivetz, Columbia University

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The Price of Choice: Differentiation and Parity in Assortment Pricing

Alex Chernev, Northwestern University

Principles or Probabilities: When Value Overshadows Expected Value

Oleg Urminsky, Columbia University

Ran Kivetz, Columbia University

2.5 Special Session: Global Consumption: (How) Does Culture Matter?

Session Chair(s): Cristel Russell, San Diego State University

Ana Valenzuela, Baruch College

Discussant: Russell W. Belk, University of Utah

SPECIAL SESSION SUMMARY

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Brands as Global Signals: A Cross-Country Study

Ana Valenzuela, Baruch College

Tulin Erdem, University of California – Berkeley

Joffre Swait, University of Florida

One Part Salience, One Part Origin, Stir, Sprinkle with Acceptance and Resistance, Bake for One Century and Voila: A New Cultural Casserole!

Dale W. Russell, The Amsterdam School of Communication Research

Cristel Antonio Russell, San Diego State University

2.6 Competitive Paper Session: Sponsorship & Responses

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Session Chair(s): Terry Bristol, Arizona State University (West)
Tamara Mangleburg, Florida Atlantic University

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Tamara F. Mangleburg, Florida Atlantic University	

Participants:

Tamara Mangleburg, Florida Atlantic University
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Les Carlson, Clemson University
Karin Ekstrom, Goteborg University
Michael Belch, San Diego State University
James Gentry, University of Nebraska
Marvin Goldberg, Penn State University
Sanford Grossbart, University of Nebraska
Richard Lutz, University of Florida
Elizabeth Moore, University of Notre Dame
Lan Nguyen, University of Illinois
Kay Palan, Iowa State University
Cara Peters, University of North Carolina – Charlotte
Gregory Rose, University of Washington Tacoma

SESSION 3
FRIDAY, OCTOBER 8
2:00 p.m.–3:30 p.m.

3.1 Special Session: MSI Sponsored Special Session: Assortment and Variety-Seeking in Consumer Choice

Session Chair(s): Alexander Chernev, Northwestern University
Leigh McAllister, University of Texas at Austin
Discussant: Barbara Kahn, University of Pennsylvania

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3.2 *Special Session: Managing Memories for Emotions: Formation, Retrieval and Protection*

Session Chair(s): Rebecca K. Ratner, University of North Carolina
Gal Zauberan, University of North Carolina
Discussant: Kathryn Braun-LaTour, University of Nevada – Las Vegas

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Stacy L. Wood, University of South Carolina

Retrieval Inhibition in Emotional Picture Recall

Jo Ann Sison, UC Santa Cruz
Mara Mather, UC Santa Cruz

Strategic Memory Protection in Choice over Time

Gal Zauberan, University of North Carolina
Rebecca K. Ratner, University of North Carolina

3.3 *Special Session: Advances in the Investigation and Application of the Anchoring and Adjustment Heuristic*

Session Chair(s): Leif D. Nelson, New York University
Discussant: Stephen J. Hoch, Wharton–University of Pennsylvania

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Favored Favorites: Inequalities in Equivalent Outcomes

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Joseph P. Simmons, Princeton University

3.4 *Special Session: Twenty Years of Consumer Culture Theory: Retrospect and Prospect*

Session Chair(s): Eric J. Arnould, University of Nebraska
Craig Thompson, University of Wisconsin
Discussant: Richard J. Lutz, University of Florida

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Consumer Culture Theory (CCT): Twenty Years of Research

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Albert M. Muniz, DePaul University

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Melanie Wallendorf, University of Arizona

3.5 Special Session: Faulty Reasoning and Gambling Behavior

Session Chair(s): Joseph Goodman, University of Texas at Austin

Discussant: Julie R. Irwin, University of Texas at Austin

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Joseph K. Goodman, University of Texas at Austin
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Natalie Denburg, University of Iowa
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Session Chair(s): John D. Branch, Washington University in St. Louis

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Bela Florentine, Pennsylvania State University
Debbie MacInnis, University of Southern California
Amar Cheema, Washington University in St. Louis
Gustavo de Mello, University of Southern California

SESSION 4
FRIDAY, OCTOBER 8
4:00 p.m.–5:30 p.m.

4.1 Special Session: Simple Payments and Complex Rewards: Consumers’ Preference for Complexity in Payment versus Reward Schedules

Session Chair(s): Tom Meyvis, New York University
 Discussant: Ran Kivetz, Columbia University

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Multi-Medium Reward Programs
 Dilip Soman, University of Toronto
 Mengze Shi, University of Toronto
 Xiuping Li, University of Toronto

Too Close to Quit: The Effect of Reward Fungibility on Consumer Purchase Intentions
 Joseph C. Nunes, University of Southern California
 Xavier Drèze, University of Pennsylvania

4.2 Special Session: Using Construal Level Theory to Uncover Cognitive Drivers of Decisions for the Future

Session Chair(s): Sucharita Chandran, Boston University
 Manoj Thomas, New York University
 Discussant: Yaavoc Trope, New York University

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 Jane E.J. Ebert, University of Minnesota

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 Selin Malkoc, The University of North Carolina at Chapel Hill
 Gal Zauberman, The University of North Carolina at Chapel Hill

Distance Lends Structure to the View: Temporal Construal and Value Perceptions
 Manoj Thomas, New York University
 Sucharita Chandran, Boston University
 Yaacov Trope, New York University

4.3 Special Session: Speed- and Online Dating: Insights into Preference Construction in Frequent, High Involvement, Personal Decisions

Session Chair(s): Richard Lutz, University of Florida
Discussant: Richard J. Lutz, University of Florida

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Sheena Sethi-Iyengar, Columbia University
Itamar Simonson, Stanford University
Raymond Fisman, Columbia University

The Online Pursuit: Preference Learning in Online Dating

Jeana Frost, Massachusetts Institute of Technology
Dan Ariely, Massachusetts Institute of Technology

4.4 Special Session: Investigating Negative Self-Conscious Emotions' Impact on Consumer Memory, Processing, and Purchase

Session Chair(s): Heather Honea, San Diego State University
Discussant: Gerald Gorn, Hong Kong University of Science and Technology

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Darren W. Dahl, UBC
Heather Honea, San Diego State University
Rajesh V. Manchanda, University of Manitoba

Exploring Shame and Guilt in Consumer Behavior

Shashi Matta, University of Southern California
Vanessa M. Patrick, University of Georgia
Deborah J. MacInnis, University of Southern California

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Session Chair(s): Dawn Iacobucci, *Journal of Consumer Research*

4.6 Competitive Paper Session: Virtual Relating

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Alex Chernev, Northwestern
Dipankar Chakravarti, University of Colorado
Susan Fournier, Dartmouth College
Steve Hoch, University of Pennsylvania
Eric Johnson, Columbia University
Barbara Kahn, University of Pennsylvania
Kevin Keller, Dartmouth College
Amna Kirmani, Southern Methodist University
Don Lehmann, Columbia University
John Lynch, Duke University
Rich Lutz, University of Florida
Leigh McAlister, MSI and University of Texas – Austin
Page Moreau, University of Colorado
Akshay Rao, University of Minnesota
Sanjay Sood, UCLA
Stacy Wood, University of South Carolina

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FRIDAY, OCTOBER 8

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Vicki G. Morwitz, New York University
Discussant: John G. Lynch, Duke University

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Discussant: Ian Skurnik, University of Toronto

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Anne L. Roggeveen, Babson College

The Dirt on Coming Clean: Perverse Effects of Disclosing Conflicts of Interest
Daylian Cain, Carnegie Mellon University
Don Moore, Carnegie Mellon University
George Loewenstein, Carnegie Mellon University

5.3 Special Session: The Role of Goal-related Associations in Judgment and Behavior

Session Chair(s): Aparna A. Labroo, University of Chicago
Angela Y. Lee, Northwestern University
Discussant: C. Miguel Brendl, INSEAD

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Ayelet Fishbach, University of Chicago

Prevention, Promotion, and the Adoption of New Products
Michal Herzstein, University of Rochester
Steven S. Posavac, University of Rochester
J. Josko Brakus, University of Rochester

The Effects of Goal-compatible Associations on Brand Evaluation
Aparna A. Labroo, University of Chicago
Angela Y. Lee, Northwestern University

5.4 Special Session: Motivational Influences of Social Context on Consumer Behavior

Session Chair(s): Stefano Puntoni, London Business School
Nader Tavassoli, London Business School
Discussant: Nader Tavassoli, London Business School

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The Influence of Social Context on Advertising Reception
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How Consumers' Self-View Influences Their Goals, Information Processing, and Choices
Rebecca W. Hamilton, University of Maryland
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5.5 Special Session: You (Still) Can't Always Get What You Want: Why Greater Choice Is Demotivating

Session Chair(s): Kristin Diehl, University of South Carolina
Discussant: Rebecca K. Ratner, University of North Carolina, Chapel Hill

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Maureen Morrin, Rutgers University – Camden
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6.1 Special Session: The Influence of Primary and Secondary Goals on Consumer Decision Making

Session Chair(s): Leonard Lee, Massachusetts Institute of Technology
 Discussant: George Loewenstein, Carnegie Mellon University

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Goal Strength, Preference, and the Structure of Goals
 Arthur B. Markman, University of Texas at Austin
 C. Miguel Brendl, INSEAD
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Conditional Coupons: Preference Uncertainty and Spending Goals
 Leonard Lee, Massachusetts Institute of Technology
 Dan Ariely, Massachusetts Institute of Technology

6.2 Special Session: Me, Myself and My Brands

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 Cristel Russell, San Diego State University
 Discussant: Sanjay Sood, University of California – Los Angeles

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Self-Construal, Reference Groups and Brand Meaning
 Jennifer Edson Escalas, Vanderbilt University
 James R. Bettman, Duke University

Does Being Glued to the Tube Mean Sticky Brand Associations? Consumer Television Connectedness and the Enrichment of Brand Meanings and Associations
 Cristel Antonio Russell, San Diego State University
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6.3 Special Session: Feeling the Future Now: The Influence of Affect on Preferences, Predictions and Perspectives

Session Chair(s): Vanessa M. Patrick, University of Georgia
Discussant: Prashant Malaviya, INSEAD

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Alexander Fedorikhin, University of Southern California
Debbie MacInnis, University of Southern California

Augmenting Affect and Discounting Cognition: Consumers' Attitudes Toward Environmentally Friendly Products
Cenk Bülbül, New York University
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Discussant: Steve Duck, University of Iowa

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Linda L. Price, University of Nebraska
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Susan Fournier, Dartmouth College
Jill Avery, Harvard Business School
Andrea Wojnicki, Harvard Business School

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Steve Duck, University of Iowa

6.5 Special Session: Interpretive Research: Lessons from the Field and A Report from the World of Practice

Session Chair(s): Alladi Venkatesh, University of California – Irvine
Discussant: Alladi Venkatesh, University of California – Irvine

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Maryann McCabe, Cultural Connections

What's Anthropological about Corporate Ethnography? Lessons from the Field

Norman Stolzoff, Ethnographic Insight, Inc.

6.6 Competitive Paper Session: Issues in Evaluating Products

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Session Chair(s): Rebecca Hamilton, University of Maryland
Amna Kirmani, Southern Methodist University
Discussant: Amna Kirmani, Southern Methodist University

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Joydeep Srivastava, University of Maryland
Seonsu Lee, Wonkwang University

Twist My Arm: It's Not So Bad if the Agent Has an Ulterior Motive

Rebecca Hamilton, University of Maryland
Amna Kirmani, Southern Methodist University

6.9 Roundtable: ACR-Latin America: Fostering Research Opportunities in the Region

Session Chair(s): Silvia Gonzalez, I.T.E.S.M. – Campus Monterrey

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Alexandra Rodriguez, University of Illinois
Jose Mauro Hernandez, Uninova
Gustavo de Mello, University of Southern California
Lisa Penaloza, University of Colorado
Carlos Ballesteros, UPCO
Cathy Cole, University of Iowa
Ana Valenzuela, Baruch College
Joseph Goodman, University of Texas
Juliano Laran, University of Florida
Dan Laufer, University of Cincinnati
Marcos Cunha, University of Washington
Raquel Castano, I.T.E.S.M. – Campus Monterrey

SESSION 7
SATURDAY, OCTOBER 9
2:00 p.m.–3:30 p.m.

7.1 Special Session: The Influence of Choice Sets and Screening Processes on Decision Quality

Session Chair(s): Amitav Chakravarti, New York University
 Discussant: Srinivasan Ratneshwar, University of Missouri-Columbia

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 Chris Janiszewski, University of Florida
 Gülden Ülkümen, New York University

Improving Decision Quality by Altering Consideration Sets
 Kristin Diehl, University of South Carolina

When More Choice Motivates: Considering the Benefits of Perceived versus Actual Choice on Outcome Satisfaction
 Sheena S. Iyengar, Columbia University Business School
 Catherine Mogilner, Stanford Graduate School of Business

7.2 Special Session: The Many Routes to Price Unfairness Perceptions

Session Chair(s): Kent B. Monroe, University of Illinois, Urbana-Champaign
 Lan Xia, Bentley College
 Discussant: Margaret Campbell, University of Colorado

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 Nada Nasr Bechwati, Bentley College
 Jagdish N. Sheth, Emory University
 Rajendra S. Sisodia, Bentley College

Effect of Price Matching Guarantees on Consumers' Perceptions of Fairness
 Monika Kukar-Kinney, University of Richmond
 Lan Xia, Bentley College
 Kent B. Monroe, University of Illinois at Urbana-Champaign

7.3 Special Session: Reactance Revisited: Why Absence Makes the Heart Grow Fonder

Session Chair(s): Yael Zemack-Rugar, Duke University
 Discussant: Donald R. Lehmann, Columbia University

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Reactance and Choice: The Role of the Timing of Information

Kyeong Sam Min, University of South Dakota

Patricia M. West, Ohio State University

Joel Huber, Duke University

Promotion Reactance: The Role of Effort-Reward Congruity

Ran Kivetz, Columbia University

7.4 Special Session: Exploring Experiential Processing in Consumer Contexts

Session Chair(s): Rui Zhu, Rice University

Discussant: Rui Zhu, Rice University

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Carolyn Yoon, University of Michigan

Ian Skurnik, University of Toronto

Denise Park, University of Illinois

Norbert Schwarz, University of Michigan

The Moderating Role of Goal Compatibility on the Schema Congruity Effect

Myungwoo Nam, INSEAD

Alice M. Tybout, Northwestern University

7.5 Special Session: Loss Aversion: What Is It and What Does It Mean for Marketing

Session Chair(s): Eric Johnson, Columbia University

Julie Irwin, University of Texas at Austin

Discussant: Ellen Peters, University of Oregon and Decision Research

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Daniel Kahneman, Princeton University

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Daniel Goldstein, Columbia University

Simon Gaechter, University of St. Gallen

Andreas Herrmann, University of St. Gallen

William Sharpe, Stanford University

Eric J. Johnson, Columbia University

Why What It Is and Who It Goes To Matters: The Emotional and Experiential Antecedents of Product Disposal Choices

Rebecca E. Walker, University of Texas

Julie Irwin, University of Texas

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Sharon Shavitt, University of Illinois at Urbana-Champaign

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Zeynep Gurhan-Canli, University of Michigan
Ying-Yi Hong, University of Illinois at Urbana-Champaign
Heejung Kim, University of California – Santa Barbara
Angela Y. Lee, Northwestern University
Kyoungmi Lee, University of Illinois at Urbana-Champaign
Durairaj Maheswaran, New York University
Sharon Shavitt, University of Illinois at Urbana-Champaign
Robert S. Wyer, Hong Kong University of Science and Technology
Yeosun Yoon, Rice University

SESSION 8
SATURDAY, OCTOBER 9
4:00 p.m.–5:30 p.m.

8.1 Special Session: How Do Consumers and Managers Process Numeric Information? The Role of Numerical Cognition

Session Chair(s): Vicki Morwitz, New York University
Manoj Thomas, New York University
Discussant: Gilles Laurent, HEC School of Management, France

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Eric Eisenstein, Cornell University

Holistic Versus Digital Models of Multi-Digit Numerical Comparison

Manoj Thomas, New York University
Vicki Morwitz, New York University

How Do We Memorize Prices? A Numerical Cognition Perspective

Marc Vanhuele, HEC School of Management
Gilles Laurent, HEC School of Management
Xavier Dreze, University of Pennsylvania
Zsofia Kenesei, Budapest University of Economic Sciences

8.2 Special Session: Implications of Experiential Processing

Session Chair(s): Anne-Laure Sellier, New York University
Discussant: Alice M. Tybout, Northwestern University

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C. Miguel Brendl, INSEAD
Amitava Chattopadhyay, INSEAD

Declarative and Experiential Information in Preference Judgments: The Role of Processing Fluency
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Bernd H. Schmitt, Columbia University
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Session Chair(s): Kent B. Monroe, University of Illinois

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Dawn Iacobucci, *Journal of Consumer Research*
Dick Wittink, *Journal of Marketing Research*
Ruth Bolton, *Journal of Marketing*
Steve Shugan, *Marketing Science*
Robert S. Wyer, *Journal of Consumer Psychology*

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Anastasiya Pocheptsova, Yale University
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Roy Baumeister, Central Florida University

8.5 Special Session: New Approaches for Measuring Consumer Preferences for Really New Products

Session Chair(s): Donna Hoffman, Vanderbilt University
Discussant: Don Lehmann, Columbia University

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Identifying and Using Emergent Consumers in Developing Radical Innovations

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Session Chair(s): Karin M. Ekstrom, Göteborg University

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Margaret Hogg, UMIST – UK
Rika Houston, California State University
Lisa Penaloza, University of Colorado
Linda Price, University of Nebraska
Ann Veeck, Western Michigan University
Alladi Venkatesh, University of California Irvine
James Gentry, University of Nebraska
Sanford Grossbart, University of Nebraska
Tamara Mangleburg, Florida Atlantic University

SESSION 9
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8:30 a.m.–10:00 a.m.

9.1 Special Session: Consumer Activism: Boycotts, Brands and Marketing Communications

Session Chair(s): N. Craig Smith, London Business School
 Discussant: John G. Lynch, Duke University

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 Vicki Morwitz, New York University
 Sankar Sen, Baruch College

Consumer Activism and the Corporate Brand
 Jay M. Handelman, Queens University
 Robert V. Kozinets, Northwestern University

9.2 Special Session: Tracing the Daisy Chain: Post-Purchase Affect and Its Influences on Subsequent Consumption

Session Chair(s): Anirban Mukhopadhyay, Hong Kong University of Science and Technology
 Discussant: Donald R. Lehmann, Columbia University

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 Amar Cheema, Washington University in St. Louis
 Dipankar Chakravarti, University of Colorado – Boulder
 Atanu Sinha, University of Colorado – Boulder

Unintended Purchase Opportunities: Goal Conflict, Mixed Emotions, and Intertemporal Effects on Persuasion
 Anirban Mukhopadhyay, Hong Kong University of Science and Technology
 Gita V. Johar, Columbia University

9.3 Special Session: Fluency and Feelings of Attraction, Belief, and Interest

Session Chair(s): Ian Skurnik, University of Toronto
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Tarun Dewan, Ryerson University

Fluency and Judgments of Pleasantness, Interest, and Involvement: Memory Evaluation as a Basis for Subjective Experience
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9.4 Special Session: The Ubiquitous Influence of Expectations

Session Chair(s): Stacy Wood, University of South Carolina
Discussant: Dipankar Chakravarti, University of Colorado

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Stacy L. Wood, University of South Carolina

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Baba Shiv, University of Iowa
Ziv Carmon, INSEAD
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In Memoriam



Kathy Brown
1956-2004

A Tribute to Kathy Brown

By Jim Muncy

When I agreed to become Executive Director of ACR, I knew the job would bring with it the unexpected. There would be both unexpected challenges and unexpected joys.

One of the biggest unexpected joys of the job came in the form of a wonderful woman named Kathy Brown. She was ACR's incredibly talented and committed Conference Coordinator.

Just three days before I was to leave the position of Executive Director, the job threw me its biggest unexpected sorrow. I received the news that Kathy had been killed in an automobile accident. It was a shock, not just to me but to everyone who has had a significant role in putting together an ACR conference or doctoral symposium over the past several years.

Kathy's incredible commitment to ACR made all of our lives so much easier and her personality and character made all of our jobs so much more enjoyable. There is no way to express what an incredible loss this is to the ACR community.

When Rajiv Vaidyanathan agreed to take over as Executive Director, one of the first pieces of advice I gave him was to do everything he could to keep Kathy on his team. I went on and on about how much she contributes to the Association. When people would ask me how long I would remain as Executive Director, I would comment that I would stay as long as Kathy Brown and Steve and Carol Barnett (a couple many of you have worked with) are still on the team. I had a hard time seeing how I could do the job without either Kathy or the Barnetts.

Anything I did right for five years as Executive Director probably wasn't really me. It was probably either Kathy Brown or the Barnetts. I may have done many things wrong as Executive Director but this one thing I know I did right. I tried my best to stay out of Kathy's way and let her do her job. She knew what she was doing, she did it with great passion and commitment to ACR, and no one could have done it better.

I start every day of my life the same way. I open it in prayer thanking God for specific blessings he has brought into my life. I can't tell you the number of times over the past five years that Kathy's name has come up as one of the people for whom I am thankful.

When you put on a conference, there is a lot of coordination that goes on between the hotel and the association—much more than I ever imagined. Before becoming ACR's Executive Director, I would just show up to conferences and assume that everything just happens to fall into place. Not so!!! It takes a huge amount of work. That is why the hotels will assign one person, an event coordinator, to a group and that person will work very closely with the association's conference coordinator.

Hotels have many groups coming in and out and so a hotel event coordinator meets with hundreds of conference coordinators every year. Without fail, sometime during the ACR conferences, the hotel event coordinator would come up to me and make it a point to mention that they had never worked with anyone as capable, talented, and organized as Kathy Brown.

The way she did her job left an incredible impression on the minds of the people we had met at these hotels. I remember recently calling Royal York in Toronto. I needed to request some financial information. It had been over a year since we had been there. Given the number of groups they have to deal with, I wasn't sure anyone would even remember who ACR was. When I got our event coordinator on the phone, I said "I am not sure you remember the Association for Consumer Research but..." His enthusiastic response was immediate. "Oh yes, you're Kathy Brown's group." As was typical when talking to event coordinators, our conversation didn't move forward until he told me what an incredible job she had done and what a delight she was to work with.

So often, Kathy's integrity, skill, and ability to do her job saved ACR and me from some serious mistakes. Let me give you just one recent example. At our most recent conference in Portland, I made a very expensive mistake. It would have been a lot more expensive had it not been for Kathy. We implemented a new procedure for estimating how many people would be at the luncheon banquets. That is typically a tough number to come up with but we want it to be as accurate as possible. Here's why.

Hotels need to know how much food to order, how much staff to have on hand, etc. We have to give them our final food count long before the banquets. Now, here's the problem. Once we tell them how many people are coming, we have to pay for that number of people—whether they actually come or not. An empty seat costs ACR just as much as one with someone sitting there and eating.

At Friday's luncheon, our new and improved system cost ACR around \$1,500 in extra food. I went to Kathy for the count for the next day and I knew it would be even worse. As I was sitting there in a state of panic, Kathy called the event coordinator. With a skill I never dreamed possible, she was able to convince the hotel to substantially drop our food count less than twenty-four hours before the banquet. Had it not been for how well Kathy worked with the hotel, they would have told us to jump in the lake. And they would have been justified in doing so. They had already bought the food and hired the workers. It was my mistake, not theirs. Fortunately, there was Kathy. She knew exactly what to say. More importantly, she had the respect of the hotel so she could say it. She saved ACR a few thousand dollars. That was just one of many instances. I could go on and on about the ways Kathy did things I don't think anyone else could have done.

Kathy will be remembered for all the ways she helped ACR. We will remember her as being the absolute best conference coordinator on Planet Earth. But more than any of this, we will remember her for what a special person she was. The months leading up to a conference are an absolute sprint. There are so many things to do and so little time to do them. There are so many details that must be attended to and so many things that can go wrong. I would show up at the hotel totally stressed out with a million things on my mind. Then would come that moment when I would look across the lobby and see Kathy Brown. Just her smile would tell me, "Everything is OK, you can relax." And do you know what? As long as Kathy was there, everything was OK.

There is no doubt about it. Kathy Brown was a very special person. My life was enriched so much by having the opportunity to work with her over these past five years. She enriched the lives of so many others. We will definitely miss her. I don't know if there are conferences in Heaven but if there are, I bet I know who God is going to put in charge of coordinating the most important ones.

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ACR PRESIDENTIAL ADDRESS

Finding Legs: Generativity and the Everyday Language of the Consumer

Debbie MacInnis, University of Southern California

In their addresses, several past ACR presidents, have discussed how important it is for us to think conceptually. Gerry Zaltman, for example, noted that the quality of our ideas is reflected by the quality of our concepts. Alice Tybout described the importance of thinking theoretically, at the level of generalized constructs as opposed to variables and the operationalizations that involve their empirical assessment. Rich Lutz indicated that thinking in terms of concepts facilitates knowledge accumulation by focusing on ideas that unite researchers whose diverse paradigmatic or methodological perspectives might otherwise make them appear divided.

Personally, I have found many of their ideas to be quite profound. So much that they have spurred me to think about some of the concepts that have been focal to our field—those that have moved our field forward by stimulating a plethora of research ideas. I call these concepts “generative” as they have the ability to generate interesting and novel insights into the internal and external world of the consumer. They “have legs” because they move our field forward and spur ideas formulated by other researchers. A non-exhaustive list of such generative domains is presented here.

They include, for example, concepts like motivation, attitudes, memory, and materialism. What struck me from this list was that many generative domains reflect words represented in our everyday language. For example, motivational research essentially deals with the domain of what “I need”. The phrase “I am” has generated work on the self-concept “I like”—research on attitudes; “I remember”—work on memory; and I have—“materialism”. This revelation convinced me that people like Craig Thompson and others in our field who examine consumer discourse may be on to something big!

This revelation also made me wonder whether we have exhausted our list of highly generative concepts and whether there are novel concepts that could further move us forward.

I believe there are, and I wish to illustrate this potential by describing the relevance of once such concept—that of hope. I do so not to suggest that future research must or should focus on hope, but to suggest that generative research domains may be identified by listening to the everyday language of the consumer.

Before moving forward on this illustrative example, let me begin by defining hope. According to appraisal theory, hope is an emotion evoked in response to an outcome a consumer views as having two characteristics—first, the outcome is goal congruent. Goal congruent means that the outcome is good—in other words, that something positive could occur (as in “I hope I win the lottery”) or that something negative could be avoided (as in “I hope I don’t have cancer”).¹ The second appraisal is that this goal congruent outcome is viewed as possible.

As it pertains to the everyday language of the consumer, hope is a common word in everyday language. To see how common, try going through the day or even just an hour without saying the word—it’s tough. In fact, Shimanoff observed that it is one of the most frequently used words in our emotion lexicon. As such, it is of no surprise to see its occurrence in websites, and on the titles of book, newspapers articles and magazines columns.

As it pertains to *marketing*, hope is pervasive to consumers’ acquisition and usage of products in a number of *industries*. The exercise, diet, and beauty industries are spurred by consumers’ hope for a better body and more attractive appearance. Dating

services, among others, are based on consumers’ hopes for establishing new relationships; elaborate wedding rituals on hopes for their endurance; and therapy on hope to maintain good relationships or re-establish psychological balance following their demise. Use of medical services, pharmaceuticals, herbal supplements and diagnostic testing procedures are motivated by consumers’ hope for good health. Investments in education are spurred by parents hope for a good life for their children, while investments in the stock market, savings behavior, gambling, and playing the lottery are motivated by consumers’ hope for a safe and prosperous economic future. Consumers’ hope for social welfare—and such hope has implications for industries as well. Charities are sustained by consumer’s hope for a better world, while marketers that use inappropriate tactics are boycotted by consumers who hope for social justice. Hope is also relevant to the marketing of spirituality, as consumers hope for internal peace and enlightenment and life in the after-life.

In his ACR Presidential address Russ Belk encouraged us to think about consumer behavior as a part of life. I would surmise that hope has this characteristic; it is an emotion that applies to all people

¹There are nuances in the use of the term “hope”, such hope as an entity (a hope), as a possession (to have hope), as a process (to hope) or as a belief that accompanies an emotion (to be hopeful). These distinctions are discussed elsewhere (de Mello and MacInnis (2005), though all focus on the core appraisal dimensions of goal congruence and possibility. Briefly, “a hope” is an outcome appraised as goal congruent and possible. Having hope is possessing a feeling that occurs when a goal congruent outcome is appraised as possible. One either has or does not have hope. The opposite of having hope is having no hope or being hopeless. To hope deals with the notion of “how goal congruent is it”. A goal that is not only congruent but also important evokes yearning. When we say “I really hope Kerry wins the election” we mean that we have an intense feeling of longing for the occurrence of this outcome appraised and goal congruent and possible. Finally, one feels varying degrees of hopefulness as a function of the extent to which a possible goal congruent outcome is appraised as probable. It is also possible to use the core appraisal dimensions of hope to differentiate it from concepts like expectations, involvement, wishing, desire, and values. While expectations focus on what is likely and are independent of what is good, hope focuses on what is possible and goal congruent. Wishing connotes not an emotion but rather a state that accompanies a desire for a goal congruent outcome that viewed as all but impossible. Desire is also a state—a state of passion for something in the present. Values are beliefs about what is right. Hope is an emotion about what is possible. Involvement is a state that describes the arousal level of the individual and their motivation to act. Involvement implies neither appraisals of goal congruency nor possibility. Hope may induce involvement in products or decisions, but it is an outcome, not a synonym for involvement. Hope is also different from the recent work on anticipated emotions—like anticipated satisfaction, regret and joy as studied by people include Shiv and Huber, Simonson and Bagozzi. Hope focuses on anticipatory emotions— that is, emotions that *accompany* anticipated acquisition, usage and disposition as opposed to those that are expected to *arise from* purchase, usage and disposition.

in all times and in all places. It reflects what we would like to see happen to ourselves, the people we care about, those we don't, social groups, our country, and indeed the state of our world.

In the slides that follow, I "hope" to show that by focusing on the everyday language of the consumer, in this case as it applies to the concept of hope, we can move our field forward in several important ways. First, I will show that the concept of hope has considerable relevance to well-trod research domains that have already been highly generative to our field—domains like information processing, emotions, and so on. I will also show that hope has considerable generative capacity by its applicability to cries from some of our past Presidents to expand our field's focus of inquiry. I will also suggest that hope is cultivated by the marketplace and imbued in our social system. In sum, I wish to illustrate that by listening to the everyday language of consumers we may be able to identify concepts—like hope—that "have legs"; those that move us deeper into to well trod areas but also move us forward to new and uncharted domains.

Let us first consider how hope may have generative capacity by its ability to move us deeper into research domains that have already been highly generative to our field—topics like the self-concept, motivation, information processing, emotions, satisfaction, and so on.

Psychologist Hazel Markus and her colleagues have deepened the self-concept literature by identifying different types of possible future selves. These selves are relevant as they drive decision making and chart life experiences. Interestingly, these "selves" can be arrayed on a set of continua that reflect the goal congruence and possibility dimensions of hope. An "expected self" is the self we think we will likely become. A fantasy self is one that we dream about but which is most likely beyond our reach. The hoped for self is the self that we believe is possible and goal congruent. The feared self is a self regarded as possible and goal *incongruent*.

Interesting questions can be asked about these various self-concepts and the relationships among them. To what extent does the gap between a hoped for self (say weighing 120 pounds post diet) and an expected self (say weighing 150 pounds) motivate or demotivate consumer action (such as joining Weight Watchers). Is a false hope evident when a fantasy self and hoped for self cannot be distinguished? Does contrasting a hoped for self with a feared self in advertising induce greater consumer action than just the presentation of a hoped for self? And what is the relationship between other temporally focused self concepts and hope? Is hope induced by a discrepancy between an actual self (e.g., I now weigh 150 pounds) and past self (but at one time I did weigh 120 pounds)?

Hope and hoped for selves are relevant to not only to consumer motivation, but also to marketing. Following the means-end chain perspective advocated by Reynolds, Gutman, and Olson (among others), products are means to achieve not only our values but the outcomes we hope for. The outcomes achieved through product use, in turn, serve a broader purpose—that of achieving a hoped for self. Furthermore, since the outcomes we hope to achieve could relate to a number of consumption domains, products, advertisements, logos, and brand names from any of these consumption domains might feed into a hoped for self.

If consumers hope to achieve goal congruent outcomes through product use, hope should invariably be related to the notion of product category involvement. In fact, the more one hopes to achieve a goal congruent outcome the more likely one is to develop goal-derived categories that contain products relevant to the achievement of that goal. Lottery tickets, real estate, and the stock market for example, can also be consistent with the goal derived category "things that will make me rich. Interestingly, hope may also be

relevant to decision making involvement, inducing consistent and perhaps even intrusive thoughts and images that relate to the outcome we hope for. Such potential is reflected in the phrases of one being consumed by or a prisoner of hope.

The concept of hope could also be of interest to many of us who share an interest in micro-level topics as characterized by consumer information processing. Hope for a goal congruent outcome may induce pre-factual thinking and imagery about either the means to achieve a hoped for outcome or feelings that will accompany its actualization.

Furthermore hope may deepen our understanding of consumer information processing, leveraging on the fascinating research stream investigated by people like Meloy, Maheswaran, and Jain. Specifically, rather than processing information in an objective fashion, consumers who hope for a given outcome—say to look beautiful, may engage in "motivated reasoning". That is, they may process information in a way that allows them to conclude that the outcome they hope for is indeed possible. They may selectively attend to and process information consistent with the conclusion that the outcome is possible and discount or ignore information that suggests that it isn't. As it pertains to work on information search and information sources, hope may affect who we choose as an information source, as we are more likely to choose those sources that will confirm that the outcome we hope for is indeed possible. That hope may induce such motivated reasoning is perhaps reflected by the notion of "false hope" and the well known phrases shown here that characterize the seductive and mind distorting influences of hope.

Speaking of information processing, researchers have long studied individual differences and their effects on information processing. As it pertains to hope, psychologist C. R. Snyder finds considerable differences among individuals in the extent to which they experience hope. Across contexts, some individuals are more likely to have hope. These high hope individuals show greater task persistence, and find ways to achieve their goals despite obstacles. High hope individuals are not necessarily optimists who have a blind faith that things will work out. Rather, such individuals use hope to ensure goal achievement. How do such individual differences relate to factors like decision making involvement and confidence in the potential benefits of innovations as solvers of consumption problems?

A long-standing body of research in consumer behavior and psychology shows that mood has relatively profound effects on consumer behavior—influencing memory, information encoding, information retrieval, creativity and product judgments. What is the relationship between hope and mood? Does hope induce a positive mood? Are some of the effects we have observed in the literature on mood driven in essence by hope?

Relatedly, how does hope relate to anticipated emotions like anticipated joy, regret and satisfaction? On the one hand, the more one hopes for a given outcome, the more likely one is to project intense feelings once the outcome actually occurs (or doesn't occur). On the other hand, since hope is evoked in response to outcomes that are only possible, and not certain, the confidence with which affective forecasts are held may be lessened. What factors affect the extent to which we protect ourselves from hoping for things that might not occur—meaning, not getting our hopes up too high? Is there a hope regulatory system and when does it kick into gear?

And what is the relationship between hope and experienced emotions? Do consumers experience more joy, greater regret or greater sadness when they strongly hope for an outcome that occurs or does not occur?

How does hope relate to consumer satisfaction, if at all? Hope is predicated on what is *possible*, not like the expectancy disconfirmation model on what is *likely or expected*. A positive disconfirmation of what we expect enhances satisfaction. Are we even more satisfied when the outcome is better than what we had hoped for—because we didn't expect it—only thought it was possible?

A negative disconfirmation of what we expect leads to dissatisfaction with a product. But how does satisfaction relate to the disconfirmation of what we hope for? Is dissatisfaction with a product that didn't create the outcome we had hoped for mitigated by the fact that we didn't expect the outcome—only thought it was possible? Do consumers use motivated reasoning stimulated by hope to induce self-persuasion: to convince themselves that the outcome they had hoped to achieve from the product really did happen—For example, “yes, I think my skin is a bit clearer now”.

Hope is also relevant to those in our field who have studied more sociologically related phenomena such as gift giving. Fascinating work over the past 15 years has significantly advanced our understanding of gift giving and the transfer of meaning through the gift giving process. Research by John Sherry, Cele Otnes and others, shows us that gift giving can be instrumental to the cultivation and demise of relationships. Does hope weave its way into gift giving? Perhaps the hope to please the gift giver is woven into gift giving practices that help maintain good relationships. And, what is the role of hope in the intergenerational transfer of cherished possessions as studied by such scholars as Price, Arnould and Curasi? Such possessions may embody the unrealized or actualized hopes of the gift giver and their transfer may be accompanied by the hope of the appreciation of and maintenance of these meanings in the recipient.

On a more macro level, hope is also relevant to the “dark side” of consumer behavior as it pertains to spending and credit card abuse—as can happen when what we hope to have outstrips our abilities to pay for it. And what about hope and materialism. Does getting (or buying) what we hope for make us happy? The answer appears to be no—and for several reasons. First, consumption entails entropy costs that deplete life energy. But even more so, McCracken (1990) writes that once individuals take possession of objects they had previously hoped for, the impact of the object on happiness can be empirically tested. Invariably the consumer realizes that the product didn't actually make them happier. Interestingly, rather than learning from this experience, hope springs eternal as consumers continue to buy more and different stuff since it is THAT which will make them happy. Paradoxically, happiness may reside not in *acquiring* what we hope for but in the process of *having hope* in the first place. As Chalmers writes”, “The grand essentials of life are something to do, something to love, and something hope for”.

Finally, how does hope relate to even more macro-level issues that relate to cross cultural research on consumption? Very little research has examined cross-cultural differences in hope, though the question seems a natural one as some societies are centered on the here and now and what is as opposed to the future and what is possible. Moreover, we know that some societies adopt a fatalistic attitude, focusing not on possible goal congruent outcomes but rather the certainty of goal incongruent ones. In their book *The Rules of Hope* Averill, Caitlin and Chon (1991) provide some provocative results that lend insight into potential cross-cultural differences in hope. When studying individuals from 8 countries, they found that the concept of hope was frequent in the emotion lexicon of individuals from the US, Australia, Puerto Rico and Japan but infrequent among consumers from Indonesia, Malaysia and Sri Lanka.

Interesting differences were also found in what was seen as related to hope. Americans saw hope as similar to concepts like faith and prayer, which focus on uncontrollable forces outside the self. In contrast, Koreans saw hope as similar to concepts like ideal, goal, effort, and ambition, clearly relating hope to personal control. Differences were also found among cultures in what consumers *hope for* and what they believe they shouldn't hope for.

Perhaps the study of hope can lend insight into differences in consumer behavior across cultures. For example, to what extent do different cultures link products and consumption with hoped for outcomes? Do appeals to consumer hopes work consistently across cultures? Does culture moderate the impact of advertising that appeals to consumer hope on advertising efficacy?

Now let's think about the role of hope in expanding our thinking to novel or at least under-researched domains identified by some of ACR's past presidents. In the more “micro” domain, I would like to show that hope has relevance to other emotional-relevant domains and to non-conscious processing and issues of evolutionary significance and survival, relevant domains suggested by Past President Joe Alba. I will briefly show its relevance to social marketing, self-regulation, the dark side of consumer behavior and marketing, happiness, consumption in third world and emergent economies, and in general life—as encouraged by past presidents like Alan Andreasen, Beth Hirschman, Marsha Richins, and Russ Belk.

As it relates to emotions, hope is relevant to the emergent domain of consumer coping. In a consumer domain hope is nowhere more evident than in consumers' coping with the loss of possessions as might be experienced through war, imprisonment, internment, poverty, homelessness, institutionalization, and natural disasters. What keeps consumers going in these times of strife and in the absence of material possessions that make for a comfortable existence? Psychologists argue that it is hope. Hope sustains people in the worst of times as often it is all that we have to hang on to.

Insight into how hope facilitates coping is revealed in a number of places including Dr. Jerome Groopman's book *The Anatomy of Hope*. Groopman, the chair of the Harvard School of Medicine, identifies case after case where hope has prolonged life and enhanced the quality of life of consumers beset by disease and trauma. Groopman points to fascinating research at the interface between biochemistry and emotion—research that dovetails with the interests of others in our field who value the linkage of brain, emotion, non-conscious and evolutionary processes. That research suggests that hope facilitates coping because the internalization of the possibility of a goal congruent outcome (such as recovery) is associated with the release of endorphins and enkephalins, neurotransmitters that mimic the effects of morphine. Groopman argues that the biology of hope is a very real one having significant effects on coping with extremely adverse situations.

If hope reminds us about what is possible, does it also affect task persistence by keeping the outcome that we hope to have happen in the foreground? When does hope fade and turn into defeat? What predicts when consumers lose hope and believe they can no longer go on with consumption practices designed to make for a better life? Does hope encourage delay of gratification? Perhaps the more one hopes to achieve a goal congruent outcome the more one can keep the image of the hoped for outcome and the good feelings that surround its achievement salient, and hence the longer one can delay gratification.

If hope affects task persistence and delay of gratification, what are its implications for self-regulation? Hundreds of thousands of consumers are beset by problems of over-consumption and sometimes enact actions that break patterns of over-consumption. What

is the relationship between hope and self-regulation? What do consumers do to keep their hope alive in self-regulation practices? How can marketers induce and encourage hope? Consider, for example, Weight Watchers' practice of acknowledging other members for their weight loss success. The effect of this practice goes beyond a public reward to the successful individual. It also sustains hope of consumers who have not yet achieved this goal congruent outcome by reminding them that weight loss can happen to them too.

Self-regulation relates to outcomes that are controllable. But how do individuals maintain hope when things are outside of their control? This too has interesting consumer behavior implications as illustrated in Clotfelter and Cook's book "*Selling Hope: State Lotteries in America*" (among other places).

Consumers often engage in superstitious behaviors to feel that they have more control over making hoped-for outcomes happen. For example, some consumers play the lottery on "*lucky days*"; others research which numbers haven't won in a while, and hence are "*due*". Blowing on dice when we gamble or standing next to a "*lucky lady*" is designed to bring on a hoped-for win. An entire industry associated with talismans, good luck charms, crystals and the like are designed to enhance the perceived probability of a hoped-for outcome. In other contexts, consumers appeal to benign gods, as children do when they make trips to the mall to sit on Santa's lap and relate what they hope they will find under the Christmas tree. Others pray to God for the outcomes they hope will happen. Perhaps, for example, a few people have found themselves saying "please God, let this pregnancy test be negative and I promise I'll never have sex again".

While hope may be associated with coping with bad outcomes, it may also be an experience that is held and savored. Research by psychologists Chew and Ho suggests that in some cases hope may be associated with the timing of uncertainty resolution. When we hope that something may occur, we may delay knowing how it turns out because we want to savor the possibility that what we hope for has come true. As a case in point, consider why some consumers fail to scratch the numbers off of a lottery ticket immediately. Why wait? The reason is that waiting allows one to savor the hope that the ticket is a winner.

If hope facilitates coping, what happens when consumers lose hope? Consistent with Martin Seligman's work on depression and hopelessness, sociologist Marian Brewster Smith proposes that the loss of hope is associated with drug abuse, addiction, theft, and other factors that represent the dark side of consumer behavior.

ACR President Marsha Richins asked us to consider big or macro-level issues associated with consumer behavior. Along these lines, one might ask how does the increasing globalization of communication between industrialized and third world countries alter the nature of what consumers hope for? Does the realization of what is goal congruent and possible raise hope? Or does the discrepancy between what is now and what is possible induce a state of hopelessness by suggesting that what is possible for some could never be possible for you.

Beyond the just described, hope is also relevant to important public policy issues. If hope induces motivated reasoning, making consumers less discerning processors of information, consumers may be less able to recognize or acknowledge blatantly false advertising claims. As such, they may be more likely to fall victim to scams and fraudulent activities.

Furthermore, the lure of outcomes one hopes for, coupled with motivated reasoning may induce consumers to use extreme and often risky practices so as to achieve the outcome hoped for. A long literature attests to this potential, including research by our own

Jonathan Schouten. In her book *Hope in a Jar*—a chronicle of the cosmetics industry, Kathy Peiss notes that consumers have historically engaged in many seemingly outlandish practices to look more beautiful—such as taking poison to promote "bedroom eyes. To Hope for beauty undoubtedly underlies these painful and risky practices.

The motivational impact of hope may also make consumers engage in marketplace practices that raise ethical implications. There is, for example, a growing marketplace designed to match couples who desperately hope to have children with the human eggs of beautiful and intelligent women. Aside from the obvious ethical implications of creating a marketplace where babies can be bought and sold and a society which deems certain traits "desirable" and others "undesirable", one wonders about the ethical implications of preying on the hopes of consumers who are so desperate to have children that they will do anything—even turn to an underground marketplace— to make it happen.

The concept of hope also finds relevance in the realm of social marketing, an area that ACR President Alan Andreasen proposed has considered potential to contribute to social welfare. Hope is closely aligned with a well-known bias examined by people like Lauren Block, Punam Keller and Geeta Menon—the positivity bias. Interestingly, we tend to believe that the outcomes we hope for are more likely to happen to us than to other people, and that the outcomes we fear are more likely to happen to other people than to us.

Clearly this bias has implications for social marketers who want to warn consumers about the possibility of having cancer or contracting AIDS. Yet, the very existence of this bias makes consumers feel they are less vulnerable to these negative outcomes. As such, they are less likely to engage in preventative actions that may involve their detection. Interesting questions can be asked about hope and the positivity bias. How can marketing communications be calibrated such that they reduce the positivity bias yet also sustain hope that a given illness—if detected—can be remedied?

Those of us who are interested in social influence might ask where hope comes from, how it is created, how it is dashed, and what factors moderate its derivation. I'd like to spend a minute here thinking about these issues, considering how hope is induced by our social system and the marketplace and whether consumers are increasingly turning to the marketplace as opposed to religion as source of hope.

Grant McCracken's classic 1986 JCR paper indicated that the meaning of products derives from the culturally constituted world and from market-relevant anointers of meaning—like ad agencies, producers and marketers, as well as social groups, evaluators and commentators. To what extent is the meaning of products and consumers' hope for the outcome they produce driven by the marketplace? And to what extent are social evaluators and the media—people like Simon Cowell of American Idol—important to the cultivation of as well as the demise of hope.

As far as social commentators go, consider as an example commentators like Michael Moore and speakers at the Democratic Convention (whose slogan is "Hope is on the way"), complement this year's political marketing campaigns in shaping consumers' hope for a better America. Consider too movie stars and celebrities as forces that shape consumers' hopes for athletic greatness, beauty, achievement, and esteem. Even everyday people cultivate hope through the media. Consider, for example, the impact of American Idol contestants like Diana DeGarmo, Latoya London, and Fantasia Barrino in shaping average consumers' hopes for fame. Groupies and fans hope for proximity and the opportunity to touch the greatness of their favorite bands—as illustrated not only in the

movie *Almost Famous* but also in a wonderful paper by Tom O'Guinn on the Barry Manilow fan club. Hope for achievement in the bodily domain are encouraged by Mr. Universe, Olympians and the celebrated others who are positioned as the icons of athletic prowess.

The heroes and heroines who occupy our childhood fantasies are reflective of hope. How many of us, for example, did not hope to grow up being as brave and adventurous as Amelia Earhart, as intelligent and as perspective altering as Albert Einstein, as dedicated and as devoted to the state of our planet as Jane Goodall, and as good looking and sexy as C.W. Park?

Of course the cultivation of hope by the culturally constituted world begs the question of the socialization of hope in children—a topic ACR President Debbie Roedder John discussed in her presidential address. At what age do children have the cognitive capacity to be future oriented and to hope? How does the manifestation of hope or the things we hope for change as function of age? At what age do children learn to turn to the marketplace as a means for fulfilling hope through consumption and to what extent are children's hopes unfulfilled by what they feel that don't have in the way of consumer goods?

Those in the audience who adopt a marketing perspective might ask what marketing tactics stimulate hope? Clearly, if hope relates to appraisals of goal congruency and possibility, tactics that make it seem that a goal congruent outcome *is* actually possible should induce hope.

One might do this by suggesting that this possibility exists because of something new about the product. Innovations are seductive because they imply that there is something new about the product that can deliver what wasn't possible before. Alternatively, hope may be encouraged by promises of customization. Customization, after all, takes into account the specific goal congruent outcomes a consumer hopes to achieve and ensures that it happens. Alternatively, one may provide demonstrations that show, if not imply that goal congruent outcomes are possible.

Rather than suggesting possibilities in the product, marketers may also stimulate hope by suggesting that possibilities for the goal congruent outcome exist *in the person*. Appeals that tell the consumer that they "can do it" or that they can "change their fate", are designed to alter the belief that what consumers thought was impossible can be actualized through their own efforts.

Marketers also cultivate hope by suggesting possibilities *in the process*. The idea here is that consumers can get what hope for if they get the inside scoop on how to make it happen. Many magazines, books, product packages and websites promise this knowledge and hence the possibility of achieving what one hopes for through the provision of tricks, tips, steps, tools, and best of all, "secrets".

A final issue I'd like to consider regarding hope as stimulated by marketing is whether they marketplace is increasingly serving as a source of hope—potential outstripping the influence of other sources. Throughout time, hope has been linked with religion. To the religiously faithful, fulfilling hope for today seems less important than hope for the everlasting joys experienced in the afterlife. However, the *secular world of consumption affords many opportunities for hope* beyond the sacred and spiritual hope offered through religion. Indeed, Russ Belk (1996) argues that our society has witnessed a *transformation of the locus of hope*—from religion and redemption to the marketplace and consumption. Rather than spending the day set apart for worship, Sundays are just as often spent on trips to the mall where hopes of new lives, and better things are indulged. The religious experience of Christmas has moved from a spiritual practice focusing on hope for a new world following

the birth of a savior to a commercial enterprise focused on consumption and Santa Claus. And stores are called "meccas" offering hope and salvation to consumption woes.

I have tried to suggest that the concept of hope is one that may "have legs". That is, it may have considerable generative capacity, allowing us to deepen our knowledge of topics that remain tried and true but also allowing us to delve into areas that are also vital, and while pioneered by some are not yet prototypic of our field. This includes questions that link hope with consumption and life, coping, public policy, social marketing, the dark side of marketing and consumer behavior, and other relevant domains.

However, hope is certainly not the only concept that has this characteristic. I believe that by looking at the everyday language of the consumer we can identify other relatively powerful yet under-researched domains that might have similarly long legs—topics like emotional attachment, self-efficacy, self-determination, and so on.

I certainly don't want to leave the impression that it is necessary to listen to the language of the everyday consumer to find relevant and meaningful concepts with legs, however, I do think that it can be instructive for us to put our ear to the ground and listen to what they have to say.

Thank you for your time and enjoy the rest of, not what I hope, but rather what I know will be a very stimulating conference.

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The Third Annual ACR Film Festival

Russell Belk, University of Utah

Robert Kozinets, University of Wisconsin

SUMMARY

The 3rd North American ACR Film Festival in 2004 continued to evolve in several ways. It was notable that there were more films accepted from European, Australian, and Asian filmmakers than from North American filmmakers. There was also a corresponding shift in research sites and topics. Even within North America there several Mexican and Latino topics represented. Clearly the Film Festival has gone global. As co-chairs of the Festival, we are very pleased by this turn of events. It was evident that videography allowed these topics to be presented in a more vivid and engaging way that allowed ACR audiences and future audiences of these videos to better appreciate the texture and flavor of the phenomena presented. It also allowed audiences to take a comparative perspective and ponder, for example, how do digital photos and the visual diaries presented on blogs of young Koreans differ from the uses of such images elsewhere? Or, how do American Latinos differ in their feelings of community from Mexicans celebrating the Day of the Dead? Or how to Japanese and Chinese Christmas meanings differ from those in the West where the holiday originated?

This year the Film Festival People's Choice Award went to a video by Mary Louise Caldwell and Paul Henly entitled *Living Dolls: How Affinity Groups Sustain Celebrity Worship*. Besides an excellent study of Cliff Richard fan clubs in Australia, the filmmakers also brought a little of big time Film Festival promotion to the conference with give-away postcards, pens, and other merchandise promoting their film. Other filmmakers appeared to take note of these marketing methods and we may well see more of this in next year's festival.

On Saturday afternoon, besides a re-showing of the prize-winning film, the co-organizers held a mini-workshop on consumer videography. In addition to basic demonstrations and discussions of filmmaking and editing, a healthy discussion ensued about the nature of the medium as a vehicle for consumer research. Issues of theory, technique, voice, and representation stimulated lively and diverse opinions that carried out of the workshop and into the hotel hallways.

This year ACR President Debbie MacInnis also announced that the revamped ACR web site plans to offer downloadable videos or video trailers from the Film Festival in the Future. Together with downloadable consumer and marketing videos beginning in the online *Academy of Marketing Science Review*, a special DVD issue of *Consumption, Markets, and Culture*, and a new Film Festival at the 2005 European ACR Conference, the increasing popularity of videographic consumer research is strongly evident.

It is exciting to watch this emerging area of consumer research develop and to see a fresh batch of innovative videos each year. We have said during the two earlier Film Festivals that most filmmakers whose work was selected were first-time videographers. This continues to be true, although we are also beginning to see new films by those who have been in prior years of the Festival. Since many of the first time filmmakers have asked us for examples of prior films, we hope to have some of them up (in part or in their entirety) on the ACR web site by this time next year. We hope this will increase exposure to these videos as well as bring some of them more into the classroom and seminars.

FILM FESTIVAL ABSTRACTS

“Selling Tragedy: The Commodification of Ground Zero”

Jean-Sebastien Marcoux, HEC Montreal

Renaud Legoux, McGill University

This film deals with the selling of souvenirs at Ground Zero, a complex activity which has often been condemned as a form of crass exploitation of tragedy. It is based upon a field research conducted between March 2003 and March 2004, and uses ethno-videography and other qualitative methods. The film draws on consumer researchers' work on the sacred and the profane, and extends it to traumatic, overwhelming situations, like the 9/11 attack. It opens up on a discussion of the construction of social memory, and its appropriation by individual consumers.

“Living Dolls: How Affinity Groups Sustain Celebrity Worship”

Marylouise Caldwell, University of New South Wales

Paul Henry, University of Sidney

Celebrity worship attracts limited attention in the marketing literature (exceptions include O'Guinn 2000; Pimentel and Reynolds 2004). In this study, we examine the case of sustained celebrity worship within an affinity group (Macchiette and Roy 1991) by focusing on the Cliff Richard Fan Club in Sydney, Australia. Our findings support and contradict prior research (e.g., O'Guinn 2000). We extend theory by demonstrating that affinity groups sustain celebrity worship by providing benefits beyond those directly linked to celebrity worship (Jenkins 1992; Kozinets 2001). For example, creating an extended social network that provides positive social stimulation and on-going emotional support.

“The Fantasy of My Ideal Home: Idealism and Realism in Home Comfort”

Peisan Yu, Tung-Hai University, Taiwan

While the term comfort is being used pervasively in daily language, its manifestation in the making of home comfort is still under-explored. This videographic production is a follow-up on the interpretivist discourse of home comfort and its experientialism. A holistic view of consumption constellation and symbolism is employed to submerge into the realism and idealism in the fantasy of home of comfort. Based on the fifteen in-depth interviews with informants in Hong Kong and the urban regions of Taiwan, data of hand drawing, photographing, video shooting and verbal narration were gathered to acquire an profound account ideal home comfort. Altogether five Grounding Themes are raised for the foundation of their emergent themes.

“How Children in Rural China Become Consumers”

Kara Chan, Hong Kong Baptist University

James U. McNeal, Peking University

Fanny Chan Phil, Hong Kong Baptist University

Since Premier Deng Xiaoping adopted the Open policy in 1979, the Chinese economy has been enjoying rapid growth. Although living standard and income in rural China have improved, they still lag behind their urban counterparts. In this video, we visited a rural village in Chengdu Sichuan in August 2003 and interviewed seven children aged nine to twelve. The video starts with an overview of different types of shops in the rural area and continues with interviews of children. We found that rural children have limited consumption experience compared to urban children and that they relied heavily on personal sources for new product information.

“Fanatic Consumption: Reconsidering Fanaticism”

Scott Smith, Central Missouri State University

Jeff Murray, University of Arkansas

Jason Cole, University of Missouri

Molly Rappert, University of Arkansas

Dan Fisher, University of Tulsa

Fandom is often stigmatized as abnormal, dangerous, or silly (Lewis 1992). Examining so-called fanaticism in a consumer context provides insight into the processes that lead to deeply involved commitment to lifestyles and consumer products or brands. This research involved the interviewing of individuals who have experienced the “fanatic” label to attempt to understand the motivations that drive their consumption and to examine the way in which these stigmatizations are used, accepted, modified, or refuted by individuals.

“Generaciones/Generations: Cultural Identity, Memory, and the Market”

Lisa Penalzoza, University of Colorado

In this documentary Mexican Americans in San Antonio, Texas share their market experiences—from the blatant discrimination of the 1940’s and 50’s, to the activism of the chicano/a rights civil rights movement in the 60’s and 70’s, to the gains of affirmative action through the 1970’s and 80’s, to the present popularity of Latino culture dubbed “Latino chic.” The film addresses a range of issues at the nexus of culture, consumer behavior and marketing, including identity, memory, social mobility, bilingual education, representations of Latinos/as in advertising and tourism, and the role of business in the Latina/o community.

“Xantolo: The Day of the Dead Celebration in the Huasteca Region of Mexico”

Sindy Chapa, University of Texas-Pan American

Leticia Escobedo De Chapa, Institute of Research and Difusión of Mexican Folklore – Matamoros

This video shows how the tribe of Huastecos, located in the states of Tamaulipas, Veracruz, Hidalgo and San Luis Potosi, celebrate XANTOLO, which means “day of the dead.” The Huastecos celebrate “the dead” for three consecutive days. It begins on October the 31, with the creation of the altar, and continues through November the 1st and 2nd, known as All Saints’ Day and All Souls’ Day. Previous to the celebration, two other important days are considered for the Huastecos, the “Domingo Grande” and the Day of the Flower; days when the Huastecos shop and get ready for the celebration. Overall, it is appreciated through this video that the most prominent consumption symbols of the Huastecos during the Xantolo celebration are those related to the altars, the offerings, the cemetery, and the dances.

“Phoenix: Destruction and the Creation of Self”

Angela Hausman, The University of Texas–Pan American

Olga Chapa, The University of Texas–Pan American

The notion that possessions form the nexus of self-image is well established (cf. Belk 1988; Richins 1994; Wallendorf and Arnould 1988). Yet we know little of what happens when all one’s possessions are lost, especially when the loss is total and instantaneous. Involuntary disposition of possessions leads to dramatic changes in consumption behavior and the meaning of possessions as the new self is re-created. (Andreasen 1984; Mehta and Belk 1991). This film traces the journey made to reconstruct self after devastating fire loss.

“Tet and Consumption in Vietnam”

Thuc Doan Nguyen, University of Utah

Tet is the traditional Vietnamese New Year that derives from the Chinese Lunar New Year. In Victor Turner’s terms, Tet is a liminal time in the calendrical ritual of the Vietnamese culture. That is, it is set apart from the ordinary and everyday so that ordinary rules of behavior are suspended or inverted. In studying the traditional Vietnamese New Year, the one event where the Vietnamese consume the most, this video will address two questions: 1. How do the Vietnamese consume during Tet? And 2. How is globalism evident in Tet consumption patterns?

“Happy New Year: An Examination of Chinese New Year Food Shopping Behavior”

Lien-Ti Bei, National Chengchi University

Etta Y. I. Chen, National Chengchi University

For the family reunion, shopping special and traditional food for Chinese New Year becomes an important ritual activity. This film explores the unique behaviors and interactions from both vendors and consumers in the Di-Hua Street, which is the most representative New Year food market in Taipei. Shoppers in Di-Hua Street and two families are interviewed to reveal their feelings about New Year food shopping activities. Chinese New Year atmosphere, bargaining skills, and consumers’ impulse and eager of purchases in a festal market are all demonstrated in this film.

“Because It Is There: An Extreme ServiceScape”

Gulnur Tumbat, University of Utah

This film introduces the concept of extreme servicescape illustrated by Everest base camp in Nepal. It is a temporary home and a pilgrimage site for climbers, guides, and Sherpas for over a 2-month period. It is mainly characterized by a moving glacier, cold weather, and constant avalanches. It is not wilderness in its physical sense but an extreme servicescape with its computers, satellite phones, and even coke or beer, or anything from the civilized world that would make clients—who pay at least \$65,000 to climb the mountain—endure living at this place and feel home.

“Beyond the Camera Lens: A Look Inside the Photo-Taking Culture of Korea’s Youth”

Joonyong Seo, Seoul National University

Hae-Joo Kim, Seoul National University

This film focuses on the emergence of a new photo-taking culture in Korea, led by young owners of digital cameras. Based on offline interviews of twenty young Koreans and online observation of website postings, we found that these young consumers try to seek fun and self-presentation through photo-taking. At the same time, they try to record precious experiences of their past and communicate them to others. In addition to technological advancement, these psychological factors were analyzed as the prime sources of the sudden photo-taking culture of Korea’s youth.

“Santa Claus is Coming to Town: Assimilation of Christmas in Japan”

Junko Kimura, Haboromo University – Japan

Russell Belk, University of Utah

Based on videographic fieldwork in Osaka, Kobe, and Kyoto, we investigate the popular celebration of Christmas in Japan. From our interviews and observations we consider broader debates on globalization, localization, and hybridization in contemporary celebrations of consumption. We find that multinational brands, media, and retail chains play important roles in promoting a global Christmas, but that Japan adapts rather than simply adopts these imports. It does this through the joint processes of making the exotic familiar and keeping the exotic exotic. Christmas is made to suit Japanese sensibilities or it is treated like visiting foreign pavilions at a World Fair.

“Sinolization of a Western Holiday: The Sweethearts’ Christmas”

Xin Zhao, University of Utah

Russell Belk, University of Utah

Christmas has come to urban Chinese retail stores, shopping malls, restaurants, bars, and private parties. Christmas carols, Santa Claus, Christmas Trees, and gift-giving are increasingly common. However, this is a young people’s holiday celebrated mostly by couples. Based on interviews with consumers, sales people, and a department store manager, we find that interest in Christmas and Christmas activities is high despite confusion as to its religious aspects. The Chinese celebration of Christmas is compared to the Spring Festival (Lunar New Year) celebration but is seen as less of a family holiday. There is also an attempt to blend Buddhist deities into the Chinese Christmas celebration.

“Private Spaces in Public Places: An Exploration of the Concept of Sacred Space in the Context of Public Restrooms”

Norlaine Thomas, University of Manitoba

This film looks at people’s attitudes towards the public restroom space, and their reactions to the growing presence of advertising and other commercial manifestations in these private spaces. Interviewees talk about their experiences, memories and impressions of the less obvious functions of public restrooms. The film draws upon the concept of the sacred as well as exploring liminal space, an area set apart from the everyday world with its own rules and boundaries. Gender issues arise in the examination of the different interpretations of the spaces allotted to males and females. Privacy, safety, and anonymity are developed as themes in the context of this distinct environment.

“Consumption in an Intercultural Marriage”

Yasmin Sekhon, Bournemouth University

Russell Belk, University of Utah

Any time a couple forms a household, changes in consumption patterns and rituals must occur. When the members of the couple are from different cultural, religious, and ethnic backgrounds, more change is necessary. We examine the sorts of consumption changes and impact on identity in marriages between second generation Indian immigrants in the U.K. and Anglos in the UK. This video focuses on one couple comprised of a Sikh man and an English woman. Areas on which we focus include dating, marriage, home decor, food, music, houseguests, money, gift-giving, religion, and racism.

SPECIAL SESSION SUMMARY

Finding Families: Family Identity in Consumption Venues

Linda L. Price, University of Nebraska
Amber M. Epp, University of Nebraska

SPECIAL SESSION OVERVIEW

Family remains essential to many core questions in consumer research. The family serves as a consuming, producing, distributing and socializing unit interacting with other elements of society (Netting, Wilk and Arnould 1984). Families are at the center of how people learn to be consumers, the meanings ascribed to consumption activities, and consumption itself (Miller 1998; Moore, Wilke and Lutz 2002). Despite the profound importance of families to consumers and consumption activities, consumer researchers have devoted relatively little attention to understanding them. Moreover, consumer research to date has reflected narrow conceptualizations of the family as a consuming unit (Burns 1993; Commuri and Gentry 2000).

The family, as location, experience, kinship and ideology has undergone dramatic transformation. Great diversity of experience of family life is now common and several sets of potential kin link a growing proportion of children and adults (Finch and Mason 2000; Smart and Neale 1999). At the same time, many contemporary consumers still want to believe they belong to a family that works and to feel they contribute actively to it (Finch and Mason 2000; Miller 1998; Smart and Neale 1999).

Morgan (1996) challenges the idea of the family as an institution, speaking instead of family practices that are historically and culturally located but at the same time fluid and elective interacting with other practices. Because how and what constitutes a family and the ideological power of the term have changed, the task of finding families has changed. This session introduced new empirical and theoretical approaches to understanding family practices in consumption venues that are responsive to the diversity of family life now common. Each of the papers in the session offered insights into family identity, and the blending of family practices with other practices. Collectively, the papers support the emotional and ideological power of family, but provide fresh perspectives for examining how family identity is constructed between generations, across work roles and spaces, with brands and consumption.

We began our quest for family with a poem by John Schouten who searches for family by tracing emotional signatures. His poem underscored the emotional power of family and set a reflexive tone for the session. The second presentation by Amber Epp and Linda Price introduced a conceptual model linking family identity to its enactment through consumption practices. This paper set the stage for the empirical papers that followed. The third presentation by Robert Kozinets and his co-researchers offered a fascinating account of how grandmothers, mothers and daughters create and reproduce family identity through the American Girl brand. The dolls and stories are used to create, extend and implant memories of themselves, their families and their heritage. The final presentation by Kelly Tian and Russell Belk examined how consumers use material goods to navigate and resolve corporate-family and home-family competitions for commitment and attachment. The ideological power of family is evident in corporate attempts to “become family”. Their study also illustrated the fluid, elective quality of family. Eric Arnould, University of Nebraska, served as discussion leader in the session.

“Observations At My Own Funeral”

John W. Schouten, University of Portland

What is this place?
A sea wall?
People gathered at a pier?
I sense water here, and salt.

In death I have no eyes, no ears.
No fingertips.
Hard matter has turned to shade and smoke.
Emotional contours shape the air:
A granite egg lodged in ancient ice,
The briny scent of unfinished business,
Burrowing worms of fear.

I begin to understand.
This is not the shore.
There is no pier. No boat.
No cry of gulls.
What I imagined to be floating here
Is a box of souring bones.

My flesh and blood,
Are you also in this place?
Which among these huddled shapes are yours?
I shall sift through them and try to trace
Your emotional signatures.

Here a woman
Holds a mental picture
Of me, only younger
And crueler:
Fraying paper, broken glass,
The sand at the heart of a misshapen pearl.

And here a rage of muscle,
A tongue-tied brain,
A flash of sugar in flame.
In him I hear my own voice:
The bass line in a song
Of hope... despair... disdain.
My son. Grow strong.

And you.
I would know you anywhere.
You are my open country.
I know every stream and every wood.
Every blade of grass.
I would inhabit, if I could,
This empty space, this sparrow's nest
Filling up with snow.
I see you have kept secrets.
Jewels wrapped in papery leaves.
I will let them be.
You have done as much for me.

“Rethinking Family Consumption: An Exploration of Family Identity”*Amber M. Epp, University of Nebraska**Linda L. Price, University of Nebraska*

The marketing literature focuses on ways individual identity is reflected and constructed through consumption (Belk 1988; Noble and Walker 1997; Schouten 1991), but largely ignores families in this regard. Yet, the family represents an important unit of consumption. Specifically, families shape individual choices in terms of socialization effects (John 1999) and provide a locus for intergenerational influences (Curasi, Price, and Arnould 2004; Moore, Wilkie, and Lutz 2002). Despite the remarkable influence of family on consumer behavior and the fact that scholars across disciplines acknowledge the value of exploring the concept of family identity, little consumer research addresses this key issue. Marketers would benefit from understanding how a family’s identity patterns its consumption activities and preferences.

First, we explore family identity as a meaningful unit of analysis in family research by defining its components and linking family identity to consumption behavior. Bennett, Wolin and McAvity (1988) offer the most comprehensive definition of family identity in the psychology literature: “Family identity is the family’s subjective sense of its own continuity over time, its present situation, and its character. It is the gestalt of qualities and attributes that make it a particular family and that differentiate it from other families” (p. 212). These authors observe three primary components of family identity: membership, temperamental and generational.

Second, we introduce a model of family identity enactment. We begin with the notion that families have collective identities contingent upon the social context of family life. We next introduce the enactment of family identity through the interaction of various communication forms and symbols. Forms refer to the communication mechanisms families use in enacting their identities, including the performance of family rituals, narratives, social dramas, everyday interactions, and intergenerational transfers. Consumer activities including the purchase, consumption and disposal of products, brands, possessions, services, and places serve as symbols of family identity enactment. Further, family psychology research suggests families vary in their level of adaptability of these forms and symbols. Finally, our model includes possible outcomes for family identity. Over time and through transitions, families’ identities develop and change, leading to many possible outcomes including reconstruction, maintenance, reinforcement, and weakening.

In addition, we introduce factors that moderate the relationship between families’ identities and enactment. These include the extent that a family has a shared sense of collective identity, the extent that the shared identity is aligned with the individual family members’ identities, and the level of commitment family members have to maintaining that shared identity.

Similarly, disruptions impact the relationship between families’ identities and the enactment of identities. Bolea (2000) recognizes that families’ identities are challenged during disruptions, making them more salient. In marketing, research suggests that one’s identity is challenged during transitions (Noble and Walker 1997) and transitions lead to disruptions in consumption (Andreasen 1984; Fellerman and Debevee 1993). We describe disruptions as both the traditional family life cycle trajectory (marriage, birth of a child, empty nest) and less recognized transitions (sudden loss of a job, relocation, serious illness).

Our third objective was to specify possible research questions delineating the relationships between family identity and consumption behavior in three domains of family life: transitions, everyday interaction, and intergenerational influence. Below, we highlight important aspects of these three domains.

Traditionally, consumer researchers rely on family life cycle (FLC) models to examine the consumption behavior of families in transition. While these models contribute to understanding how structural changes in family composition alter consumption behaviors, this paper critiques FLC models and advances the family identity construct to broaden our understanding of family transitions beyond purely structural components of family. This perspective provides a more malleable view of families, overcoming constraints imposed by the structural household boundaries evident in FLC categorizations and helping capture the overwhelming diversity of families.

Families also must find a way to manage everyday interactions such as making decisions, eating meals together, shopping and saving behaviors, roles of family members, and receptivity to outside influences such as media and peers (c.f. Carlson and Grossbart 1988; Moschis 1987; Churchill and Moschis 1979; Moschis and Moore 1982). In a similar vein, identifying how families use brands to construct identity and acknowledging that families construct identity in different ways should be of interest to consumer researchers. The family identity construct brings a holistic perspective to the examination of how family influence mediates the effect of media and peers on adolescent behavior by considering the structural, temperamental and generational components of family. For instance, consumer researchers are studying issues regarding alcohol and cigarette use among young people, specifically addressing the role of advertising and peer influences on these important consumption issues (cf. Pechmann et al. 2003; Pechman and Knight 2002). However, these issues are being examined without reference to the particular families in which they are embedded. Family identity may play an influential role in determining how young people respond to consumption issues such as alcohol and cigarettes. In particular, the “relative rigidity/flexibility” aspect of the temperamental component of family identity may determine how susceptible young people emerging from within these families are to outside influences.

In addition to experiencing transitions and managing everyday interaction, families act as a locus for social reproduction. Consumer researchers focus on various topics within this domain including intergenerational influence as a source of brand equity (Moore et al. 2002) inalienable wealth (Curasi et al. 2004) and rituals (Belk, Wallendorf and Sherry 1989; McCracken 1986; Rook 1985; Wallendorf and Arnould 1991). However, studies in the marketing literature do not specifically address issues of family identity, and its role in intergenerational transfer. Family identity offers valuable explanations for why intergenerational influences occur in some families but not in others. As well as examining intergenerational questions of brand transfer, the generational component of family identity also has implications for the extent to which services and places are constructed into a family’s identity and transferred across generations. Furthermore, this paper recognizes the role of consumption rituals in constructing and transmitting family identity across generations of family.

“American Girl: The Family Brand”*Robert Kozinets, University of Wisconsin-Madison**John Sherry, Northwestern University**Mary Ann McGrath, Loyola University**Stefania Borghini, Bocconi University**Nina Diamond, DePaul University**Albert Muniz, DePaul University*

This presentation explores consumers’ in-store and in-home use of the American Girl brand and its family of products to build and extend family memories. Girls, mothers, and grandmothers use the brand (and the pilgrimage experience) to create, extend, and implant memories of themselves, their families, and their heritage.

American Girl Place (AGP) is the epicenter of an experiential brand-based project that can also be understood as a commercial reformation of family, cultural, and gender identities. AGP is designed to harness play in the service of learning, to interpret, transmute, and transmit traditional cultural and familiar familial values to contemporary girls living in a plural postmodern society. That a template for successful comportment can be devised and delivered for (and internalized by) tweenagers negotiating the broken terrain of girlhood in a multicultural milieu is one of the central problems of our investigation. The performance and contestation of that template, manifested both on-site at AGP and in the homes of consumers which have become, are the principal foci of our research. Our findings illuminate the powerful cultural role of brands and brand narratives in what may be the quintessential small social group: the family.

To date, our methodology has been principally ethnographic in nature. We have conducted extensive participant observation at American Girl Place, including some photography and videography. We have conducted numerous interviews both on-and off-site, with store management, consumers (purchasers, influencers and end-users) and other stakeholders. We have immersed ourselves in company literature (press kits, American Girl magazine, several book series and self-care/personal growth genres, direct mail catalogs and website pages) to understand the corporate archival presence of the brand. Our research team was assembled to ensure a deep and holistic account of the focal phenomena. The team is composed of males and females of disparate age, marital status and nest composition. Several nationalities and ethnicities are represented on the team. While the team is comprised principally of seasoned ethnographers, several disciplines (anthropology, cultural studies, psychology, semiotics and marketing) are represented as well.

We find that complex brand narratives are used by girls, their mothers and grandmothers as elements in the co-construction of personal mythologies, family mythologies, and cultural connections. Girls, mothers, and grandmothers play not only with dolls, but with the diverse and diversity-celebrating, deeply involving stories surrounding the American Girl brand. Families use them as the foundation to construct their own stories, and they synthesize new stories from the combination of commercial and personal tales.

The customer domain, that of young girls who were enjoying their experience with a variety of dolls, led to a web of connections that reinforced their kinship with mothers, aunts and grandmothers, their shared experience with female friends and an idealized and controllable sense of themselves. Through their use of dolls, clothing, accessories and alternative historical contexts, we witnessed girls vacillating between imaginative play and preparation for their lives as adult women. The material accretions of domestication involve the arrangement, rearrangement and interplay of the objects that make up the contents of rooms, closets, and wardrobes. Girls who had technically outgrown their dolls or put them aside, have squirreled their dolls and accessories away in closets and claimed that this experience was “still in them.”

Mothers and grandmothers approve of these lessons, but also enjoy the ability to give their young female offspring experiences similar to those of their own childhood. The older women feel a sense of nostalgia and connection with the doll-stories, but they also enjoy the reproduction of the forms of their upbringing that may have become passé. In the current casual world of denim jeans and t-shirts, playing dress-up with both the doll and the doll's owner (who may not favor wearing a dress ever, but will comply in order to look like her doll) reproduces what may have been a routine experience in the adult's childhood. This is “stuff” that mothers *want* their girls to *want*.

Therefore, we suggest that the net result of this consumption of branded stories is the construction of a gendered family history that connects the women and girls through history, nation, ethnicity, and gender, and that helps to clarify and educate girls, their mothers, and their families about who they are and what matters to them. These findings of family/togetherness/cultural sameness are of course set off against notions of difference. Yet this distinction raises the fascinating dynamic at work both in commercial and contemporary popular culture: the exoticization and appropriation of cultural difference itself as a vehicle for family differentiation (a form of co-branding, perhaps?) and neo tribal affiliation. In an effort to ennoble play and harness the ludic in the service of personal development, American Girl marketers and American girl parents collude in the enduring co-creation of a model of femininity, identity, and family.

“Personal Possessions in the Workplace: The Influence of the ‘Alternate Family’ of the Corporation on Consumption”

Kelly Tian, New Mexico State University

Russell Belk, University of Utah

When a work organization is small, its members share space, material resources, and everyday life much like a family (Thorne and Hochschild 1997). Prior research recognizes that organizational members share in the making of a corporate family via developing personal relationships, taking on family roles (e.g., the “head of the family,” “nurturing parent,” “dependent child”), and participating in struggles over resources like those encountered in the home (Czarniawska 1999; Thorne and Hochschild 1997). Prior work also suggests that in dealing with the competition between a corporate family and their home-based families, workers may rather unconsciously use possessions like keys and calendars to avoid home-work conflicts, and to negotiate the physical and psychological boundaries between home and work (Nippert-Eng 1996). The present work contributes to this knowledge by investigating the ways in which consumption behavior plays a role in the formation of the corporate family and its defining values. It further suggests the conscious ways in which workers make use of a variety of material goods that they keep at work to navigate or resolve corporate-family and home-family competitions for their commitment and psychological attachment.

Textual data for our study was provided by auto-driven interviews conducted with seventeen employees, who prior to the interviews, photographed their twelve most valued workplace possessions. Typical of innovative post modern organizations, the corporation from which the sample was selected employed a small number of workers (65) and exhibited a culture in which values of individual expression, teamwork, and a “family-orientation” were dominant.

The corporation established its acceptance and valuation of its role as an alternative family through gift-giving practices, company-sponsored social events, and open policies with respect to possession displays. Gift-giving practices included exchange rituals such as the company's annual “Junk Sale” in which individuals bid for the used goods donated by their coworkers in order raise money for a social cause, and a Christmas gift exchange.

However, gift-giving practices also included corporate gifts given to either celebrate organizational successes or to acknowledge and render tangible an individual's role in the overall team effort (e.g., logo-bearing gifts). Gifts of stock options were also received by all employees, such that members benefited more like family members do from the pooled resources and economic success of the household. Paralleling the social activities of family, the company hosted ritualized sit-down luncheons attended by all members, as well as, bowling parties, golf tournaments, and pic-

nics. Further, the firm, like the home family, was open to workers' expressions of individuality through their possession displays.

These consumption behaviors facilitated development of familial-like relationships among coworkers, emotional attachment to the organization, and creation of a "homey" atmosphere. Familial relationships were initiated with personal disclosures that ensued from gift exchanges. The Junk Auction prompted winning bidders to talk with donors about their history with the object; whereas, the Christmas gift exchange encouraged disclosures about present hobbies and interests that might form the basis for gifts. These company-sponsored gift exchanges modeled the usefulness of gifts in building personal relationships, seemingly giving rise to more ad hoc individually-initiated acts of gift giving. The continued display of gift objects in the workplace following exchanges served to elicit additional personal disclosures, as did personally selected possession displays brought to work to convey individuality.

Workers' emotional attachments to the company were rendered tangible in photographs and other souvenirs of participation in company-sponsored social events, as well as, corporate gifts which marked successes or acknowledged individual contributions to the group. Such objects served to ground and stabilize attachments to the company by facilitating the retelling of organizational stories. In illustration, one salesperson, who deemed the company's survival dependent on his ability to bring in revenues, photographed a champagne bottle given to all employees when he secured the company's largest contract. His retelling of the celebration emphasized his success in his family role as "bread winner."

A "homey" environment was created in the workplace by the collective display of personal possessions, inclusive of gifts and expressive objects. Such an environment not only added to the feeling that individual expression was valued, but also that the company was "a home away from home," where the support provided by personal relationships (normally sought at home), was also accessible at work. Further, the gift of stock options, which most employees held, led to a family-sense of being needed by other members, to "make it happen" for the organization (i.e., achieving liquidity via a "buy out").

The corporate family created through these consumption practices emerged as one that created expectations among members that they should shoulder considerable responsibility and work extended hours if necessary to fulfill it. Thus, for many workers, the corporate family competed with a home-based family, leading individuals to negotiate home-work boundary through their workplace possession displays of pictures, creations, and gifts associated with home family.

Possession-guided strategies for managing home-work boundaries varied across individuals both in terms of how much of the home-aspect of the self concept was extended into the workplace through possession displays, and how these displays were used. Strategies included use of personal possessions at work to represent and compensate for sacrifices of home-based families, to shift to thoughts of home-based families during times of stress (e.g., by viewing family photographs), and to complement work-identities with those traditionally enacted in the home (e.g., using humorous objects to conjure a more playful aspect of the self concept). Our interpretation of these practices shows that the balancing of these two families through possessions is a way to see a balance between home and work selves.

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SPECIAL SESSION SUMMARY

Consumers' Evaluation of Time

Lance-Michael Erickson, University of Arizona
Narayan Janakiraman, University of Arizona

SESSION OVERVIEW

The fact that time is becoming an increasingly scarce resource among consumers has been known for some time now. A special issue on "Consumption of Time" published in the *Journal of Consumer Research* in March 1981 urged researchers to study how consumers' time perceptions influence decision making. We have made considerable progress since and are now aware that the concept of time is sensitive to various perceptual and contextual factors. Much research has been dedicated to explaining how consumers experience the passage of time and use that experience as an input into their judgments and decision making. More recently, the field has focused increased attention to studying time as an important resource that consumers actively evaluate vis-à-vis other resources such as money. A cursory look at the last few issues of *JCR* seems to suggest that at least one research paper per issue considers the effects of time as a variable in some form or the other. This session therefore was timely (yes, we said it) in that it brought together three papers that highlight important aspects of how time is experienced, perceived, and valued, and how that influences decisions and choices.

In the first presentation, Vicki Morwitz and Priya Raghubir examined how people's perception of time systematically deviates from actual time as a result of the nature of the temporal experience. Their work demonstrated that consumers do not consider all delays to be equal, even when total elapsed time is held constant. In the second presentation, Lance Erickson and Narayan Janakiraman explored the effects of unexpected delays on consumers' time/money tradeoffs. They proposed that the timing of the communication of a delay can have differential effects on consumers depending on whether they have been required to put down a deposit or have been offered a rebate. Finally, Erica Mina Okada and Stephen Hoch explained why people seem more willing to waste time than money by showing systematic differences in the way that people ex ante spend time versus money and ex post differences in how they evaluate decision outcomes experienced after spending time or money.

"Biases in the Perception of Experienced Time"

Priya Raghubir, University of California – Berkeley

Vicki G. Morwitz, New York University

In many marketing contexts, consumers' time perceptions can influence their purchase likelihood and satisfaction (e.g., perceptions of time one is waiting in a line, on the phone, or in traffic to purchase a product or service, a delay in the loading of a web page, etc.). We suggest that perceived time systematically deviates from actual time, and that the direction and magnitude of these deviations is contingent on the nature of the temporal experience. If this is true, then marketers in some situations can use this knowledge to influence their consumers' time perceptions. In some instances, marketers wish to reduce consumers' perceptions of elapsed time (e.g., waiting lines, web download times), while in others, they may wish to increase elapsed time perceptions (e.g., amusement park rides, experiential services). In yet other situations, marketers may simply wish to be aware of how the execution of their decisions influences consumers' perceptions of elapsed time (e.g., design of TV/radio advertisements). This research examines the antecedents behind biases in expected and experienced time.

We propose that characteristics of the Delay, Goal, and Perceivers affect time perceptions. Delay characteristics examined include (i) number of delays, (ii) the length of each delay, (iii) the nature of delays (continuous or discrete) and (iv) the timing of delays (early versus late). The first set of experiments examines the effects of number, length, and nature of delay on time perceptions. The second set incorporates delay timing and goal characteristics, specifically the proximity to a goal and whether or not the goal has been achieved. Perceiver characteristics examined include individual differences on attitudinal and behavioral variables such as punctuality, what time of day the person operates best (night or day), driving speeds (at different speed limits), whether they set their watches ahead, and their attitudes to and behavior during time changes (at start and end of DST).

Overall, we propose that the underlying reason for biases in time estimation is because people inappropriately estimate mean using the variance of a temporal sequence. The number and nature of delays both affect the variance of speed across a time period. Specifically, we expect that estimates of experienced stopping time would regress to the mean when experienced. This would lead to a single long delay being underestimated and multiple short delays being overestimated. This would imply that people would prefer a single discrete form of delay rather than multiple short ones. However, when stopping time was not experienced, then the number of delays would be used as a cue to estimate overall stopping time. This would lead to a reversal of the effects: people would prefer multiple short delays compared to a single discrete form of delay. However, irrespective of whether time was experienced or not, we expected that continuous delays characterized by a short-term drop in speed would be perceived to be the longest. This is because for these delays neither the cue of a single stopping time length, nor the cue of a finite number of stops is easily available. The uncertainty (variance) associated with the absence of these cues translates into higher estimated delay time.

Study 1 systematically manipulated the delay at three levels: single continuous delay, single discrete delay, and multiple discrete delays. The cover story involved a traffic scenario. Participants were given a scenario about a person who drives to the supermarket to purchase microwave popcorn, then drives to the video store and picks up a video, and then drives home. In the single continuous delay condition, the driver was required to stop at a stop light behind a long line of cars that inched their way up to the stop sign, in the single discrete delay condition, the analog was a traffic light at which the driver stopped and then proceeded, and in the multiple discrete delay condition, there were three stop signs. We matched length of wait times (120 seconds), route distance (2.3 miles @ 25 mph speed), actual duration (5.52 minutes), and the semantic descriptions of delays (82-87 words). Three studies were conducted: two paper-and-pencil based scenario studies (within- and between-subjects), and a between-subjects computerized experiment where the scenarios were visually presented in real time on a computer screen. Participants estimated the time and distance of the journey. In all studies, the single discrete delay was perceived to be faster than the single continuous delay. The perceived duration for the multiple discrete delays varied as a function of whether time was experienced or not, as predicted. These results have interesting implications for marketers. For example most software programs

and web pages appear to give information about delays using a semi-continuous visual measure such as a bar filling up towards 100 percent. Our results suggest that such techniques lengthen rather than shorten perceived time.

The second set of studies examines time perceptions for journeys that vary in the variance of the speed across the journey (holding mean speed constant) in the presence as well as absence of delays. Continuing with the traffic scenario analogy, we manipulate the variance of speed via the nature of the driving (weaving between lanes with varying speed, or driving at a constant speed), and the salience of this delay via its timing (shortly after the journey began or near its end). As with the previous set of experiments, the studies were within and between subjects, paper-and-pencil as well as computerized studies where time was experienced. Data collection for the studies is complete, and analysis is in progress. Time permitting, we will discuss the main findings from related research that examines the effect of goal characteristics: specifically time perceptions for equal length periods prior to and after achieving a goal such as driving to a desired destination versus driving back home. Preliminary results from three studies suggest that perceived time is longer when approaching a goal compared to after achieving a goal: It is faster getting back home.

“The Effects of Unexpected Delays on Consumers’ Time/Money Tradeoff Decisions”

Narayan Janakiraman, University of Arizona

Lance-Michael Erickson, University of Arizona

Consumers often make tradeoffs between waiting longer and paying more to enjoy the benefit(s) of a product. A common scenario where time is explicitly traded for money is the case where one chooses different shipping modes (and hence waiting times) based on shipping costs. The way that consumers make these tradeoffs has traditionally been studied using temporal discounting, which suggests that for certain types of benefits (such as hedonic, addictive, etc.) people are less willing to wait longer and are more willing to pay more to enjoy the benefit sooner. For other types of products (such as retirement savings), consumers show restraint and are more willing to wait longer to enjoy the benefit. Other researchers have taken a different approach to this issue, suggesting that time as a cost is more ambiguous than money and thus time-money tradeoffs will be difficult for consumers to evaluate consistently.

A particular aspect of these tradeoffs that has not been examined is the extent to which the tradeoffs are influenced by new information about the tradeoff variables that is presented to the consumer after choosing an option but before realizing the benefit. Sellers and consumers routinely face this issue when they find that delivery schedules must be adjusted. Our study explores the effects of information that suggests that time until delivery has increased from when the consumer has made their original decision. The likelihood that this consumer will switch to an alternative product option depends in part on how they perceive the anticipated delay. Often marketers use one of two strategies to dissuade consumers from switching due to unanticipated delays — requiring consumers to pay a deposit (sunk money) or by offering a price decrease to compensate for the additional delay. We expect that the effect of the two strategies depends in part on when the delay is communicated to consumers. If consumers are immediately informed of the delay we expect that paying consumers a small compensation for the additional delay will be a better strategy than requiring a deposit. If however the delay is mentioned after some elapsed time we expect that offering consumers a small compensation for anticipated delays will be a worse strategy than requiring a deposit. Two different aspects drive consumer perceptions and hence decisions:

1) fairness of compensation for elapsed wait (and hence inclusion of sunk time) and 2) growing salience of sunk cost of money. Specifically, we suggest that consumers experience time as a continuous cost—from the moment they agree to wait a certain period before receiving a product benefit they begin “paying” the time component cost of the transaction. Unlike money, elapsed time can never be recovered and consumers incorporate it thusly into time money calculations.

We have conducted a series of experiments where subjects were asked to imagine a hypothetical situation with two options: one where they pay more money for less time to get an item, and another where they pay less money but spend more time to get the item. Participants were told to imagine that they had chosen the less time option. They were then presented with new information that suggested a time delay. The delay was either presented immediately or after some time had elapsed waiting for the product. A subset of the participants were informed that they would be charged less due to the delay, while another subset of consumers were required to put down a small deposit of money upfront and were not offered a price decrease. Participants were asked whether they would prefer to stick with the original chosen option or switch to the alternative option.

In cases where the additional delay does not change how the two alternatives are ordered, rational economics would suggest that consumers should stick with their original option. However, we find significant deviations from economically rational behavior that exhibit the patterns that we anticipated. In the case where consumers are informed of the delay one day after the original transaction, we find a significant portion who will forego a deposit to switch to the alternative option, and we also find a significant portion who view a price decrease as sufficient compensation for the delay. We find the opposite pattern when consumers are informed of the delay after two weeks. In this case, deposits are more effective at keeping people from switching to the alternative option, whereas a price decrease is often viewed as insufficient compensation for the additional delay—suggesting that people are incorporating their sunk waiting time into their decision. We are currently in the process of replicating these findings in a real-world setting using data gathered from the furniture industry.

“Spending Time vs. Spending Money”

Erica Mina Okada, University of Washington

Stephen J. Hoch, University of Pennsylvania

Benjamin Franklin (1748) said, “Remember time is money,” implying that time is valuable just like money. A moral interpretation might be that time should be spent wisely. An economic interpretation might be that the value of one’s time can be expressed in monetary terms as an opportunity cost, often represented by one’s after-tax wage rate (Becker 1965). Either way, both time and money are exchange mediums. People can acquire products by paying hard cash or expending effort, but typically there is a trade-off between the two currencies. Consumers generally pay a premium for convenience and incur temporal transaction costs in the process of information search and uncertainty reduction (Carlson and Gieseke 1983; Marmorstein, Grewal and Fishe 1992; Stigler 1961), or as an additional cost in the form of delays (Taylor 1994).

But there are reasons to suggest that consumers do not treat time and money in the same fashion, even if normatively they should. In economics, an individual’s hourly wage rate w is a commonly used benchmark for one’s opportunity cost, and accordingly one should be indifferent between paying w in cash and spending an hour of time working in order to acquire a product. One systematic deviation from this assumption is the under-weighting of opportunity costs (Thaler 1980, 1999) which leads individuals to

work one hour for w even though they are only willing to pay $<w$ in cash to spare the expenditure of their own effort. People fail to calculate the opportunity costs of time when unstated (Neumann and Friedman 1980) and underestimate them when prompted (Hoskin 1983). Another deviation from the model is that people's perceived valuation of time is not as precise as w . This ambiguity in the value of time is the focus for our research.

A key difference between temporal and monetary currencies is that the opportunity cost of money is easy to assess, whereas the opportunity cost of time is more ambiguous. Opportunity cost captures the concept of the next best use for a resource. The question is: what is the next best thing that one can do with the money or time if one chooses not to spend it on the item at hand? Money has a readily exchangeable market, is highly liquid and fungible, and can be saved. A dollar is a dollar no matter the transaction type and so what comes to mind as the next best use for money remains fairly constant across situations. In contrast, the range of the second best uses for one's time is variable. Time is not as readily exchangeable; it is perishable and despite some ability for postponement cannot be inventoried easily for later use. People may be more practiced and therefore reliable at spending money than bartering time for goods. At the same time, people have plenty of opportunities each and every day to spend (or waste) their time, but the transactions may be more ad hoc and informal than those involving money.

Consumers are likely to be more adaptable in what they believe their time is worth and what constitutes an acceptable implicit wage rate. The greater ambiguity of the value of time likely supports what Hsee (1995, 1996) has called elastic justification, allowing individuals to be more opportunistic in their valuation of time. We believe that people have a much easier time living with wasting time than wasting money, a view supported by Soman's (2001) finding that sunk costs involving expenditures of time are more easily ignored than expenditures of money. And if consumers have an easier time self-justifying losses of time, then we might expect that they are more willing to take risks when making temporal compared to monetary investments.

In a series of five experiments we provide evidence that it is the inherent ambiguity in the value of time that supports/justifies a different spending pattern than that observed with money. The first two studies examine ex post expenditures of time versus money. Study 1 shows that satisfaction with an acquisition is less sensitive to the consumption experience when people pay in time than in money as people have an easier time accepting bad outcomes when they pay with time. The experiment provides direct evidence that people flexibly adjust the value of their temporal inputs to be congruent with the realized outcome. Basically you should get what you pay for, so if the outcome is positive (negative) people infer a higher (lower) value of the time that they expended in the acquisition. This kind of flexible valuation is harder to do with money. Note that these results cannot be explained by a cognitive dissonance story since the need for dissonance reduction should be greater after spending money (Soman 2001). Study 2 shows that when people pay using a fictional currency with a volatile exchange rate (suggesting ambiguity in value) their ex post evaluations of positive and negative outcomes are more like those made when paying with time, again suggesting that the ambiguity in the value of the currency sustains the observed pattern.

The remaining studies examine ex ante expenditures of time and money. Studies 3 and 4 utilize simple, equal expected value lotteries of both monetary and non-monetary outcomes. When people spend money, they display the standard pattern of increasing risk aversion to higher variance (higher risk, higher reward) gambles. When paying with time, the pattern completely reverses and re-

spondents are willing to pay more time for higher variance gambles. The final study uses multi-attribute products, either average on all attributes or strong on some and weak on others, and again demonstrates that people are willing to take more risks when paying with time rather than money, presumably because they can more easily adjust the value of their temporal expenditures to whatever is the realized outcome. The greater ambiguity in the value of time allows people to be more creative in their motivated reasoning (Kunda 1990) about ex post and ex ante decisions involving time.

SPECIAL SESSION SUMMARY

The Application of Goal Systems Theory to Consumer Behavior

Andrew Mitchell, University of Toronto

Meng Zhang, University of Toronto

SESSION OVERVIEW

Goals are becoming an increasingly important concept in consumer behavior. Goals have been found to influence what information we attend to (Huffman and Huston 1993), what attribute we used to make a decision (Garbarino and Johnson 2001) and what product category is considered (Ratneshwar et al. 2001). Previous research on goals, however, has tended to treat and manipulate goals on an individual basis, instead of considering them as a system of goals and the means for achieving the goal. Recently, such a system has been proposed by Kruglanski and colleagues (2002). Within this system, goals are viewed as cognitive structures and are associated so the activation of one goal may either activate or inhibit another goal. In addition, the means for achieving each goal are associated with the goal. Consequently, the activation of a goal also activates the means for achieving the goal. This theory provides a rich framework for examining effect of goals on consumer behavior.

The purpose of this session is to introduce the *Theory of Goal Systems* to consumer behavior researchers and demonstrate its value in examining important consumer behavior issues. In the first paper, Kruglanski and colleagues present the theory. The principles of multifinality and equifinality are illustrated as well as the transfer of affect from goal achievement to the means. Research conducted within the goal systemic framework has found, among others, that 1) goals may pull attentional resources from one another, 2) individuals shield their goal commitment by inhibiting competing goals, and 3) means can activate their associated goals in a bottom up fashion. The implications of this framework for consumer psychology are discussed.

In the second paper, Fishbach uses the theory to understand successful self-control mechanisms. The results of a series of studies indicate that successful self-control occurs when momentary goals (i.e. temptations) activate overriding goals (e.g. when chocolate cake activates the goal of dieting). This activation pattern is asymmetrical: whereas temptations bring to mind the opposing goals, goals inhibit interfering temptations.

In the third paper, Zhang and Mitchell, discuss their current research which applies and extends aspects of the theory to consumer behavior. More specifically, they examine whether brands are associated with consumer goals as the attainment means. The results of two studies find that the priming of both high-level and low-level goals automatically activate brands which are used to achieve those goals. Moreover, the affect felt with respect to the achievement of a consumer goal is transferred to the associated brands. By linking brands to the consumer goal system, a new perspective on brand choice and consumer brand relationship is provided.

“A Theory of Goal Systems: Properties and Applications”

Arie W. Kruglanski, University of Maryland

James Y. Shah, University of Wisconsin – Madison

Ayelet Fishbach, University of Chicago

Woo Young Chun, University of Maryland

David Sleeth-Keppler, University of Maryland

The present paper introduces the theory of goal systems and discusses its implication for motivational phenomena and con-

sumer psychology. The theory of goals systems adopts a cognitive approach to motivation that treats goal-concepts as knowledge-structures governed by general cognitive principles. In addition, goal-concepts possess distinctly motivational contents that determine their manner of functioning. From that perspective, (1) goal systems constitute stored mental representations capable of being learned, altered or activated; (2) self-regulatory phenomena are jointly governed by cognitive principles that goal systems share in common with other cognitive systems, and motivational principles derived from the uniquely motivational contents of goal-systemic elements.

Major cognitive properties of goal systems derive from their interconnected nature. Interconnections have two essential aspects, namely: (1) strength of the links between goal-systemic elements, and (2) their form, that is, configurations these links create. Because goal systemic elements are motivational in content (constituting “goals” and “means”) they possess several motivational properties as well: (1) Jointly, goal value and expectancy of attainment determine a goal’s subjective utility driving goal-commitment. (2) Sustained motivation contributes to persistence at an activity and to the quality of its performance. Goal activation contributes to the sustenance of motivation and hence it should contribute to persistence and performance. (3) Goal attainment and nonattainment are typically accompanied by positive and negative affect respectively, which specific quality varies with the type of goal (e.g. of promotion or prevention); (4) Individuals’ choices strive to maximize total outcomes, that is, to satisfy a maximal number of goals with a minimal expenditure of resources.

Prior research within the goal systemic framework has shown that goals are cognitively activated by their correspondent means and means are cognitively activated by their correspondent goals. We found that such activation patterns: (1) arise in course of an active pursuit of goals via particular means, hence cannot be fully explained by mere semantic associations between goal and means terms in the general language, (2) have unique consequences for goal commitment, task performance and activity experience. We found that the strength with which a goal activates a means contributes to goal commitment by enhancing the expectancy of goal attainment. Furthermore, the degree to which a means cognitively activates a goal enhances task persistence and performance by focusing the actor’s attention on the goal at hand. We also found evidence for “emotional transfer” between goals and means whereby the specific affect typically attendant upon goal attainment (or nonattainment) imbues the way activities leading to that goal (i.e., the means) are experienced.

In addition to looking at relations between goals and means, goal systemic research also has examined the relations between goals and other, incompatible goals. We found that goals may pull attentional resources away from one another, and in order to shield highly committed goals from such a pull individuals may inhibit competing goal alternatives. To maintain effective self regulation some individuals may also learn to (1) activate high order goals upon encountering “temptation” goals that threaten to undermine progress to the former, high order, objectives, and (2) inhibit low order “temptation goals” (e.g. tasty but fattening foods) upon activation of a high order objectives (e.g. dieting).

Goal systemic research also addressed the form of goal-systemic interconnections, in addition to looking at their strength and function (facilitative, inhibitory). Specifically, the number of means to a given goal may vary as may the number of goals served by a given means. The set of means linked to a given goal defines the configuration of equifinality. The set of goals linked to a single means define the configuration of multifinality. Equifinality poses the problem of choice between the means, assumed to be often resolved via the multifinality principle, i.e. the choice of means that the “focal” goal satisfies, often outside of conscious awareness in addition to other, “background”, goals. We found evidence for the operation of the multifinality principle in unconscious choice phenomena involving selection among different products. We also found that the pursuit of multifinality is greater for individuals under high need for cognitive closure (Kruglanski, 1989; with Webster, 1996; in press). The pursuit of multifinality by high need for closure individuals has been demonstrated in a variety of product domains as well as in the tendency to prefer “multifinal” over “unifinal” friends.

An important phenomenon related to the notion of equifinality is that of substitutability of one means for another in the case of failure or thwarting of progress to the goal via a given means. In accordance with the goal systemic analysis we find that substitutability is a matter of cognitive framing. Thus, the same two activities may be treated as mutually substitutable in one context, where their common goal is activated, and as nonsubstitutable in another context wherein their noncommon goals are activated. Furthermore, different individuals may vary in their general tendency to view the means-goal structure as equifinal. For example, individuals with a promotion focus (Higgins, 1997) tend to view means as more substitutable than individuals with a prevention focus who tend to view means as necessary (rather than as sufficient) to goal attainment. One implication of this is that individuals with a promotion focus may mistake promises for goal attainments, and hence be less likely to act after making a promise than the case would be in the absence of a promise. Evidence for these notions will be discussed, and the implications for consumer issues will be drawn.

“Temptations Elicit Overriding Goal Activations”

Ayelet Fishbach, University of Chicago

A delicious chocolate cake in the storefront of a bakery may remind individuals of the unfortunate fact that they should go on a diet. A thought of an exotic place, ideal for a relaxing vacation, may conjure up approaching deadlines at work. On these and similar occasions, elaborating upon a seemingly desirable course of action may bring to mind the opposing, higher priority objective. The present research explored the nature of automatic associations formed between short-term motives (temptations) and the overriding goals with which they interfere. Five experimental studies, encompassing several self-regulatory domains, found that temptations tend to activate such higher priority goals, whereas the latter tend to inhibit the temptations. These activation patterns occurred outside of participants’ conscious awareness and did not appear to tax their mental resources. Moreover, they varied as function of subjective goal importance and were more pronounced for successful versus unsuccessful self-regulators in a given domain. Finally, priming by temptation stimuli was found to influence not only the activation of overriding goals, but to also affect goal-congruent behavioral choices.

More specifically, Study 1 assessed the strength of temptation-goal associations through the use of a subliminal sequential priming procedure. Using participants’ self-generated goal-temptation pairs (e.g. “study-basketball”, “faithful-sex”), we assessed the time for

recognizing goals preceded by subliminal temptations and the time for recognizing temptations preceded by subliminal goals. We then found that when the target was a goal, participants were faster to recognize it after having been primed with a temptation rather than a neutral prime. However, when the target was a temptation, participants were slower to recognize it after having been primed with the goal rather than a neutral prime.

The second study was designed to further test for the automaticity of temptation-elicited goal activation by replicating this effect under cognitive load. Once again, goal-temptation associations were assessed through a subliminal sequential priming procedure. We measured time for recognizing religious goals (e.g., “prayer” and “bible”) following subliminal “sinful” temptation primes (e.g., “drugs” or “sex”), and time for recognizing “sinful” temptations following subliminal religious goal primes. Half of the participants performed the task under cognitive load. In line with our prediction, the same pattern emerged in the presence and in the absence of cognitive load: Participants were faster to recognize the goal following a temptation prime than following a neutral prime. However, they were slower to recognize the temptation after a goal prime than after a neutral prime.

Assuming that goal activation by temptation indeed represents a functional means of self-control, it should be associated with successful, rather than unsuccessful, goal attainment. Accordingly, with respect to the academic goal of excelling at one’s coursework, Study 3 found that only successful students activate academic goals in the presence of cues for procrastination. This pattern was not manifested among less successful students who are presumably less efficient at shielding themselves against procrastination cues.

In addition to self-regulatory success, goal activation by temptations further depends on the subjective value of the goal. That is, goal activation should occur only with regard to highly valued goals. Accordingly, in Study 4 we tested for the combined influence of variations in subjective goal value and success in goal pursuit on temptation-elicited goal activation. Specifically, with respect to the goal of weight-watching, we expected that activation of goals by temptations would be more pronounced for successful versus unsuccessful weight watchers only to the extent that they perceived weight watching to be a particularly important personal objective. In line with our predictions, increased accessibility of dieting-related concepts following food primes was found only with regards to successful dieters who expressed concerns with watching their weight.

Our last study was designed to test for the behavioral consequences of goal priming. It was hypothesized that when fattening food is served, restricted eaters should activate the goal of dieting, which in turn should enable them to avoid the “forbidden” culinary delights. Due to the activation of self-control processes, temptation cues are also expected to prevent succumbing to temptations as much or more than direct goal-related cues. Accordingly, participants, all concerned about their weight, were exposed to either diet primes, fattening food primes, or control primes. Next, we assessed (1) activation of “diet” in a lexical decision task, (2) intentions to consume fattening food, and (3) choice of a gift: healthy apple vs. fattening Twix bar. In line with our predictions, participants in the food-prime condition were just as quick to recognize the word “diet” as individuals in the diet-prime condition and both conditions were faster than the control-prime. In addition, activating the goal made participants more conscious about their weight, consequently leading to more goal-congruent behavioral choices (i.e., of apple versus Twix-bar) in the food-prime and diet-prime conditions compared with the control condition. Finally, only participants in the food-prime condition showed diminished intentions to consume fattening food. Apparently, only fattening food primes bol-

stered self-control attempts as such, motivating the formation of intentions to overcome specific temptations in the future.

In sum, this research identifies facilitative links between temptation stimuli and the higher priority goals they threaten to undermine. These findings suggest that to the extent that they represent low priority temptations, external cues may set in motion self-control mechanisms designed to counteract their own influence, thus wresting behavioral control from the ‘unconcerned’ environment and relegating it to one’s own, “internal” priorities.

“Brands as Means in Consumer Goal Systems”

Meng Zhang, University of Toronto

Andrew Mitchell, University of Toronto

The theory of goal systems is applied to consumer behavior by examining whether brands are associated with both high-level (abstract and value-embedded) and low-level (specific and action-oriented) consumer goals as goal attainment means. Two experiments were conducted. The first used sequential priming in a lexical decision task and found that the priming of a goal automatically activate its associated brands. The second study investigated a unique feature of a consumer goal system, which is, the affect felt whose goal has been attained is transferred to the associated brands.

Study 1:

Participants were first asked to list two high-level goals (or two low-level goals) that came to mind. The typical high-level goals they listed included “be a successful businessman” and “be intelligent” etc., whereas the typical low-level goals they listed included “cooling off” and “planning a vacation” etc. They were then asked to list two brands that could help them attain each of these goals. For example, brands listed for the above-mentioned goals included: “Holt Renfrew” and “IBM”; “Nestle Ice Cream” and “Air Canada”. The participants then completed a 20-minute filler task to eliminate the temporarily enhanced accessibility of goals and brands. They were then subliminally primed with either a goal or a control word (e.g. tree) and asked to judge whether a target letter string was a word or not. The target letter strings included brands they listed, unrelated brands, control words (e.g. house, plant) and an equal number of nonwords. After completing this task, participants were asked to think of each brand as if it was a person, and rated how similar the person was to them as well as how they aspired to be like that person. The purpose of this question was to better understand the personalities of brands activated by each goal.

The results were as expected. Participants were significantly faster to respond to a brand after being primed with the goal associated with it. This indicated that brands were closely linked to goals and the presentation of a goal could automatically activate brands which were means to attain it.

Study 1 also demonstrated a difference between the personalities of brands associated with high-level goals vs. low-level goals. Consistent with findings of the branding literature that consumers are more likely to consider brands with a personality compatible with their own (i.e. current self, working self) or they aspire to be like (i.e. desired self) (e.g. Marcus 1986), participants were more likely to rate the brand as similar to them, or as whom they would like to become when brands were associated with a high-level goal. However, when a low-level goal was activated, participants neither regarded the brand as similar to self nor would they aspire to be like it. The brand was simply a means to achieve a temporarily activated goal. This result echoed Aaker’s (1999) distinction between “self-congruity” and “situation-congruity” on brand attitudes, however, by linking brands to goals, we are able to move a step further by demonstrating when “self-congruity” and “situation-congruity” attitudes occur. When a high-level goal is activated, consumers will

prefer a brand with a personality compatible with the self, whereas when a low-level goal is activated, consumers may not care much about whether the brand is compatible with self or not, instead, they proffer brands with characteristics compatible with the requirement of the temporary situation.

Study 2:

Study 1 demonstrated that goals could activate brands. Study 2, however, went a step further to demonstrate a unique feature of a consumer goal system, that is, the affect experienced by consumers when they attain a goal is transferred to associated brands. This transfer of affect is in proportion to the association strength between the goal and the brands.

Participants were asked to list two high-level goals (or low-level goals) that came to mind and two brands that could help achieve each goal. After a questionnaire measuring the association strength, participants were asked to imagine that they had attained the high-level goals (or low-level goals) and report the affect they would experience. Both promotion-type (happy) and prevention-type (relax) were reported. They were also asked to indicate their promotion (happy) and prevention (relax) affect towards each of the brand.

A series of multiple regressions indicated that participants’ affect towards a brand was a function of 1) their affect felt towards the attainment of the goal (both the *magnitude*—how strong the affect is and the *type*—promotion or prevention affect), and 2) the association strength between the goal and the brand. In other words, the affect towards a consumer goal was being transferred to the related brands, in proportion to their association strength. These results were consistent with the prediction of goal system theory (Kruglanski et al. 2002) and replicated previous research on affect transfer (Fishbach et al. 2004).

The results also found that different types of affect are transferred with respect to high-level goals and low-level goals. Specifically, affect associated with the attainment of promotion goals (happy) transfers from a high-level goal to its associated brands, whereas affect associated with the attainment of prevention goals (relax) transfers from a low-level goal to its associated brands. This finding is consistent with the recent research (Zhang and Mitchell 2004) showing a relationship between high-level goals and a promotion focus and a relationship between low-level goals and a prevention focus.

Taking together, these two studies demonstrated that brands can be associated with consumer goals as attainment means, and both the activation and affect can transport from goals to the related brands. These intriguing results, together with the differences between high-level and low-level goals, provide substantial insight into many areas of consumer behavior, such as brand choice and consumer brand relationship.

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Negativity in the Evaluation of Political Candidates

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EXTENDED ABSTRACT

The most well accepted explanation for the negativity effect (greater weighting of negatives as compared to positives in the formation of overall evaluations) in the political domain is the perceptual figure-ground theory (also known as the salience explanation or the expectancy-contrast explanation, Fiske 1980; Klein 1991, 1996). This theory is based on the argument that people generally exhibit a “person positivity bias” whereby they have positive expectations of others (Sears 1983), including political candidates, and negatives contrast against these expectations. From Anderson’s (1981) cognitive algebra theory through to the figure-ground explanation, non-motivational explanations for negativity dominate.

However, research in marketing (e.g., Ahluwalia 2002; Ahluwalia, Unnava and Burnkrant 2001; Kirmani, Sood and Bridges 1999; Till and Shimp 1998) and social psychology (e.g., Brendl 2001; Ditto et al. 1998; Kunda 2000) has shifted toward the examination of how motivations affect judgments. For example, the cue diagnosticity approach suggests that negative information is weighted most heavily because negatives are often more diagnostic or relevant than positives (Skowronski and Carlston 1989). When the person or object to be evaluated is hypothetical or fictitious (as in most experiments conducted in the impression formation paradigm), negative information is considered to be more relevant than positive information (Ahluwalia 2002). However, once the perceiver is familiar with the target, even a weak liking or preference is likely to invoke consistency motivation (Chaiken, Giner-Sorolla and Chen 1996) such that preference-inconsistent negative information about the target may no longer be considered as more relevant or diagnostic than preference-consistent positive information (e.g., Ahluwalia 2002). In other words, the relevance or diagnosticity assessment is subjective in nature, driven, in part, by the preferences of the perceiver (Herr, Kardes and Kim 1991).

This motivational view suggests that the negativity effect is not universal. Instead, a voter’s preferences should determine whether a candidate’s negatives are weighted most heavily. Consistent with this view, if one were to segment voters by their preference towards a given candidate, only those motivated to dislike the candidate should show a negativity effect; those who support the candidate would not be motivated to dwell on their candidate’s negatives any more than his positives. Thus, a negativity effect should only appear in evaluations where the candidate’s negatives are preference-consistent. That is, where preference for the opponent or against the candidate has already been formed.

To test this hypothesis, we analyzed National Election Study data results from both the 1992 and 1996 elections and found that the negativity effect is present only for voters who dislike the candidate. Thus, negative information about a candidate is given more weight only when it is preference-consistent for the voter. This effect is likely to be attenuated if preference for the opponent is weak and it disappears for swing voters and for those who prefer the candidate. When the data are aggregated, however, a negativity effect emerges. At a more general level, our results suggest that voters are more likely to vote for candidates than against them. Thus, our findings contradict the belief that voters typically weight a candidate’s weaknesses more than his strengths. It also questions the validity of the currently accepted belief that negative informa-

tion is likely to be weighted more heavily than content equivalent positive information by swing voters. On the contrary, our results show that a negativity effect is more often absent than present in the evaluation of political candidates, and thus present a new perspective on negativity in politics.

Should these findings be interpreted to mean that negativity has no role to play in political campaigns? Not really. The absence of a negativity effect does not imply that negative information does not have *any* impact on voters; it simply means that it is not *more* effective than equally extreme positive information. In other words, if a candidate is the target of a negative ad, the ad is likely to attenuate his evaluation. However, this attenuation is expected to be of approximately the same magnitude as the enhancement likely to occur in response to an equally extreme positive ad featuring him. This is the result we expect to be true for swing voters and those who have at least a weak preference for the candidate.

One important caveat, however, is that if the negative information presented in an attack is more extreme than available positive information the candidate could offer in support of his own candidacy, then negative campaigning may be more persuasive than positive ads he can sponsor. It is noteworthy that most case studies that vouch for the effectiveness of negative campaigning deal with either extremely negative information or negative information about a salient issue presented in a very vivid manner (e.g., the Johnson-Goldwater campaign where the infamous daisy spot focused on the use of nuclear weapons; Bush’s 1988 campaign against Dukakis focused on the highly salient issues raised in the Willie Horton case). Thus, it may not be negativity per se that generated the impact in these campaigns, but rather the seriousness and salience of the issues covered in the negative ads. Further, the effects of extremely negative information are likely to be exacerbated because of the media coverage it receives, given the media’s penchant for negative news.

Most of the negative campaigning observed in the marketplace comprises of “mud-slinging” attacks that focus on a “small corner” of a candidate’s career and deal with trivial issues (Kamber 1997) and hence their value to the campaign is questionable. We argue that in the absence of extreme information on salient issues, negative campaigning may not hold any additional sway (compared to positive information) in persuading voters.

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It Is Up to Who I Am to Spread Positive or Negative Word of Mouth to My Best Friend

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ABSTRACT

Existing theoretical perspectives make conflicting predictions about the interplay of tie strength and valence of experience on WOM transmission propensity. We argue that using the accessible self-construal as a boundary condition can clarify these conflicting views. This paper makes the following theoretical contributions. First, it offers a direct test between the two prevalent competing views on WOM transmission decision. Second, it articulates boundary conditions of these two competing perspectives. Third, it explores whether and when self-focused motivations or other-focused motivations mediate the observed moderating effect of self-construal on the WOM transmission decision.

Advertisers' Theories of Consumers: Why Use Negative Emotions to Sell?

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ABSTRACT

This paper explores the views of advertising professionals regarding consumers, and uses them as a framework to compare practitioner and academic theories regarding negative emotional appeals in advertising. We identify three broad views of consumers that appear to guide advertisers when they develop ads: (1) a “desensitized consumer” who pays little attention to advertising; (2) a “sophisticated consumer” who is conscious of advertisers’ persuasive intentions and skilled at recognizing specific tactics, and; (3) a “tribal consumer” who is driven by a fundamental need to be accepted as part of a larger group. In addition to identifying areas of agreement and discrepancy between practitioner and academic theories, our research exposes interesting limitations in the working theories of advertising professionals. We also argue that dialogue between academics and practitioners provides an opportunity to enhance advertising theory and practice, and suggest that our approach could be widely applied for this purpose.

When seeking to persuade consumers and stir them to action, advertising professionals select tactics based on their understanding of the effects these tactics are likely to produce. It follows, then, that the design of real-world ads is not necessarily driven by formal academic theory, but by the beliefs held by these professionals about the consequences of using various tactics and the moderating conditions that make such techniques more or less effective. Notwithstanding this fact—and in spite of the occasional bemoaning of it in the literature—there have been relatively few efforts to study the implicit theories of advertising professionals regarding “what works,” and compare these to the research-based models developed by academics (Kover 1995, is a notable exception). This paper helps to address this shortcoming by exploring general views of advertising agency creative staff regarding consumers, and using these as an organizing framework to compare practitioner and academic theories in an important but under-researched domain—namely, the use of negative emotions in advertising.

Such efforts to tap into the minds of practitioners are helpful for a variety of reasons—some less apparent than others. Most directly, they offer insight into the thinking that drives marketing practice. This is useful in its own right as a descriptor of prevailing industry sentiment on how best to influence consumers, since practitioners may hold different views from academics despite employing the same terminology (Cornelissen 2002). Moreover, observing such sentiment and its changes over time provides a basis for explaining the emergence and relative prevalence of specific advertising tactics and types of appeals in the marketplace. This can serve, among other things, as a source of guidance for public policymakers and social scientists seeking to draw connections between advertising and its impact on society.

A less direct but equally important benefit is that the implicit theories of advertisers offer a fresh and distinctly different perspective on the nature of consumers and their response to negative-emotion appeals. While they can scarcely be characterized as superior to formal academic models, practitioner theories have the virtue of a very different set of strengths and limitations: Although they are data- rather than theory-driven and only informally and subjectively tested, they are also descriptive of behavior in a naturalistic setting, based on extensive replication across a wide variety of product categories and ad types, and pragmatic with

respect to their implications. Moreover, practitioner theories are not usually designed to abstract from the particular to the general, so they do not tend to disregard finer aspects of the phenomenon as academic theories often do, and capture insights that the latter may overlook (Brinberg and Hirschman 1986). As a final and added benefit, practitioner theories also tend to be grounded in the response of real audiences rather than student subjects, making them a useful “reality check” on academic theories that are based on student data.

The task of identifying and cataloging the full range of these practitioner theories is a daunting one. Accordingly, for the purposes of this paper we were somewhat less ambitious: After eliciting general comments regarding the nature of consumers, we probed advertising creative staff about their theories in a very specific domain in which the authors had some experience—the effectiveness of using negative emotions in advertising, and the conditions under which such a tactic might be more or less effective. This is a promising area to explore, in large part because appeals which seek to evoke negative emotions represent an increasingly common (Huhmann and Brotherton 1997) but under-researched advertising tactic. Just as importantly, the academic literature has struggled to adequately specify the conditions under which such approaches will be more or less effective.

The paper begins with a brief review of the academic literature on the use of negative emotional appeals in advertising, in order to provide context for our research and set the stage for our own findings. We then present the results of our phenomenological interviews with advertising creative personnel, organized around three main views of consumers that emerged from these informants. Based on these findings, we propose a conceptual framework that summarizes these practitioner theories-in-use and relates them to their academic counterparts, with the goal of identifying commonalities and inconsistencies that suggest avenues for future research. We then conclude with a discussion of the implications of our research for advertising theory in general, and for the effectiveness of negative-emotion appeals in particular.

ACADEMIC PERSPECTIVES ON NEGATIVE EMOTION APPEALS

A good deal of academic research has been conducted on the psychology of emotion (e.g., Lazarus 1984) and the ways in which ad-evoked feelings may influence consumer response to marketing communication (e.g., Batra and Ray 1986; Holbrook and Batra 1987). Scholars have also observed that advertising may evoke both positive and negative emotions when seeking to persuade. Indeed, Brown, Homer and Inman (1998, p.115), suggest that from a practical perspective, “the relative strength of positive and negative feeling effects potentially could guide advertisers’ decisions regarding executional strategies.”

The more specific question of why advertisers would purposely try to evoke negative emotions in consumers is intriguing, however, since ads that provoke fear, guilt or anger are by definition aversive, and risk prompting consumers to ignore the ad or dislike the product. It has been suggested that ads use positive affect to make consumers like the ad and then buy the product, and negative affect to evoke an uncomfortable state that makes consumers want the “solution” offered by the advertiser (Aaker, Stayman and Hagerty 1986). More generally, then, advertisers who use negative

emotional appeals presumably do so in hopes that this will (a) capture their audience's attention, (b) induce an intended set of emotions, and (c) motivate them to purchase the marketer's product or service (Richins 1997; for a review see Cohen and Areni 1991). Unfortunately, there are no guarantees that what the consumer actually experiences will be the affective response the advertiser intended to create: Research has shown that this kind of mismatch between advertiser intentions and consumer response occurs all too often (Cotte, Coulter and Moore, 2004; Englis 1990; Stout, Homer and Liu 1990).

Indeed, the academic literature inspires no definitive conclusions as to the wisdom of using negative appeals in advertising, with some studies pointing to its effectiveness and others suggesting the opposite (for a review and meta-analysis, see Brown, Homer and Inman, 1998). Although Bagozzi, Gopinath and Nyer (1999) propose a framework that explains how emotions can function as causes, effects, mediators and moderators in marketing behavior, their model does not address the inconsistent findings on the effects of negative emotions. Studies which have focused more specifically on fear-based appeals are also inconclusive: Such appeals seem to enhance persuasion in some instances (King and Reid 1990), but attenuate it in others (Hovland, Janis, and Kelley 1953). Keller and Block (1996) offer some resolution to this inconsistency, but only tentatively so: They reason that weak fear appeals may be ineffective if they fail to prompt sufficient elaboration of the harmful consequences of the undesirable behavior, while strong fear appeals may fail if they induce too much elaboration of those consequences and thereby deter consumers from recognizing the solution offered in the ad.

Perhaps the most promising explanation for these otherwise peculiar findings is that consumers are active recipients of advertising messages, who actively "make meaning" from ads, rather than merely processing claims (see Mick and Buhl 1992). This is rapidly becoming a favored view within the consumer literature: Reader-response theory holds that different people interpret ads differently (Scott 1994), while the persuasion knowledge model (Friestad and Wright 1994) and its related empirical papers (Boush, Friestad and Rose 1994; Campbell 1995; Campbell and Kirmani 2000; Kirmani 1990; Kirmani and Wright 1989) argue that consumer response to advertising may be colored by their knowledge about marketers' motives and the tactics they use to persuade. This suggests that the emotional response of consumers to a negative-affect appeal will depend not only on the appeal, but also the extent to which the consumer construes that appeal as a deliberate attempt to manipulate them. The general model implied by this is one in which the emotion intended by the advertiser is initially and automatically felt upon exposure to the ad, but subsequently "corrected" as consumers access their persuasion knowledge and "correct" their initial response (Campbell and Kirmani 2000; Gilbert and Malone 1995; Gilbert, Pelham and Krull 1988; Winter and Uleman 1984; Winter, Uleman and Cunniff 1985).

These insights notwithstanding, a number of fundamental questions remain unanswered with respect to negative-emotion ad appeals. Why, for instance, do these appeals induce such powerful consumer responses in certain cases? What causes them to be more or less effective? And given the obvious risks involved in using them, when and why do advertisers employ these kinds of appeals? In the next section, we present research findings that offer a promising new basis for answering these and other important questions.

RESEARCH METHOD

Our research initially sought to explore a broad range of issues related to the use of negative appeals in advertising, so we had no

specific expectations regarding the focus of our work or its likely results. As our project evolved, however, it quickly became apparent that advertisers have well-defined notions, or "theories in use," about (a) consumers, and how their general reaction to advertising has changed over time, (b) the effects of various negative-emotion appeals, and (c) the conditions under which such appeals are more or less likely to induce a desired response. In particular, when asked about the presence of emotional appeals in the ads they create, our informants frequently prefaced their responses by describing their underlying beliefs about how and why consumers respond to such appeals. We recognized this phenomenon fairly early on and, consequently, elected to put a more concentrated focus on our questions.

We used an interpretive, phenomenological approach with general analysis that followed the process suggested by Moustakas (1994). Our procedures were conducted in accordance with the tenets of prior phenomenological research—the emic approach, text autonomy, member check, peer debriefing, and bracketing (Thompson 1997). The emic approach relies on informants' own words, avoiding the immediate incorporation of theoretical conjectures or external verification of informants' stories. The main benefit of this approach is its deep understanding of our informants' beliefs about recipients of advertising and what drove them to create emotion-evoking ads.

Sample and Interview Procedure

We conducted 15 in-depth interviews with advertising creative personnel. Five agencies were chosen from Toronto and surrounding area, with an intentional combination of large, structured organizations and small, more informal agencies. We contacted the creative director at the selected agencies via telephone and described the purpose of our study. After securing his/her agreement to participate, this individual was asked to select two members of the creative team to serve as additional interviewees. Following the telephone conversation, we mailed a letter which confirmed the appointment time and outlined the project in more detail.

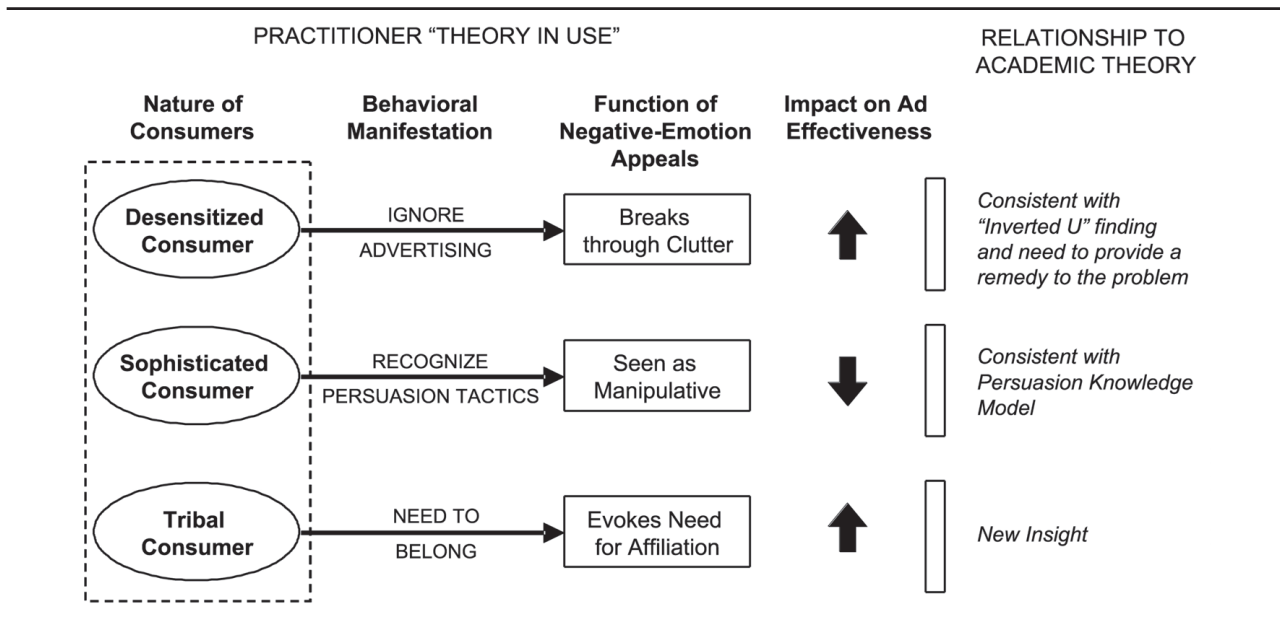
Our informants included 12 men and 3 women, with a level of experience ranging from junior (eight of the participants had worked in the industry for less than five years) to senior (three participants had more than 11 years of experience). Job titles were also varied, ranging from Senior Writer to Chief Creative Director. To encourage open participation, the identities of both the agencies and the specific interviewees were kept completely anonymous. The opening discussion began with the general question: "How do you create advertising?" From there, we used occasional prompts during the course of the discussion to extract specific views on the use of negative emotions in advertising. All interviews were tape-recorded and transcribed, with each participant being assigned a pseudonym for ease of analysis.

All interviews were conducted during the winter of 2002/2003 at the advertisers' offices, and were completed by a graduate student trained in interviewing methods but naïve to the advertising literature. Interviews were anywhere from 45 to 90 minutes long, with an average length of approximately one hour. Analysis of the more than 300 pages of transcribed responses entailed an intense reading to provide a holistic view of how participants created advertising, followed by a more focused reading to facilitate understanding of both idiosyncratic (one person) and shared (across-person) meanings.

FINDINGS

We begin by presenting three broad views of consumers which pervaded informants' responses to our queries about what they

FIGURE 1
Effects of Negative-Emotion Appeals



considered when developing ads—views which, for purposes of exposition, we have labeled the “desensitized” consumer, the “sophisticated” consumer, and the “tribal” consumer. Each of these theories seemed to provide some or all of our informants with critical guidance that helped them assess whether a negative-emotion appeal would succeed in persuading consumers. Accordingly, we organize our findings according to the view that informants appeared to be accessing when they offered a given comment. Doing so facilitated the creation of a more general theoretical framework for understanding marketers’ implicit theories about the way consumers respond to negative emotional advertising (See Figure 1). It also provided a basis for highlighting cases of rapprochement between academic theories and the practitioner views we report, along with instances where our data offer new insight into the contradictory findings on the effectiveness of negative-emotion ad appeals.

The Desensitized Consumer

It is widely recognized that consumers are bombarded with various and proliferating forms of advertising media—a situation which has led to U.S. consumers being exposed to an average of 3,000 to 5, 000 advertisements per day (Bower 2000). This has obvious adverse effects on the ability of any particular ad to impact the viewer, and research has found growing consumer indifference to commercial messages (AdWeek 1993). Our informants were highly sensitive to this concern:

“I think one of the toughest things we face is just this huge attention deficit that exists and very many people are exposed to thousands of ads a day...they are just taking in so much information in terms of what is being communicated within the world of advertising, and then beyond that, through magazines and television and the internet and so on. It is getting harder and harder and harder to get anyone’s attention for even a moment.” (Interview C-2)

“The biggest single challenge any advertiser or any advertising agency faces today, in a world where the immediate clutter has proliferated beyond the statistics, or polling how much more media exposure we get in a given day than we did thirty years ago, the single biggest challenge is grabbing people’s attention. Universities teach that economics is the science of allocating scarce resources. Well, there is nothing scarce about media, knowledge, and technology information. What is scarce is people’s attention, and so stopping and grabbing somebody’s attention is our biggest job.” (Interview C-3)

Nearly all of our informants dedicated substantial time to this theme—that the ubiquitous presence of advertising in our lives had caused consumers to become increasingly “immune” to advertising, and that commercial messages often “wash over” people without making an impact. Each of our informants emphasized that capturing consumers’ attention and getting them to process the message was one of their most important tasks.

Negative Emotional Appeals and the Desensitized Consumer. The notion of the desensitized consumer was not only universally and strongly held among our respondents, it also appeared to play a major role in influencing how and why they used negative emotional appeals in their ads. Virtually all informants stressed the ability of such appeals to overcome consumer apathy, as exemplified by this observation about the effects of fear-based ads:

“Fear works. It makes you sit up...fear works, in my mind, to jolt someone to make them at least, remember it.” (Interview A-3)

One informant even used the term “shock therapy” to describe charitable organizations’ use of unpleasant images to create emotional discomfort among consumers. When asked to clarify, he explained:

“You want to shake people up and I think the reason that happens in charities a lot is that charities, above and beyond brand advertisers, are vying for a very small piece of the pie...it shakes you up and it makes you think. And that’s normally why you see it in a lot of the charitable advertising.” (Interview C-1)

Despite this widespread belief in the attention grabbing properties of negative-emotion appeals, several informants cautioned that failure to vary the type of emotional appeal used could actually contribute to consumer desensitization to certain images and forms of advertising. They explained that certain charities have used the same ad over many years, to ill effect:

It’s unfortunate but many ads to raise money for starving children in third world countries probably become less effective, because people get used to seeing the same images on the TV... we make a person less affected by the image the more you expose them to the image (Interview D-1)

Notwithstanding their belief that negative emotional appeals provide an effective attention-getting device, most of our informants cautioned that attention does not equate to effectiveness. In their view, negative-emotion appeals had to be paired with a relevant message in order to succeed in inducing the desired behavior among consumers, especially when such behavior was to be sustained over time:

“Shock value will stop people. It probably won’t establish some kind of relationship. What it will do, it will stop people for a moment and get their attention. What happens after that becomes a little more difficult because you never really established a relationship with someone based on what your company is about, or what your product is about—all you have done is shocked them. You know, it’s like standing naked on the street. You’ll get people’s attention, but will they want to be your friend? I don’t think so...shock is there in order to show how dramatic the situation is.” (Interview C-2)

Several informants also mentioned the importance of ensuring that the level of discomfort was appropriate and the appeal legitimately related to the product or behavior being advocated. There was also broad agreement that the ad should offer some kind of solution to the negative feeling evoked—a call-to-action which provides the consumer with an opportunity to dissipate the negative emotion and turn it into a positive one. In fact, nearly all of our respondents strongly cautioned against leaving the audience in a negative affective state:

“If there’s no light at the end of the tunnel, then it is just depressing. If there’s a light at the end of the tunnel, it might be depressing and shocking, with a purpose...as long as there is a ‘do this to avoid that’ or ‘help us to avoid this’.” (Interview D-3)

Overall, our informants’ notion of a desensitized, somewhat “numb” consumer was consistent with the popular academic view (see Pieters, Warlop, and Wedel 2002 for a review), though the advertising professionals seemed to feel that the problem was especially serious. Their assessment of the conditions under which negative appeals achieve desired results also agreed with formal research findings, which have found that negative emotional appeals are most effective when they (a) evoke a moderate (versus a high or low) degree of discomfort, and (b) offer a resolution for the

negative emotion (Bozinoff and Ghingold 1983; Yinon et al. 1976, Coulter and Pinto 1995).

The Sophisticated Consumer

A second theme that emerged from our interviews was the notion of consumers as savvy and sophisticated, rather than mere processors of advertising claims. Our informants claimed that consumers had become increasingly sophisticated:

“I think consumers are smart and I think they are sensitive...I don’t think they are gullible. I think they’re generally very bright and skeptical.” (Interview B-3)

“Consumers over the past 10 years have become much more savvy, so they won’t allow you to manipulate their minds too much...Consumers are pretty effective watchdogs against being manipulated by advertisers. In part because they were manipulated for so many years, but in part also because they have been exposed to so many ads that they are very savvy about ads. I mean, we’ll sit in focus groups, listening to people talk about advertising, and they’ll know a lot of things—they’ll understand all the things that we are trying to do...we have a very savvy audience. Which in a way is good, because if we understand the basic elements of marketing, and they understand them as well, then it is going to be easy for us to create a relationship with them.” (Interview C-2)

“As a viewer, they know it [when something’s real]. They know when something’s fake and when something’s not.” (Interview B-2)

Our informants spoke of this consumer savvy not merely in terms of a general public awareness of the persuasive intentions of advertisers; they also felt that consumers had become more skilled at recognizing specific advertiser tactics, and that this meant that viewers were processing ads differently than in the past:

“I also think everybody know that they are ads...That’s it, I think. We need to give people the credit that they are due. They understand this is just the product that they are trying to sell me.” (Interview C-1)

This increase in consumers’ media savvy and ability to detect and defuse specific kinds of persuasive attempts was seen as having made the job of advertising creative personnel more difficult: In addition to the fact that they can no longer assume that the viewer is naïve to their marketing tactics, advertisers must also be concerned about unfavorable reactions to such tactics:

“...they almost want to say—‘I don’t care about that, you know, I am going to do that regardless, you can’t tell me not to.’ And sometimes it puts their hackles up and you might do the opposite of what you intended to do.” (Interview A-3)

Several respondents even indicated that they would sometimes explicitly assume that the consumer was “in on the game” and produce ads reflecting this shared recognition that the purpose of the ad was to persuade. In some cases, this took the form of an ad that specifically acknowledged the advertiser’s persuasive goals, while in others the impact was simply to produce a message that would not be perceived as unfairly manipulative.

Negative Emotional Appeals and the Sophisticated Consumer. Our informants felt that increased consumer savvy had both positive and negative implications for the effectiveness of negative

emotional appeals. On one hand, it has meant that consumers can generally be relied upon to understand the advertiser's intentions in using such appeals:

"They're a very sophisticated audience we are advertising at. You can show a single prop and they know exactly what we're trying to tell them. If you showed a smoldering teddy bear, they'd say—'oh my God, children died'." (Interview E-3)

By the same token, however, many informants expressed concern that negative emotional appeals were an "obvious" persuasive tactic, which could be construed as an attempt by the advertiser to manipulate the consumer's emotions. There was broad agreement that such appeals were therefore risky, and that this had made many advertisers reluctant to use them:

"You are kind of rolling the dice in terms of your emotional appeal, so to take it too far, you would turn people off." (Interview A-2)

"Sometimes you screw around with that (negative emotions) and all of a sudden it's nothing, or it has negative emotion, but not the irony or not whatever it was you were trying to associate with it. You stand more risk when you try to use negative emotions, but it can be done." (Interview E-1)

According to these professionals, the perception that an advertiser had abused a negative-emotion appeal usually exacted a heavy toll. Moreover, most agreed that consumers rarely gave advertisers the chance to recover, and repair damage caused by perceived misuse of negative emotions. As one informant commented with respect to fear-based appeals:

"Fear and shock is a very dangerous area to play in because, if you turn off people, they become very disloyal, very quickly." (Interview C-1)

Virtually all of the practitioners we spoke with made the point that consumers do not naïvely process advertising, but are instead conscious of the persuasive nature of advertising, and interpret commercial messages with this in mind. When specifically asked about negative emotional appeals such as fear and guilt, most informants indicated that such ads are becoming increasingly less effective because sophisticated consumers recognize them as persuasive tactics and may therefore fail to exhibit the emotional response the advertiser seeks to create.

This perspective on the consumer is well in line with current academic theory, which has increasingly taken the view that people actively construct meaning from an ad based on their own experiences (Scott 1994) and perceptions of what the advertiser is trying to accomplish (Friestad and Wright 1994; Meline 1996). In particular, the persuasion knowledge model (Friestad and Wright 1994) argues that when some dimension of an ad is recognized as a tactic, a fundamental change of meaning occurs whereby it is no longer seen as an innocuous feature of the ad. In the case of negative-emotion appeals, this would not only tend to mute the consumer's "normal" affective reaction, it could also prompt reactance as the consumer rebels against the advertiser's perceived manipulateness. Ultimately—and much to the advertiser's chagrin—it may even disrupt consumers' elaboration and comprehension of the advertising message itself (Boush, Friestad and Rose 1994; Friestad and Wright 1994).

According to Friestad and Wright (1994), acquisition of persuasion knowledge happens at both the level of (a) the indi-

vidual, as one learns from personal experience, and (b) society, as conventional wisdom incorporates consumer knowledge about particular tactics. It was striking, then, that practitioners readily acknowledged—and perhaps overestimated—the rise in persuasion knowledge at the societal level (i.e., "people are becoming more savvy") while virtually ignoring it at the individual level. Remarkably, not one of our informants made mention of individual differences in marketplace sophistication during our interviews.

The Tribal Consumer

A third broad view of consumers that emerged in our interviews was the notion of the individual being driven by a fundamental need to belong—to be accepted as part of a larger group. Most of our informants shared a common belief that their audience responded well to advertising that called on them to behave (and consume) in a way that would affirm their membership in a larger collective:

"People are all tribal...there's a certain tribalness in there when people say, 'I want to be,' 'I want to identify myself as part of something,' and yet it's something that I buy." (Interview E-1)

A common view that emerged from many of our discussions was the notion that, despite being more independent than in prior generations, North Americans (and consumers in general) are still driven by a primal desire to belong. Several informants said that they saw themselves as selling memberships in these groups, as well as the product itself. They specifically mentioned a number of product categories—beer, automobiles, and clothing—as examples of cases where ads regularly stressed the need to belong, and/or identify with a certain group.

Negative Emotional Appeals and the Tribal Consumer. The need to belong to a collective seemed to play a central role in driving advertisers' use of negative-emotion appeals, since such appeals were widely regarded as particularly effective when used in this context. Interestingly, guilt was mentioned much more frequently than fear, sadness or anger as a device for such ads. When asked why this was so, one informant explained the situation as follows:

"Guilt is probably the oldest trick in the book when it comes to advertising, so it is still being used a great deal...I think we do feel very guilty as a culture...we feel guilty about not being fit enough, or not having the right stuff...a lot of advertisers will play on that guilt...guilt works to make you see where you don't fit with the norm, [it] can make you feel bad because you don't fit in." (Interview C-2)

The choice to use guilt versus some other emotion was sometimes justified by the idea that guilt is the added element needed to get someone who is almost ready to engage in the desired behavior, over the top. One informant expressed his reasons for using guilt this way:

"Usually people that can be motivated by guilt...are already halfway or three-quarters of the way there...I think guilt is kind of directed at the righteous and the people that always want to do it, or sometimes the people that need to tell other people that they are doing it, but they are not...It's an aspect of being acceptable to others, like them." (Interview A-1)

In general, our informants seemed to regard negative-emotion appeals as a powerful tool for calling attention to the perils of being isolated from the collective. While positive appeals—i.e., ones that

focused on the benefits of group membership rather than the costs of isolation—were also quite common, they were characterized as more conventional and less motivating for the consumer. As a result, there seemed to be a sense that negative-emotion appeals of this type would become increasingly popular.

The resurgence of group identity and the concomitant need to belong to a collective self is an oft-cited theme in several streams of research outside of the consumer domain (see Maffesoli 1995). In spite of the emphasis placed on multiple selves by numerous postmodern authors (e.g., Bauman 1996; Cushman 1990; Gergen 1991; Grossberg 1996; Lifton 1993; Sampson 1985), it has been argued that individuals struggle to consolidate their sense of personal identity. One way this can occur is through affiliations with similar others. The informants in our study seemed to intuit this cultural shift, perceiving that a sense of belonging—and validating oneself through psychological bonds with likeminded individuals—is increasingly important to North American consumers.

DISCUSSION

This research stands as a rare effort to survey advertising personnel on their views about consumers, and the resulting implications for advertising practice. In doing so, it makes several important contributions to the consumer literature. Most obviously, we build on work by Kover (1995) to identify some of the implicit theories that advertising professionals use to guide their decisions when formulating ads. These theories—rarely considered explicitly, even by advertisers themselves—offer valuable insight into how such decisions are actually made, and thus why modern advertising has assumed its present form. Second, our work helps to validate and inspire academic research by contrasting the implicit theories of practitioners with the more formal models of scientific study. Since each type of theory has a distinctive set of strengths and limitations, comparing the two provides an opportunity to identify areas of convergence and divergence, and thus areas where further research may be helpful. Finally, our efforts provide a model for making use of practitioner views in order to advance academic theory. The initial phase of our research drew on the beliefs of advertising professionals to construct a general framework of theories about consumers, while the second phase applied that framework to the study of some specific questions that academic research has yet to fully resolve.

The answers to these questions are themselves of some interest. For instance, we had wondered why negative emotional appeals seemed to elicit such powerful responses among consumers, relative to other kinds of ads. Clearly, one reason is that these ads are, by definition, affect-based and therefore emotive. But our conversations with industry professionals also revealed that such appeals are commonly used by advertisers as a means of breaking through ad clutter, and are therefore chosen specifically for their capacity to shock—in other words, there is a powerful selection bias at work.

We had also been curious about factors that moderate the effectiveness of negative-emotion appeals. Most of the points raised by our informants had already been recognized in the academic literature—that such appeals fail when the level of induced affect is too low or too high, when the ad fails to offer a solution to the problem, or when consumers see it as an attempt to manipulate. Interestingly, however, our interviewees also added that negative-emotion appeals were particularly effective when paired with efforts to invoke the consumer's need to belong to a broader collective. Though the theoretical explanation for this latter phenomenon is not immediately apparent, it is certainly an interesting question to pursue in future research.

Finally, we had sought to understand the practitioner rationale for using negative-emotion appeals at all, given that positive approaches seem to carry fewer risks. Our respondents made it clear that negative appeals are often used because advertising professionals view them as an effective means of breaking through advertising clutter. Yet this raises an interesting paradox: While negative-emotion appeals may help the advertiser to overcome the apathy of the “desensitized consumer”—and perhaps arouse the affiliative needs of the “tribal consumer”—they run a serious risk of being viewed as manipulative by the “sophisticated consumer.” Since all three of these labels describe the same group of individuals, it seems apparent that the working theories of advertising professionals suffer from some fundamental contradictions. Making these theories explicit, as we have done here, provides a critical first step toward reconciling the inconsistencies inherent in practitioners' mental models of consumer behavior, thereby offering the potential for improvements in advertising practice.

Limitations and Future Research

Like all research, ours was characterized by certain limitations which bear some attention. First, our interviews were conducted using a select group of informants in a single urban center, suggesting a need to validate our findings with advertising professionals in other cities. Second, our work was qualitative and exploratory, so the manner in which we gathered, interpreted, and organized informant responses was shaped partly by our own idiosyncratic worldview. Additional work will be needed to develop and test our conclusions more formally. Third and finally, our conclusions are unavoidably culturally rooted, in that they reflect the views of practitioners who are not only based in North America, but also seek to appeal primarily to consumers there. Although we believe that many of our conclusions have broad applicability, we caution that they do not necessarily apply to consumers or to advertising practice in other places.

Apart from follow-up work to address such general matters, opportunities also exist to conduct more specific research in a number of areas. For instance, there is a need to determine which products or services have been advertised using negative emotional appeals, and assess whether and why such appeals were more effective in the case of certain product categories. In addition, although our project ended up focusing specifically on advertisers' use of negative-emotion appeals, it is clear that this is a narrow part of a much broader picture. The three “views of the consumer” identified here could be used as a framework to explore other research questions, and possibly identify other inconsistencies in advertisers' implicit theories.

Overall, it is clear that further study of the views, schemas and assumptions of advertising practitioners is sorely needed. Notwithstanding our efforts and the prior work that inspired us, the beliefs and practices of advertising professionals remain largely unexplored by academics. Cataloguing and assessing the implicit theories of those who design and implement advertising every day may serve as a fertile source of inspiration for more formal models of consumer response to ads. Indeed, we submit that encouraging dialogue between academics and practitioners offers a promising and underappreciated opportunity to accelerate both theory and practice for marketing in general.

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Fluency of Consumption Imagery Generation and the Reversed Effects of Imagery Appeals

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The use of imagery is a widespread practice for influencing consumers' choices. Television commercials induce viewers to immerse themselves in the imagery of product experiences. Print advertisements use phrases such as "imagine yourself", "picture yourself here", or "imagine how it would be". Existing research indicates that such practice should be highly effective (Escalas 2004; Keller and McGill 1994; McGill and Anand 1989; Keller and Block 1997; Burns, Biswas, and Babin 1993). However, the present investigation reveals circumstances under which asking consumers to imagine their future experience with the product may be not only ineffective but can decrease the persuasiveness of the message.

Complementing the traditional approach toward attitude change as determined by the amount and favorability of the information that comes to mind in response to a message (Greenwald 1968; Higgins 1996; Meyers-Levy and Malaviya 1999), a growing body of research demonstrates that consumer judgments are also likely to be impacted by the ease with which one generates or processes this information (Wänke, Bohner, and Jurkowitsch 1997; Reber and Schwarz 1999; McGlone and Tofighbakhs 2000; Hawkins and Hoch 1989). Yet, while the existing research on fluency effects has been focused on discursive processing of information, there is lack of research investigating the impact of the fluency experiences associated with imagery processing. By examining the effect of ease-of-imagery-generation on product preferences, the present research is a step toward filling this gap.

In three experiments, we varied the ease of consumption imagery generation through factors pertaining to the audience or the product depiction and provided converging evidence for the ease-of-imagery-generation effect across: 1) different contexts, 2) measures of product attitudes, purchase intentions, and actual product choice, and 3) different manipulations of the fluency of imagery generation. We further revealed circumstances under which these effects are likely to occur and examined the underlying processes.

Study 1 examined the effect of imagery appeals for individuals high and low in their dispositional ability to create vivid mental images. We created a print vacation advertisement that either did or did not contain imagining appeals. The design of the study also included dispositional imagery vividness (Marks 1973) that was measured in an omnibus questionnaire at least one week before the experiment. The results revealed that the imagery appeals had a positive effect on brand attitudes and purchase intentions for high imagers but a negative effect for low imagers.

Study 2 examined the vividness of the pictorial depiction of the product as a variable that could enhance or undermine the effect of imagery appeals. Using the stimuli from Study 1, two additional versions were created that manipulated the vividness of the pictorial product depiction. The results from this 2 (presence of imagery appeals) by 2 (vividness of the product depiction) design revealed that when the product was depicted in a vivid way, imagery appeals resulted in more positive product attitudes and purchase intentions. However, when the product was described in an abstract way, asking individuals to imagine the product experience decreased product preferences. Further analysis revealed that the interaction between presence of imagery-inviting appeals and vividness of the ad was mediated by the subjective accessibility of the consumption imagery.

Study 3 manipulated the vividness of a description of a recently open restaurant by presenting easy-to-imagine verbal

information or factual information. In addition, we examined the effect of presenting both vivid and factual information simultaneously. Participants were presented with one of the three types of restaurant description and were asked to process information using either an analytical strategy or imagery; in a control condition no specific instructions were given. Study 3 also examined the subjective nature of the ease-of-imagery-generation effect by assessing the possibility that the effect would be stronger for individuals who are attuned to their internal experiences. This resulted in a 3 (type of information) by 3 (type of processing instructions) design with private self-consciousness as a continuous variable.

The results from Study 3 revealed a significant 2-way interaction between type of processing instructions and type of product description for participants high in private self-consciousness, but not for those low in private self-consciousness. That is, for individuals who were more attuned to their internal experiences, the imagining instructions had different effects on product preferences depending on the vividness of the product description. When the product was depicted in a vivid way, imagining instructions increased product choice. However, this pattern was not observed when in addition to the vivid information the message included factual information. Furthermore, when the product was presented only via factual information, asking participants to imagine the product experience decreased their likelihood of choosing the product.

These results provided evidence that consumers use the fluency of consumption imagery generation as a basis for product-related judgments and revealed conditions under which inviting consumers to imagine using the product may decrease purchases. In a more general framework, the present research suggests that a mismatch between the type of information and the type of processing utilized by the consumer can impact the fluency of processing the product information and hamper the effectiveness of persuasive communications.

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SPECIAL SESSION SUMMARY

Habitual Consumption

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SESSION OVERVIEW

It is the rare consumer who checks the price and selection of orange juice at a variety of grocery stores before making a purchase, or calls up multiple restaurants to investigate pizza offerings before making an order. Instead, on these and many other consumption occasions, we simply do what we did last time: we buy orange juice at the same store where we always buy orange juice, and we call the same number to order our usual pizza. Habitual consumption is a pervasive phenomenon. It is a part of the daily lives of most consumers, whether it is reading the same newspaper or drinking the same brand of coffee, much of what people consume today they have consumed in the past and will continue to consume in the future.

This special session was designed to disseminate the results of ongoing research aimed at developing a better understanding of habitual consumption—a form of behavior that plays a prominent role in everyday life, yet is often overlooked by consumer researchers. Three papers were presented, based on evidence from diary data, panel data and laboratory experiments, which demonstrated that habits have clear benefits, as well as some possible drawbacks, for consumers. In combination, the papers extend our current understanding of habits, and point out the minimal role being played by emotion and awareness in this type of consumer behavior. The first paper (Quinn and Wood) examined the role of habits in self-regulation and the generation of behavior in everyday life, with an emphasis on better understanding the psychological mechanisms underlying repeated consumer choice. The second paper (Khare and Inman) investigated the temporal and contextual aspects of food consumption habits, and outlines results that have important implications for marketing theory as well as public policy. The third paper (Murray and Häubl) integrated habitual consumption into the human capital models of consumer choice, and demonstrated the economic value of consumer habits to both firms and individuals. In addition, each paper spoke to possible ways to modify habitual behavior, with an emphasis on instances where such behavior may have negative implications for consumer welfare.

The session touched on many themes of emerging and established importance in consumer research including habit, automaticity, nonconscious influences on choice, variety seeking and brand-loyalty, as well as the more general topics of consumer preference formation and repeated choice. Two general conclusions seemed to emerge from the papers presented and the authors' interaction with the audience during the question and answer period. First, habitual consumption is an important and pervasive, yet under researched phenomenon in consumer behaviour. Second, while we all have an intuitive understanding of what a habit is, little is known about the effects of habitual behaviour on consumer choice or the psychological mechanisms that underlie consumption habits. The work presented in this special session provides a solid theoretical and methodological foundation upon which a better understanding of the phenomenon can be built.

LONG ABSTRACTS

“Everyday Habits and Self-Regulation”

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Wendy Wood, Duke University

In this paper we describe our recent work on the role of habits in self-regulation and the generation of behavior in everyday life. Habits are behavioral dispositions to repeat past action that develop through frequent performance in a stable context. When habits have been formed, these dispositions are likely to guide purchase and consumption behaviors, even when they conflict with conscious intentions (Ouellette & Wood, 1998). Thus, an understanding of consumer habits provides insight into the psychological mechanisms underlying repeated consumer choices. Also, our work highlights the unique challenges associated with changing consumption and purchase habits.

The research used a descriptive, ecological approach and examined habits as they naturally occur, situated in the context of daily life. Studying habits in context is important because habit performance is triggered automatically by features of the situation in which the habits were formed. Specifically, we discuss the findings of several diary studies of the everyday habits of people from college and community samples, and we consider the implications of these findings for consumer research (Quinn & Wood, under review; Wood, Quinn, & Kashy, 2002).

Participants completed a 2-day diary procedure in which they reported their behaviors, thoughts, and feelings once per hour. Behaviors were classified as habits when they were performed just about every day and usually in the same location, whereas nonhabits were performed less often or in varying places. Analysis of respondents' diary reports indicated that they tended to think about nonhabitual behavior when performing it, but were less likely to think about habits during performance. The minimal thought about behavior during the performance of habits reflects the automaticity of these acts and highlights efficiency as one benefit of habit use. Habitual behaviors can be performed quickly, easily, and with minimal conscious thought. Thus, habit performance conserves cognitive resources and frees people to devote their thoughts to behavior-irrelevant issues (e.g., planning future events, reliving past experiences). The diary data also revealed that people's emotions differ for habits versus nonhabits. Participants experienced less stress and, in general, emotions of less intensity when performing habitual behaviors. Thus, the efficiency of habits is achieved through minimal drain on the affective as well as cognitive resources associated with their performance. However, because habit performance is associated with a general dulling of affect, efficiency and stress reduction appear to come at the expense of emotional experience. Thus, one drawback of a reliance on habits is the potential of emotional quiescence and absence of pleasurable intense emotions (e.g., excitement).

Another drawback of habit use is apparent when the behavioral consistency fostered by habits becomes an obstacle to change. This occurs when people change their intentions and an established habit is no longer desired. In such a case, existing habits oppose newly formed intentions, making it difficult for people to adapt their behavior to new situations and information. Another diary study explored this tendency of habits to maintain “unwanted”

behaviors regardless of intentions (Quinn, in progress). Participants completed a 7-day diary in which they tracked their “unwanted behaviors” in everyday life. These involved instances in which they tried not to perform some action, such as eating unhealthy foods, making a bad impression, sleeping too late. Some of these unwanted acts were habits (behaviors performed frequently in stable contexts) that, for various reasons, were perceived by participants as undesirable and contrary to their explicit intentions. Other unwanted acts were nonhabitual impulses, urges, or choices (i.e., behaviors performed infrequently or in an unstable context). The diary results indicated that unwanted habits are in fact formidable obstacles to self-control. Participants’ ratings showed that, compared with unwanted nonhabits, unwanted habits were more difficult to inhibit and participants had less success at doing so. In this research, performance of unwanted habits appeared to generate both positive and ambivalent emotions for participants. Although participants felt they should stop performing such behaviors, quitting would eliminate the good feelings associated with the act. Thus, positive feelings associated with unwanted habits contributed to the difficulty participants experienced in self-control attempts. Habits seemed to be especially difficult to overcome when they were performed in the context in which they were developed (i.e., context remained stable), presumably because they ran off automatically when cued by the supporting circumstances. Two specific behavioral strategies showed promise as means of overriding unwanted habits: (a) substituting a competing behavior in place of the habit, and (b) monitoring one’s behavior carefully for errors in performance. These findings suggest ways to combat consumer habits and to bring purchasing decisions under people’s conscious, intentional control. Such interventions may be useful when the costs of automatic patterns of consumption outweigh their benefits.

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“Habit Regimes in Consumption”

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Habits are highly likely to develop in temporally and contextually stable behaviors (cf., Ouellette and Wood 1998) such as food consumption behavior. Though habits can form for a variety of reasons such as unconscious acquisition and deliberate development among others, once developed, habits operate automatically i.e., at a lower level of cognitive processing (cf., Aarts and Dijksterhuis 2000). Habits serve to help people conserve limited mental resources by minimizing effort in decision-making (cf., Bargh and Ferguson 2000). These limited mental resources can then be used to deal with less recurring and novel situations in day to day life. Habitual behavioral routines such as eating the same type of breakfast cereal everyday are likely to be triggered by temporal and contextual cues such as eating at a particular time and at a particular place everyday. Through repetition these cues become associated with a consumption behavior and may eventually begin to initiate the behavior largely outside of awareness.

We study the nature of temporal and contextual consistency in a repetitive consumption behavior such as the consumption of food nutrients (e.g., saturated fat, calcium, etc.). Temporal consistency is evidenced from the fact that past behavior has a predictable carryover influence on future behavior and we accordingly term it as *carryover habit*. Contextual consistency is evidenced from the fact that behavior is stable within contexts but variable across contexts. We term it as *baseline habit* to reflect the consistent differences in baseline behaviors in different contexts. We empirically measure habit via a four-week long individual level food consumption panel dataset (n=1029) and demonstrate systematic patterns in the nature of carryover and baseline habits towards the consumption of food nutrients. Our data are aggregated up to the three primary meal levels (breakfast, lunch, and dinner) for each panelist. We model carryover and baseline habit for each panelist for each of three positive (calcium, carbohydrate, fiber) and three negative (caloric density, saturated fat, sodium) nutrients.

Carryover habit for a nutrient is measured for each meal by modeling the lagged influences of the three past meals on the current meal. If one or more of these lags is statistically significant then carryover habit with respect to that nutrient for that meal is observed. In this formulation, the first and second lags’ coefficients measure across-meal carryover effects (e.g., the influence of sodium levels at the immediately preceding breakfast and lunch on the sodium level at the current dinner) and the third lag’s coefficient measures the within-meal carryover effect (e.g., the influence of calcium level at yesterday’s lunch on the calcium level at today’s lunch). Additionally, we argue that each carryover habit influence can take one of two forms: fixed vs. cycling. When a lag’s coefficient is significant and positive we categorize this type of carryover habit as fixed carryover habit (e.g., eating nutritionally similar breakfast cereals everyday) (Heien and Durham 1991). When a lag’s coefficient is significant and negative, we categorize this type of carryover habit as cycling carryover habit (e.g., systematically alternating between nutritionally distinct breakfast cereals) (cf., Brickman and D’Amato 1975). Baseline habit (Connors et al. 2001) is observed when the consumption level of a nutrient is significantly different across meal types. For example, if a panelist consistently consumes lower levels of saturated fat at breakfast but higher levels of saturated fat at dinner then baseline habit with respect to saturated fat will be observed. We model carryover and baseline habit jointly via a panelist level seemingly unrelated system of regression equations (SUR). In this SUR system, each of the six nutrients has three equations (one for each meal). The coefficients of the lagged meals enable inferences about carryover habit, and the intercepts enable inferences about baseline habit.

In the second stage of our analyses, we hypothesize and test differences in the estimated panelist level parameters. The hypothesized differences are in terms of meal type (breakfast, lunch, dinner), nutrient type (positive, negative), carryover length (within meal, across meal), and habit form (fixed, cycling). Since these moderating variables vary within panelist, we employ a mixed modeling approach as this enables us to account for between panelist differences via random effect terms in each hypothesized effect. Our hypothesis testing shows that: (1) A majority (over 92%) of individuals exhibit carryover habit in the consumption of food nutrients. (2) Within meal carryover effects are stronger than across meal carryover effects and this effect is stronger at breakfast than at lunch and dinner. (3) The magnitude of fixed carryover habit is stronger than that of cycling carryover habit and this effect is: (a) stronger at breakfast than at lunch and dinner, and (b) stronger for within as compared to across meal carryover effects. (4) A majority of individuals (over 75%) exhibit baseline habit in the consumption of food nutrients and: (a) for negative nutrients, the nature of

baseline habit is such that they constitute dinner foods much more than breakfast and lunch foods, and (b) for positive nutrients, the nature of baseline habit is such that they constitute breakfast foods much more than lunch and dinner foods.

Our findings have important implications for public-policy making and managerial decision-making. First, based on the observed asymmetry between positive and negative nutrients, dietary guidelines for positive nutrients should focus more on breakfast foods and those for negative nutrients should focus on dinner foods. Such targeting could increase the effectiveness of dietary guidelines. Second, the asymmetry between positive and negative nutrients has implications for designing nutritional descriptors of foods. Nutritional descriptors for breakfast foods could focus on accentuating the positives (e.g., high calcium) and nutritional descriptors for dinner foods could focus on downplaying the negatives (e.g., low in saturated fat). Our findings also contribute in important ways to the emerging literature on habits. We measure habit based on data whose recall length is very small (panelists provide consumption data at the end of every day) and therefore our habit estimates are likely to be more realistic. We study habits not only via the traditional temporal consistency focus but also through a contextual consistency focus (e.g., differences in habits across the three daily meals).

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"Skill-Based Habits of Use and Consumer Choice"

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This work examines the role of skill-based habits of use in consumer decision making. We conceptualize such habits as a class of *goal-activated, automated* behaviors (Bargh 1990) that develop as consumers gain brand-specific skills through repeated consumption experiences. Our approach integrates habits of use into human capital models of consumer choice (Ratchford 2001), and thereby extends the literature on consumer preference formation and choice.

Stigler and Becker (1977) argued that "the costs of searching for information and of applying the information to a new situation are such that habit is often a more efficient way to deal with moderate or temporary changes in the environment than would be a full, apparently utility-maximizing decision" (p. 82). Their approach links the concept of human capital to decision making,

which opens a new perspective on consumer behaviour over time and throughout an individual's lifecycle. Unfortunately, other than this seminal work, "there is not much on human capital applied exclusively to consumer behavior in the economics literature, and . . . the marketing and consumer research literatures have virtually ignored this concept" (Ratchford, 2001, p. 398). We argue that the accumulation of human capital, and its economic value to the consumer, is directly related to the observed reductions in task completion time that have been thoroughly researched by psychologists as *The Power Law of Practice* (Newell and Rosenbloom 1981).

In three experiments, we demonstrate that *habits of use* are an important type of human capital that influence consumer choice by making it difficult to switch from an initially-adopted brand (an "incumbent") to a different one (a "competitor"). The primary task, common among the three experiments, requires participants to search through a web site to find a specific piece of information (i.e., the goal). The web site itself was designed to resemble a news site such as CNN.com or nytimes.com, and contains a series of pages that the participant must navigate in order to achieve the search goal assigned to them. Although the specific piece of information varies between trials, the sequence of pages that must be navigated (i.e., the navigation path) to find the target information remains constant. Initially, participants will have to make a choice among the paths available on each page. However, with practice, and given that the correct sequence of pages remains constant across trials, the opportunity exists to automate this navigation behaviour. The idea is that as task performance becomes increasingly habitual, the consumer becomes increasingly locked-in to the incumbent interface. This process of practice leading to the development of habitual behaviour, which in turn leads to high levels of loyalty, offers an explanation of the psychological mechanism underlying many of the predictions of the human capital model. In essence, habit development reduces the time required to complete a consumption task and, therefore, increases the value of the interface that the consumer associates with that task.

As a result, habitual product use can create a distinct type of consumer loyalty that is driven by the degree of *skill transferability* among brands, rather than traditional antecedents such as affect or trust. We argue that the accumulation of human capital during habit formation has an economic value to the consumer that is directly related to a reduction in the effort required to consume or use a brand. When such habits are specific to an incumbent brand, the latter has an advantage over competitors in the marketplace since switching to another brand would require the acquisition of new skills that are specific to that brand. The results of Experiment 1 support this theory. In addition, they demonstrate that the effect of experience on preference is fully mediated by an objective measure of skill transferability between an incumbent and a competitor brand.

Another important determinant of choice, evident from the first experiment, is whether or not product usage errors were made as participants searched for the target information. Such errors decrease the ease of using the product, as evidenced by task completion times and the participants' self-reported perceptions of ease of use, and increase the probability of switching to the competitor. It appears that by slowing down the task completion times usage errors impede habit formation and, as a result, reduce the value of practice with the incumbent. Conceptually, such errors are a potential source of product *dissatisfaction* because they reduce the usability of the product and, therefore, reduce the ability of the product to satisfy the needs of the consumer. Our data support Oliver's (1999) conjecture that such dissatisfaction may be the "Achilles' heel" of consumer loyalty.

In addition, we contend that skill acquisition is a necessary, but not sufficient, condition for the development of habits of use that lead to consumer loyalty. In particular, since habits of use are goal-specific (Aarts and Dijksterhuis 2000), loyal consumption driven by such habits should also be goal-specific. We propose that, in order for this type of loyalty to form, it is critical that the acquired skills are automated and associated with a specific consumption goal. Experiments 2 and 3 examine the central role of goal activation in connection with consumers' preference for an incumbent brand. Our results suggest that, even in the presence of objectively equivalent competing brands, an incumbent brand can acquire a market share as high as 100 percent when the activated goal is congruent with consumers' usage habits. However, an incumbent gains no advantage when the activated goal is incongruent with its habitual use, but congruent with the use of a competing brand. This is the case even if the consumer has extensive experience with an incumbent brand that is equally suited to achieving the activated goal, and only very limited experience with the competitor. The paper concludes with a discussion of the theoretical and practical implications of our findings.

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Emergent Moderators of Affective Response in Consumer Behavior

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SESSION OVERVIEW:

As the study of affect in consumer behavior has accelerated in recent years, more sophisticated models have emerged. Factors which were once overlooked or thought to be minor are being recognized as fundamental. This session examined three of these moderators of affect, which are coming to be recognized as critical to our understanding of affect in consumer behavior. Specifically, the session explored (1) how trust in one's feelings impacts the degree to which people rely upon them in their judgments, (2) how focusing on episodic, rather than global experience can largely eliminate the impact of product quality on affective response, and (3) how preceding a positive affective component with a negative one can actually enhance positive affective response relative to presenting positive components alone.

For those researchers already interested in this area, the session served as a lightning rod for exploration of the issues, critique of the current state of research and methods employed. The discussion period facilitated an exchange of ideas, not only from the presenters and the discussion leader, but from many members of the audience.

While the three papers were clearly substantively related, they were also highly complementary. Each focused on a different moderator of affect in consumer behavior. The three papers also shared many methodological similarities.

The format of the session was as follows. The chair briefly introduced the topic and the participants. Each paper presenter then presented their research, with time left over to allow for several questions after each talk. In the last 20 minutes, Robert Wyer gave his insights into this emergent topic area, and led a substantial and meaningful discussion in which many participated.

“Should I Trust My Feelings or Not?” The Metacognition of Affect as Information in Judgment”

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According to the affect-as-information framework, we tend to rely on our feelings because we believe that they convey valuable information about the object being evaluated. If we feel good while evaluating a target, we infer that the target is desirable; if we feel bad, we infer that the target is not desirable. The “how-do-I-feel-about-it?” heuristic is generally regarded as a low-effort, “peripheral” strategy (e.g., Forgas 1995), invoked primarily as a means of simplifying judgment. Some research indicates, however, that people can be quite discriminating in their reliance on feelings. Under certain conditions, people's reliance on their feelings appears to be very sensitive to the perceived diagnosticity of these feelings (e.g., Pham, 1998; Raghunathan & Pham, 1999; Schwarz, Strack, Kommer, & Wagner, 1987). This suggests that the “how-do-I-feel-about-it?” heuristic could be used more reflectively than previously believed. In particular, the reliance on feelings may be regulated by some metacognitive assessment of whether these feelings *should* be used in a given judgment rather than by a sole concern for judgmental efficiency.

The purpose of this research is to provide a better understanding of when and why people rely on their feelings in judgment. Results from four studies (already completed) confirm that feelings can be used more reflectively in judgment. It is suggested that this reliance is not the product of shallow peripheral processing. In-

stead, the increased reliance on feelings seems to reflect a fairly strategic process whereby people perform a metacognitive assessment asking if they *should* use their feelings and draw conclusions from the level of trust they experience in their feelings. Results also confirm that processing resources are required to perform this metacognitive assessment.

In all four studies trust was manipulated using a procedure adapted from Schwarz and colleagues (1991). The rationale behind this procedure is that when people are asked to generate or retrieve information, they monitor not only the content of the information they generate or retrieve but also the ease with which this information is generated or retrieved. People draw inferences that are consistent with the implications of accessible content when recall or generation of content is experienced as easy. However people draw inferences that are contrary to the implications of accessible content when recall or generation of content is experienced as difficult. In our studies respondents were asked to describe either 2 (high trust condition) or 10 (low trust condition) situations in which they trusted their feelings to make a judgment. It was expected that the ease respondents felt when identifying 2 versus 10 such situations would affect their momentary confidence in their feelings.

The purpose of study 1 was to show that people reflect on the use of their feelings in judgment and that the level of trust in feelings would affect the reliance on feelings in the evaluation process. After being primed for high trust versus low trust in feelings, respondents were asked to express their attitude toward the issue of reading based on a British TV commercial praising the virtues of books. To manipulate respondents' subjective affect toward the issue (holding the TV commercial constant), we varied the pleasantness of the musical soundtrack of the commercial. Consistent with our theory, we found that the pleasantness of the commercial's soundtrack had more influence on attitudes when respondents experienced high trust in their feelings than when they experienced low trust in their feelings.

The purpose of study 2 was to test the reliability and generality of study 1's findings, using an incidental mood manipulation of feelings toward the target. After manipulating trust as in study 1, respondents' mood state was manipulated. Respondents were then asked to evaluate a book based on a synopsis. Results showed that respondents who were primed to trust their feelings were more influenced by their mood states in their evaluations than respondents who were primed not to trust their feelings. This result suggests that the metacognitive assessment of feelings applies to feelings in general, including to incidental feelings arising from a mood state.

The purpose of study 3 was to test the proposition that (a) assessing the diagnosticity of feelings from a metacognitive standpoint requires a significant amount of processing resources, and (b) if sufficient resources are unavailable, people rely on their feelings without much consideration to the diagnosticity of the feelings. Using study 1's manipulation of integral feelings, the influence of these feelings was compared across 3 conditions representing different combinations of respondents' momentary trust in their feelings and the availability of processing resources (controlled through a cognitive load manipulation). Results confirmed that under high resource availability, respondents replicated the results of study 1. However, under low trust with limited resource availability, respondents behaved differently. These respondents relied

on their feelings without much consideration to these feelings' diagnosticity, and therefore were influenced by the commercial's soundtrack despite being primed not to trust their feelings.

The purpose of study 4 was to test the robustness and generality of the results of study 3 using an incidental mood manipulation of respondents' feelings toward the target. As in Study 3, the effects of the manipulation of affect were compared across three conditions. Replicating the results of study 2, respondents' evaluations were more influenced by their mood when they were primed to trust their feelings than when they were primed not to trust their feelings. In contrast, under conditions of limited resource availability, respondents' evaluations were influenced by their mood even though they were primed not to trust their feelings, replicating the results of Study 3.

Based on our results, it is proposed that the reliance on feelings in judgment often involves a metacognitive assessment of whether one's feelings should be used in judgment. It is conjectured that the reliance on feelings in judgment operates in two different ways: a reflective way that involves a metacognitive assessment of the diagnosticity of the feelings when resources are available, and a non-reflective way that is insensitive to the diagnosticity of the feelings when resources are unavailable.

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"Is Driving a BMW More Enjoyable than Driving an Escort? Depends on How You Think About It"

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Hedonic expectations play a major role in many consumer decisions. People expect, for example, that driving a luxury car is a more pleasant hedonic experience than driving an economy car and this expectation plays a major role in their purchase decisions. But do people actually feel better when driving a better car? The answer depends on how consumers' hedonic experience is assessed, with important implications for research methods and consumer decision making.

A large body of literature has documented discrepancies between people's reports of current and past emotional experiences (see review by Robinson and Clore, 2002). When people report on their *current* feelings, the feelings themselves are accessible, allowing for accurate reports. When they report their feelings during a *specific past episode*, they can often draw on episodic memory, retrieving specific moments and details of the past. In contrast, *global* reports of past feelings and *predictions* of future feelings are based on semantic knowledge. In this case, people draw on their general beliefs about the event class to infer what their feelings "must have" been or will be. These different sources of information give rise to systematic differences in people's self-reports of emotion.

Drawing on Robinson and Clore's (2002) accessibility model of emotional self-report, we asked our participants to report their driving experience. We first asked undergraduates at a Midwest university (M=177) to predict how they would feel while driving either a BMW, Honda Accord, or Ford Escort along several affect dimensions (e.g., happy, enjoyable, depressed, annoyed, etc.). The results showed that driving a BMW is associated with the most positive and least negative feelings and driving a Ford Escort is associated with the least positive and most negative feelings, with Honda Accord scored in between. The results support our hypothesis that hedonic expectations of driving experience map onto the economic value of the car. In our second study, we asked drivers to report how they feel while driving their car in two reports conditions. In a *global reports* condition, participants first reported which car they have (model and year) and subsequently how they feel while driving their car along the same affect dimensions used in the first study. In an *episodic reports* condition, participants first recalled the last time they drove their car to work, next reported how they felt during this specific episode along the same affect dimensions, and finally identified the model and year of their car. On theoretical grounds, we predicted that the type of car driven is related to participants' reported hedonic experience in the global but not in the episodic condition. We used the Kelly Bluebook value of respondents' cars as a proxy for car quality. As is standard with income data, we took natural log of cars' Kelly Bluebook values to normalize the distribution and used it as a predictor of reported affect.

A total of 173 participants participated in this study. Confirming our hypotheses, the natural log of cars' Bluebook values

predicted reported hedonic experiences under global report conditions ($p < .01$), but not under episodic report conditions ($p > .05$). This pattern is reflected in a significant interaction of the natural log of Bluebook value and reporting condition, $\beta = 2.43$, $p < .05$.

Our third study replicated study 2 with a broader range of driving episodes in an Internet survey. Specifically, participants classified the most recent driving episode (e.g., drove to work, went to shopping, gave kids a ride, going out, etc.) in the episodic reports condition. The global reports condition remained the same as in study 2. Again, the results supported our hypothesis. The natural log of car's Bluebook value was a significant predictor of reported affect only in global reports condition ($p < .01$) but not in episodic reports condition ($p > .05$). We also hypothesized that the value of the car would matter in some car-focused episodes (e.g., driving the car just for fun). Unfortunately, we only had few respondents that fall into this category (i.e., driving for fun). Nevertheless, we found that the value of the car was a significant predictor of negative feelings in "going out" category (somewhat car-focused episode) in episodic reports. This provided partial support for our hypothesis.

These findings have several implications. First, they suggest that the cars we drive make a difference when we focus on the car, e.g., while driving it just for fun. But under most circumstances, something else is likely to be on the driver's mind and the car driven may contribute little to consumers' online hedonic experience. This is consistent with Robinson and Clore's (2002) accessibility model, which suggests that the information that is chronically or temporarily accessible at that point in time drives the differences in emotional reports. Second, our findings highlight that global recall of product experience are likely to (erroneously) confirm consumers' expectations: consumers' predictions of hedonic experience as well as their global retrospective reports are based on features of the product, resulting in similar prospective and retrospective answers. Neither of these reports, however, matches consumers' actual online experience during product use, suggesting that people's semantic beliefs and expectations are rarely updated. Third, because consumers are unlikely to spontaneously think about their product experience in an episodic (rather than product focused) way, they fail to realize that the product may not deliver what they expected. Fourth, in combination, these processes impede learning from experience and may result in the erroneous impression that one's expectations were right on target.

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"Mixed Emotions: Impact of Positive and Negative Emotional Content in Advertising"

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Investigations of how affective experiences are combined have all examined the integration of affective stimuli of a single valence. These studies converge on the conclusion that recency is a primary driver of overall affective response. The effect of recency, which is implied by the "peak-end rule" proposed by Fredrickson and Kahneman (1993), has been replicated for both aversive stimuli (Ariely & Carmon, 2000; Kahneman et al., 1993; Redelmeier & Kahneman, 1993; Varey & Kahneman, 1992) and positively valenced messages in an advertising context (Baumgartner, Sujan & Padgett, 1997). This stream of research, however, has always held valence constant while varying intensity.

The implications of this research for conditions in which both positive and negative affective components are combined into an overall affective response are unclear. For example, suppose a radio ad begins with sad music and suddenly switches to happy music. How will the overall affective response to such an ad differ from the response to only the positive or only the negative material? Would switching the order of positive and negative material change the overall affective response? Finally, how would response differ if some or all of the affect eliciting music were removed, leaving only the more evaluative information? This research addresses these questions.

Theory Development In Brief

Contrast occurs when the perception of a stimulus is more extreme than it would be if considered alone. For example, preceding a positive stimulus by a negative one may lead it to be perceived as more positive than it would if it were presented in isolation. As a consequence, responses to the two stimuli in combination may be biased toward the second, positive stimulus.

Contrast effects on evaluative assessments are typically assumed to be symmetric (see, e.g., Raghunathan & Irwin, 2001). We believe, however, that the motivational effects of affect will lead to a specific form of asymmetry and that the order of the positive and negative stimuli will have an impact on the amount of contrast observed. This expectation is grounded in evidence that people who experience negative affect are prone to engage in behaviors that allow them to get out of this unpleasant psychological state (e.g., Carver & Scheier, 1998; Clore et al., 2001; Clore, Schwarz & Conway, 1994; Schaller & Cialdini, 1990) and that people who experience positive affect may wish to maintain this state (Wegener & Petty, 1994; Wegener, Petty & Smith, 1995). The former effect may be thought of as *mood repair* and the latter as *mood maintenance*.

Experiment 1

Overview

A total of 116 introductory marketing students participated for research credit. This study employed a four-level, between-subject design, manipulating the affective valence(s) present in the advertisement. The four conditions were: positive-only; negative-only; positive affective stimulus followed by negative affective stimulus (positive-negative); and negative affective stimulus followed by positive affective stimulus (negative-positive). In this experiment, the affect was induced by the type of music used in the background in a 30 second advertisement for a diabetes foundation. Pretesting was conducted to ensure that the music used was appropriately valenced. Further, the valence of the verbal material presented in the advertisement was kept consistent with the background music. Each individual listened to one of four different advertisements regarding diabetes, played on a portable cassette recorder. After this, participants provided overall affective responses, content specific perceptions of seriousness and hope, and a global evaluation of the ad.

Results

For positive affect, contrast was observed for the increasing sequence (i.e., negative-positive), but not the decreasing sequence (i.e., positive-negative). A negative stimulus followed by a positive one resulted in the highest reported positive affect and the greatest level of perceived hope. This negative-positive sequence also did not result in lower levels of perceived seriousness, relative to the negative content alone. This is particularly important from a communications strategy perspective, as it appears that the negative-

positive sequence is able to increase hope without reducing seriousness, making it a powerful format for this type of persuasion attempt.

Experiment 2

Overview

A total of 291 individuals in an introductory psychology course participated for research credit. Individuals received the verbal information in either a negative-positive order or a positive-negative order, as in Experiment 1. Positive music was either presented or not presented while positive information was conveyed, and negative music was either presented or not presented while negative information was conveyed. Thus, the design was a 2 (information order) x 2 (positive music present vs. absent) x 2 (negative music present vs. absent) factorial. Aside from these differences, the stimulus materials, procedure and dependent variables were identical to those of Experiment 1.

Results/Discussion

The combination of negative affect-eliciting music followed by positive affect-eliciting music had a disproportionate influence on measures of positive affect, global assessment of the ad and perceptions of hope regarding the treatment of diabetes. This sheds additional light on the negative-positive superiority effect found in Experiment 1. That is, neither the rapid cessation of negative music nor the rapid onset of positive music has the same impact as rapidly switching from negative to positive.

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“Is this Site Confusing or Interesting?”

A Perceived Web site Complexity (PWC) Scale for Assessing Consumer Internet Interactivity

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ABSTRACT

This paper develops a comprehensive conceptualization of the construct, perceived web site complexity. Drawing on the research on stimulus complexity and task complexity, we develop a valid and reliable scale that captures the underlying dimensions of perceived web site complexity. We found two key dimensions underlying perceived web site complexity: *structural complexity* (comprising *range* and *dissimilarity* of structural elements) and *interactive complexity* (comprising *navigational ambiguity* and *probabilistic hyperlink outcomes*). Further, the results confirm that the facets of perceived web site complexity have an inverted-U relationship with telepresence. Finally, telepresence mediates the relationship between complexity and attitudes. We discuss the implications of these results.

INTRODUCTION

With the growth of the Internet, businesses are spending billions of dollars to add a wide range of sophisticated features such as animated pictures, icons and links at a web site that increase its *complexity*. What effects might this complexity have on the consumer attitudes and intentions at the site? While complex web sites may be more memorable, communicate more information and engage consumers (Beatty, 1998; Hansell, 1998), they can often be difficult to navigate and use (Jarvenpaa and Todd, 1997).

Despite the over-arching significance of perceived web site complexity (PWC), substantive research employing this construct in an online environment is constrained by two major reasons. Current research on complexity in an online environment focuses on Berlyne's (1970) structural view of stimulus complexity, characterized by the range and dissimilarity of the structural elements. However, this characterization does not address the individual–environment interaction, which is critical in an online context. Hoffman and Novak (1996) have highlighted the unique interactive facet of a web site that distinguishes it from other media. Web sites allow instant two-way communication opportunities not possible in traditional media. Drawing on the task complexity literature, we address the interactive facet that is integral to complexity in an online environment. Besides the focus on the number of task inputs one has to process, research on task complexity (Campbell, 1988; Wood, 1986) focuses on the interrelationships between individual actions and task outcomes. We adapt this view to understand how the interrelationships between the individual actions and interactive elements (for example hypertext links) at the web site, contribute to complexity. We argue that PWC stems from the discrepancy between the navigational expectations of the individuals and the outcomes of the interactive features. In essence, complexity of a web site arises from not only the physical arrangement of pictures, text and sound, but also from the interactivity in traversing the web pages. We integrate the stimulus and task complexity literatures to develop a comprehensive framework of PWC.

Second, the absence of a valid and reliable measurement scale capturing the dimensions of PWC has seriously impeded substantive research linking complexity to other constructs of interest. Systematically developed measures will provide quantitative rigor to examining substantive links between PWC and relevant attitudinal constructs, and can help ensure the effective operationalization

of PWC in experimental studies. Further, a well-defined complexity scale may allow researchers to classify web sites, provide a basis for manipulating web sites and allow easy comparison of web sites in future studies about this construct.

From a practical perspective, developing a comprehensive understanding of complexity can promote the effective use of the Internet as a marketing communication channel. For example, a clear understanding of the dimensions may help marketers clarify whether complexity makes a site confusing or interesting. A clear understanding of the various facets of complexity will allow marketers to manage complexity more effectively — marketers can tailor the complexity at web sites based on individual goals.

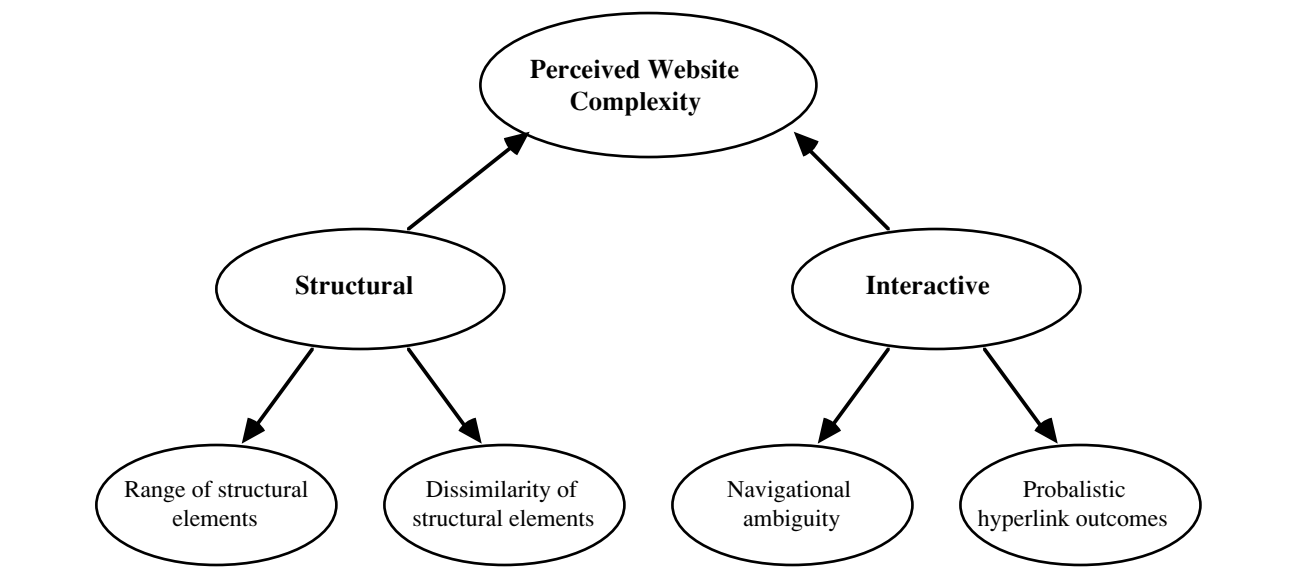
Given these concerns and potential, this paper 1) develops a scale to assess perceived web site complexity (PWC); 2) verifies the scale's underlying latent structure and 3) examines the relationship between PWC, telepresence and attitude.

COMPLEXITY IN AN ONLINE ENVIRONMENT

In marketing, there have been numerous studies that have conceptualized complexity to investigate its effects on evaluations and intentions. In the sub domain of advertising, researchers have focused on *visual complexity* (Cox and Cox, 1988; Morrison and Dainoff, 1972) — the number of heterogeneous objects and irregularity, and *message complexity in television advertisements* (Thorson, Reeves and Schleuder, 1985) — number of visual features (edits, scene changes, superimposed images, zooms etc) and number of audio units (count of linguistic propositions). In product related studies, researchers have focused on *brand logo complexity* (Janiszewski and Meyvis, 2001) — the complexity and familiarity of brand logo characteristics, and *product design complexity* (Cox and Cox, 2002) — the extent of heterogeneity and irregularity of the shapes and fabrics of the product design. Internet researchers have extended this structural view to manipulate the complexity of a web page by colors and movement (Bruner and Kumar, 2000), number of links, number of graphics, home page length and animation (Geissler, Zinkhan and Watson, 2001). Researchers in a retail environment also uphold this structural view where they contend that physical design and décor elements have a significant impact on consumer behavior (Baker, Parasuraman, Grewal and Voss, 2002; Bitner, 1992). In addition, researchers examining retail store environments have referred to complexity as the uncertainty in the environment (Donovan, Rossiter, Marcolyn and Nesdale, 1994; Donovan and Rossiter, 1992). Some researchers who have investigated *complexity in products and product choice tasks* (Dhar, 1997a, 1997b; Swait and Adamowicz, 2001; Tversky and Shafir, 1992) focus on how individuals have to adapt to the task characteristics.

Most of this research in complexity has their roots in Berlyne's (1960) stimulus complexity. Accordingly, these studies have defined complexity in terms of an individual's perception of the *structure* and *visual pattern* of the stimuli. Berlyne (1960) identified several structural elements of stimulus complexity including amount and heterogeneity of elements, their arrangement and incongruity. In summary, he posits that individuals view a stimulus to be more complex as the number of distinguishable elements is increased.

FIGURE 1
Dimensions of Perceived Web site Complexity (PWC)



However, the stimulus-based view, focusing on the number of distinct elements that the individual has to process in an online environment ignores the interactive aspect. In an online environment, consumers mainly navigate through a web site to fulfill various goals of exploring, being entertained, seeking information, buying a product (Rodgers and Thorson, 2000; Coyle and Gould, 2002). In their goal pursuit, individuals need to interpret and adapt to various sophisticated interactive features (for example hyperlinks), which allow individuals to interactively access information and navigate through the environment (Hoffman and Novak, 1996). While such symbolic communication serves as an interactive tool to navigate through the environment; the discrepancy between the navigation expectations of the individuals and outcomes of the interactive features may contribute to the complexity at the web site.

Besides focusing on the number of task inputs one has to process, research on *task complexity* (Campbell, 1988; Wood, 1986) focuses on the interrelationships between individual actions and task outcomes. Wood (1986) contends that task complexity is an aggregate multidimensional construct, which is a linear combination of both the number of task inputs one has to process and the uncertainty between the potential action activities and desired outcomes. We adapt this view to develop a holistic conceptualization of PWC, which addresses both the structural and interactive aspects of complexity that individuals encounter while performing an online task. Based on Wood's theorization, we posit that PWC is a linear combination of the two latent dimensions—structural and interactive. We show this aggregate model of PWC in Figure 1 and discuss the dimensions in the following sections.

Structural Complexity

Berlyne (1960) proposes that stimulus complexity reflects the range of different structural elements and the irregularity in arrangement. Mehrabian and Russell (1974) too contend that complexity in an environment comprises different structural elements such as ambient conditions, spatial layout; and signage and artifacts. Similarly, literature on task complexity define complexity as the number of distinct information cues that must be perceived and processed in the performance of a task (Wood, 1986). Internet

researchers have extended this structural view to manipulate the complexity of a web page by colors and movement (Stevenson Bruner and Kumar, 2000), number of links, number of graphics, home page length and animation (Geissler et al, 2001).

Accordingly we theorize that structural complexity arises from the overall configuration of the various structural elements across the web pages at a web site. The structural elements maybe classified into *content* and *form* (Lang, 1990; Reeves and Nass, 1996) where content based elements essentially comprise the information categories presented and form based elements comprise the various ways the information is presented (text, images, video, audio, animation). Specifically, structural complexity subsumes two subdimensions—the *range* of different structural elements, and the *dissimilarity* of these elements at a web site. In other words, as the range and dissimilarity of the structural elements increase, the structural complexity is increased.

Interactive Complexity

Interactive complexity arises from the fact that individuals must frequently adapt to changes in the cause-effect chain during the performance of the task (Wood, 1986). In other words, it can be defined in terms of *inexact means-end*—the degree of uncertainty between potential action activities and desired outcomes (March and Simon, 1958). In a navigation environment, the action-outcome uncertainty can be explained by *schema incongruity* (Mandler, 1982). Based on schema research (Sujan and Bettman, 1989), we argue that uncertainty in an online environment arises due to the failure to develop a schema (ambiguous hyperlink) or due to the lack of fit between the schema (expectations based on the hyperlink) and the ensuing webpage. In other words, if the expectations based on the hyperlink do not match to the ensuing webpage, it leads to schema incongruity. In what follows, we outline the two facets of interactive complexity in more depth.

Complexity in the navigation environment is reflected in the *ambiguous* nature of hyperlinks or other obstacles such as unclear procedures to browse the web site. Hyperlinks that connect different web pages enable users to construct interpretations and expectations, and navigate effectively through the web site. When real world objects are represented in a hyperlink, the individuals are

likely to find it more meaningful and find it easy to make links between what is shown in the hyperlink and function it is supposed to represent (McDougall, De Bruijn and Curry, 2000). To facilitate the transfer of information, researchers propose the use of realistic metaphors (Steuer, 1992) or natural mapping strategies (Norman, 1990) whereby the individual can form expectations of the outcomes. However, due to technological innovations, hyperlinks today are becoming increasingly ambiguous, not allowing the individual to form expectations of the corresponding destination. In other words, an ambiguous hyperlink increases the interactive complexity of the web site.

The other important facet of interactive complexity is the probabilistic nature between the paths and the outcomes at the web site. In other words, the expectations based on the hyperlink may not match the ensuing web page. For example in the Disney web site that simulates the Disney theme park, the user may expect to access information about a specific Disney landmark by a click on the hyperlink that resembles the real Disney landmark. But, the click may not necessarily take the user to the desired page (Coyle and Thorson, 2001). The hyperlink is therefore probabilistic in nature where the individual action-outcome expectancy is not met. In summary, interactive complexity reflects the degree to which users find the hyperlinks at a web site ambiguous and the expectations based on the hyperlink format incongruous with the ensuing web page.

RESEARCH METHODS

The research design of this study is based on Bagozzi's (1980) criteria of construct validation — 1) theoretical meaningfulness, 2) observational meaningfulness, 3) internal consistency, 4) convergent validity, 5) discriminant validity and 6) nomological validity.

Scale Development:

Development of the scales to measure each construct in the model advanced through a series of steps. First, to address the theoretical meaningfulness of the construct we *theoretically* derived 10 items of PWC (see Table 1). Second, to increase observational meaningfulness of these measures (Bagozzi, 1980), we conducted a free association task among 40 subjects (mean age=23, 30% female), which yielded 10 more items. We then grouped the 20 items into the sub-facets of structural and interactive complexity using the Q-sort technique as a way to strengthen construct validity (Anderson and Gerbing, 1981). Third, we gave out a pilot questionnaire based on the 10 theoretical and 10 empirical measures to 30 subjects (business professors, Ph.D. students, web professionals). They evaluated these measures for content, clarity, meaningfulness and ability to measure PWC. We also used item-total correlation and discrimination based on t-statistic to remove redundant items. We removed items with low item-total correlations (2 items: 0.28, n.s. and 0.21, n.s.) and nonsignificant t-statistic (same 2 items: 0.95, and 1.34, n.s.) between the ratings of the top 25th percentile and lowest 25th percentile respondents. Based on these results of the pilot test, we retained 18 items (see Table 1) to test our proposed theoretical model.

Dimensionality

We administered the scale to 162 undergraduate students at a major midwestern university (67% in the 19-24 age group and 57% male). To ensure that results were not idiosyncratic to student subjects, we replicated this study with 120 nonstudent subjects who visit the local library (25% in the 19-24 age-group and 75% in the 30-60 age-group; 75 males). Thus the total sample consisted of 282 subjects. We randomly assigned the subjects to one of the 48 web

sites¹ in a computer laboratory setting and instructed them to surf the web site for 15-20 minutes.

The overall reliability estimate for the 18 item PWC scale was robust (Cronbach coefficient alpha=0.81). We employed confirmatory factor analysis (Bagozzi, 1980) using EQS to assess the convergent, discriminant validity and the internal consistency of the items. We tested three alternative models (other than the null model) to confirm the multidimensionality of PWC (see Results in Table 2). The lack of fit of the one first order factor model confirms the multidimensionality of PWC and provides evidence of discriminant validity for measures of structural and interactive complexity. Similarly, the lack of fit of the two first order orthogonal factor model provides evidence of discriminant validity for measures of range, dissimilarity, probabilistic hyperlink outcomes and navigational ambiguity and suggests the need to create an aggregate factor.

We used a structural procedure (Law, Wong and Mobley, 1998) to test the linear aggregate model of PWC. The seven factor model consisting of four first order factors (range, dissimilarity, probabilistic hyperlink outcomes and navigational ambiguity), two second order factors (structural and interactive complexity) and an aggregate factor (perceived web site complexity) reflects the best fit. These results confirm our proposed theory based dimensionality of PWC.

Table 3 shows the standardized factor loadings of each measurement item and the standardized structural coefficients of each latent variable used to examine the convergent validity of the measures. The factor loadings of the 18 items range from 0.71 to 0.89, whereas the standardized structural coefficients of the latent factors range from 0.84 to 0.91. These results provide satisfactory levels of convergent validity (>0.70) for the proposed dimensions of PWC.

Nomological Validity

We illustrate the modeled relationships between web site complexity and two consumer outcomes: telepresence and attitudes. We measured telepresence using the 8-item scale developed by Kim and Biocca (1997). The reliability coefficient associated with this scale for our sample was 0.84. To measure the attitude toward the web site, participants evaluated the web site using three seven-point scales (good-bad, favorable-unfavorable, and like-dislike) (Coyle and Thorson, 2001). The reliability coefficient for this scale for our sample was 0.83. Since individual differences may confound perceived complexity (Wood, 1986), we collected information of relevant individual characteristics including age, education and gender. We calculated a composite measure of familiarity by averaging the z scores of the four measures: familiarity with the web site and product, years of internet experience and weekly use of internet. We used these measures as controls in the regression analyses.

¹To increase the generalizability of our results, we went through a series of steps to select a wide variety of websites that were different on several features. Initially, we selected 150 web sites which belonged to several product categories, both familiar (for example travel, entertainment, auction and news) and unfamiliar (for example computer hardware ingredients, office software and fertilizers). A cluster analysis that grouped the websites based on form, content and success measures yielded six clusters. We randomly chose eight websites from each cluster based on one guiding criteria: to include about the same number of websites from familiar (4) and unfamiliar (4) product categories.

TABLE 1
Measurement scales of Structural and Interactive Complexity

Construct	Perceived Web site Complexity Measures
	Likert Scale
Structural Complexity	<p>Range</p> <ol style="list-style-type: none"> 1. Length of text (Stevenson et al 2000) 2. Number of background colors (Stevenson et al 2000) 3. Number of images (Geissler et al 2001) 4. Number of animated images (Stevenson et al, 2000) 5. Number of hypertext links (free association) 6. Number of information items (free association) 7. Number of web pages (free association) <p>Dissimilarity</p> <ol style="list-style-type: none"> 8. Clarity between text and images (free task association) 9. Dissimilarity of images (free task association) 10. Dissimilarity of information items on the web pages (free task association) 11. Dissimilarity in the layout of the webpages (free task association) 12. Interrelationships between information across webpages (Daft and Lengel, 1986)
Interactive Complexity	<p>Navigational ambiguity</p> <ol style="list-style-type: none"> 1. Icons used to browse the web site are not meaningful (Steuer, 1992; McDougall, de Bruijn and Curry, 2000) 2. Hyperlinks presented does not allow individuals to form expectations (McDougall, de Bruijn and Curry, 2000) 3. Navigation is hindered by banner and pop up advertisements (free task association) <p>Probabilistic hyperlink outcomes</p> <ol style="list-style-type: none"> 4. Individual links take you to the desired pages (Palmer, 2002) 5. Individual links do not take you to the relevant web pages (Palmer, 2002) 6. Uncertainty between pieces of information presented on the website (Daft and Lengel, 1986)

Structural Complexity and Telepresence

Literature on stimulus complexity proposes an inverted-U relationship between perceived complexity of the stimulus and the pleasantness towards the stimulus (Berlyne, 1960). In an online environment, the nature of browsing experience is captured by the telepresence. Telepresence is defined as the mediated perception of the environment where the individual feels present (Kim and Biocca, 1997; Steuer, 1992). We propose that the configuration of structural elements (structural complexity) would have implications for the telepresence experienced by the individual. More specifically, based on the stimulus complexity research (1960); we propose an inverted-U relationship between perceived structural complexity and telepresence. According to Steuer (1992), representational richness of a mediated environment, characterized by the way in which the environment presents the formal features to the senses, influences the telepresence experienced in the environment. This suggests that the wide variety of design and information cues contributing to the structural complexity creates a representationally rich environment for the individual. The use of multiple forms of presentation (text, graphics, animation and videos) is likely to heighten the visual sensory depth of users by richly engaging their visual sense. In turn, this sensory depth immerses users in the web environment, heightening their sense of telepresence at the web site. On the other hand, simple web sites that employ one or a few presentation cues may lack representational richness and sensory appeal, leading to low levels of telepresence among individuals.

However, while an optimal level of structural complexity may engender a representationally rich environment, structural complexity is acceptable only to a certain extent because highly complex web sites may result in an excessive cognitive overload. The use of many diverse cues in presenting information can lead to sensory overload and impede information processing (Klein, 2003). Similarly, the cognitive load theory suggests that processing verbal and visual cues in a multimedia environment is cognitively demanding (Sweller, 1988). This cognitive and sensory overload resulting from high levels of structural complexity can inhibit the telepresence experienced by individuals at a web site (Lombard and Ditton, 1997; Steuer, 1992). This suggests that there exists a medium level of structural complexity where the individual can maximize their sense of telepresence at a web site.

H1a: There will be an inverted U relationship between structural complexity and telepresence at a web site.

Interactive Complexity and Telepresence

Schema researchers have shown that consumers perceive moderate levels of incongruity as “interesting and positively valued” (Mandler, 1982). Specifically, “the process of resolving incongruity tends to be rewarding” (Meyers-Levy, Louie, and Curren, 1994) as there is positive affect associated with assimilating incongruous new information into the existing schema. In an online context, high levels of telepresence experienced at the web

TABLE 2
Goodness-of-fit Indices for Alternative Models of PWC

Models	Chi-Square	Chi-square/df	CFI	NFI	RMSEA
1. Null	598.07	5.41	--	--	--
2. One First Order Factor	316.13	2.81	0.69	0.54	0.28
3. Two First Order Orthogonal Factors	249.04	2.73	0.74	0.71	0.19
4. Four First Order Factors, Two Second Order and the Aggregate Factor	141.83	1.57	0.92	0.87	0.05

TABLE 3
Standardized Parameter Estimates and R-squares for the seven factor model of PWC

Item	Factor Loading	R-Square
1. Structural Dissimilarity: Clarity between text and images	0.88	0.77
2. Structural Dissimilarity: Dissimilarity of images	0.83	0.69
3. Structural Dissimilarity: Dissimilarity of information items	0.79	0.62
4. Structural Dissimilarity: Dissimilarity in the layout of web pages	0.84	0.74
5. Structural Dissimilarity: Interrelationships between information across the web pages	0.71	0.50
6. Structural Range: Length of text	0.85	0.72
7. Structural Range: Number of background colors	0.89	0.79
8. Structural Range: Number of animated images	0.77	0.59
9. Structural Range: Number of images	0.78	0.61
10. Structural Range: Number of hypertext links	0.89	0.79
11. Structural Range: Number of information items at a web page	0.74	0.55
12. Structural Range: Number of web pages at a website	0.87	0.76
13. Interactive: Probabilistic hyperlink outcomes: Individual links take you to desired web pages	0.71	0.50
14. Interactive: Probabilistic hyperlink outcomes: Individual links do not take you to relevant web pages	0.86	0.74
15. Interactive: Probabilistic hyperlink outcomes: Uncertainty between pieces of information	0.79	0.62
16. Interactive: Navigational ambiguity: Icons used are not meaningful	0.82	0.67
17. Interactive: Navigational ambiguity: Navigation is hindered by banner and pop-up advertisements	0.74	0.55
18. Interactive: Navigational ambiguity: Hyperlinks do not allow one to form expectations	0.79	0.62

Statistics for latent variables

Item	Standardized Structural Coefficients	R-Square
1. Range	0.91	0.83
2. Dissimilarity	0.84	0.71
3. Probabilistic hyperlink outcomes	0.87	0.76
4. Navigational ambiguity	0.85	0.72

site captures the positive affect due to resolving complexity. We propose an inverted U relationship between interactive complexity and telepresence. In other words, the opportunity to resolve the complexity in case of an ambiguous link or probabilistic hyperlink outcome could be rewarding for the individual. For example, by clicking a hyperlink (Birthdays) at a Gymboree web page, individuals will expect information on details (for example costs, time, party details) about hosting a birthday at a Gymboree location. However, if instead the click takes the individual to a web page that lists the positive experiences of children and their parents (somewhat incongruous information) involved with birthday parties at Gymboree, it represents an (moderate) interactively complex situation. Individuals could have a rewarding experience by resolving this incongruity and assimilating it in their existing schema. However, extremely low levels of interactive complexity represented by congruous web pages are not noteworthy and do not prompt cognitive resolution.

While moderate interactive complexity provides a rewarding experience, very high interactive complexity characterized by unfulfilled expectations poses as a deterrent to the navigation. Coyle and Gould (2002) have shown that unfulfilled expectations impede consumers from following their trajectories toward a goal, leading to negative attitudes. This is consistent with the schema literature that proposes that unresolved ambiguity elicits more negative affect than congruous situations (Meyers-Levy and Tybout, 1989). In other words, in extreme interactive complexity scenarios, since the incongruity remains unresolved, it could lead to negative effects on telepresence at the web site.

H1b: There will be an inverted U relationship between interactive complexity and telepresence at a web site.

Complexity, Telepresence and Attitude

While, prior studies (Stevenson et al, 2000; Geissler et al, 2000) have examined a direct relationship between perceived complexity and user attitudes, we propose that telepresence mediates the effects of both structural and interactive complexity on attitude towards the web site. Researchers have distinguished web sites from other static media as they provide a real and direct experience to the individual (Hoffman and Novak, 1996). This experience captured by the telepresence leads to attitudinal and behavioral outcomes at a web site (Coyle and Thorson, 2001; Klein, 2001). In other words, if complexity induces a high telepresence, it would lead to more favorable attitudes and vice versa. We therefore hypothesize that telepresence will mediate the relationship between complexity and attitude towards the web site in case of both structural and interactive complexity.

H2a: Telepresence mediates the effects of structural complexity on attitudes

H2b: Telepresence mediates the effects of interactive complexity on attitudes

Nomological Validity Results

We tested the nomological validity of PWC using the mediator regression procedure. We used three separate equations to test the mediating role of telepresence in the relationship between perceived complexity and user attitude as shown in Table 4. In the first equation, we entered the control variables, followed by structural and interactive complexity and finally, we entered structural and interactive complexity square terms. In the first equation, the significant negative structural ($p < 0.01$) and interactive complexity ($p < 0.01$) square terms point to an inverted-U relationship between the two facets of complexity and attitude. In the second equation, we tested the curvilinear effects of structural and interactive com-

plexity on telepresence. As shown in Table 4, the structural ($p < 0.01$) and interactive ($p < 0.01$) complexity square terms are negative and significant. These results lend support to H1a and H1b that propose a curvilinear relationship between facets of PWC and telepresence. In the final equation, we entered the control variables first, followed by telepresence and finally we entered the independent variables (structural and interactive complexity and their squared terms). Once we enter telepresence, the effect of structural and interactive complexity on attitudes becomes significant, confirming that telepresence mediates the effects of structural and interactive complexity on user attitudes. These results support H2a and H2b.

DISCUSSION

To promote research on complexity in an online environment, we developed the PWC scale that captures multiple facets of complexity. Our results suggest that two dimensions capture the PWC construct. Moreover PWC has an inverted-U relationship with telepresence. Finally, telepresence mediates the relationship between PWC and user attitudes. In what follows, we discuss the theoretical and managerial implications.

There are four major research implications to our study. First, it suggests that PWC is a multidimensional construct that comprises structural and interactive facets of a web site. This result is especially notable since extant studies have defined complexity in an online environment mainly in terms of the structural elements of a web site (Bruner and Kumar, 2000; Stevenson et al, 2000). Future studies examining complexity in an online environment should consider both the structural and interactive facets.

Second, we propose that two opposing mechanisms underlie the relationship between structural complexity and telepresence. On the one hand, structural complexity provides a representationally rich environment that engages individuals and increases their telepresence experience at the web site. On the other hand, structural complexity inhibits telepresence experience of consumers because processing a wide range of dissimilar information cues may result in cognitive overload. In our study, the interplay of these two opposing mechanisms resulted in an inverted-U relationship between structural complexity and telepresence. An important area for future research is identifying moderating variables that determine which mechanism (representational richness or cognitive overload) gains prominence. A potential moderator may be the nature of online task—searching and browsing (Hoffman and Novak, 1996; Schlosser, 2003). Searchers and browsers differ significantly in terms of the level of cognitive effort they expend in information processing as well as the level of challenge they seek in the process of navigation (Hoffman and Novak, 1996). Searchers place more effort on reaching the goals and devote less cognitive effort to undirected exploration; whereas browsers focus on learning and exploration; seeking higher levels of challenge (Schlosser, 2003). Thus, it is likely that the relationship between structural complexity and telepresence may be different for searchers and browsers.

Third, we found a similar inverted U relationship between interactive complexity and telepresence. This result can be explained by the schema incongruity theory (Mandler, 1982). High interactive complexity leads to unfulfilled expectations that deter the telepresence experience of consumers. However, in moderate interactive complexity, individuals appreciate the opportunity to resolve the incongruity, resulting in higher telepresence experience. An interesting extension of our study would be to investigate the coping mechanisms used by consumers to resolve moderate interactive complexity. For example, since searchers and browsers have different goals and orientations, it is possible that they use different ways of resolving interactive complexity.

TABLE 4
Regression results of PWC, telepresence and attitude

	(n=282)					
Model 1: Complexity → Attitude	B	SE B	β	ΔR ²	Adj. R ²	F
Dependent Variable: <i>Attitude</i>						
Step 1: Initial likeness of the web site	1.45	1.18	0.12			
Age	1.05	0.99	0.09			
Level of education	0.23	0.27	0.04			
Gender ¹	0.58	0.69	0.04			
Familiarity	0.18	0.01	0.28*	0.09		
Step 2: Structural complexity	0.52	0.11	0.25*			
Interactive complexity	0.07	0.01	0.21	0.11*		
Step 3: Structural complexity square	-0.03	0.00	-0.31**			
Interactive complexity square	-0.01	0.00	-0.34**	0.14***	0.28	4.29**
Model 2 Complexity → Telepresence	B	SE B	β	ΔR ²	Adj. R ²	F
Dependent Variable: <i>Telepresence</i>						
Step 1: Initial likeness of the web site	0.98	1.05	0.08			
Age	0.74	0.63	0.11			
Level of education	0.18	0.22	0.03			
Gender ¹	0.11	0.07	0.09			
Familiarity	0.21	0.03	0.31**	0.12*		
Step 2: Structural complexity	0.23	0.01	0.27*			
Interactive complexity	0.02	0.00	0.22	0.09*		
Step 3: Structural complexity square	-0.05	0.00	-0.39***			
Interactive complexity square	-0.03	0.00	-0.35***	0.11***	0.27	4.95**
Model 3: Complexity → Telepresence → Attitude	B	SE B	β	ΔR ²	Adj. R ²	F
Dependent Variable: <i>Attitude</i>						
Step 1: Initial likeness of the website	0.73	0.65	0.13			
Age	0.28	0.24	0.09			
Level of education	0.09	0.13	0.03			
Gender	0.06	0.05	0.07			
Familiarity	0.04	0.00	0.21	0.03		
Step 2: Telepresence	0.03	0.00	0.37***	0.15***		
Step 3: Structural complexity	0.12	0.05	0.22			
Interactive complexity	0.97	0.64	0.15	0.07		
Step 4: Structural complexity square	-0.07	0.04	-0.12			
Interactive complexity square	-0.11	0.06	-0.17	0.04	0.33	3.86**

¹Gender was represented by a dummy variable: female=0 and male=1

*p<0.05 **p<0.01 ***p<0.001

Finally, researchers can use the PWC scale to evaluate web sites they are constructing as experimental stimuli or for developing and assessing theory in relation to web site categorization and comparability. In this regard, future research should be done applying the PWC's structural and interactive components of web site complexity in conjunction with considerations of cognitive load, richness and navigation. From a managerial perspective, the multi-dimensional nature of the scale, PWC can help marketers to identify specific sources of complexity — is complexity occurring due to the multitude of structural features, the dissimilarity between the features, ambiguous hyperlink or the probabilistic navigation outcomes?

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Changing Banner Ad Executions on the Web: Impact on Clickthroughs and Communication Outcomes

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ABSTRACT

Online advertisers change banner ad executions to overcome negative returns from repetition, improve clickrates and communication outcomes. We investigate the effect of banner ad repetition level, same and varying banner ad executions and consumer navigation orientation on behavioral response (clickrate) and memory-based outcomes (unaided recall, aided recall and recognition). We found that number of clickthroughs, aided recall and recognition scores were higher when subjects were experientially oriented. There is no significant effect of banner ad executions or repetition level on clickthroughs and unaided recall. Recognition is higher under high repetition and same ads in goal-directed condition and varying executions in experiential orientation.

Advertising as a business model has dominated the commercial growth of the Internet. The ability of the medium to track and record advertising served to consumers and low relative costs promises advertisers greater accountability and economy in targeting their markets. Despite declining clickthrough rates and predictions of the “death of the banner ad”, the banner ad as an advertising unit has stood the test of time and has always accounted for the largest portion of all ads served, 58% as of Q3 2003 (DoubleClick Ad Serving Trends 2003). Many blame the declining clickrate of banner ads to their ubiquity, small size and high repetition—making consumers immune to noticing, much less clicking on them. Based on prior research in TV and print, changing banner ad creative executions may be a solution however little is known if the same effects hold true on the Web.

Metrics used to capture the effectiveness of banner advertisements have been debated since the early stages of Internet commerce. Since it is relatively easy and inexpensive to track consumer browsing behavior during website visits, the focus has been on measuring behavioral outcomes like “clickthroughs” rather than affective or cognitive communication outcomes. A clickthrough indicates that the web surfer has seen the banner ad and clicks through to the advertiser’s URL via the banner. Websites hosting on-line ads favor traditional “exposure” based metrics, such as “impressions or pageviews” served, to allow them to charge for each banner exposure. However, advertisers’ desire for accountability in performance and challenges posed in accurately measuring whether the banner ad was actually noticed during an “impression” (as we discuss in the next sections) has led to insistence on click-based pricing (CPC) which accounts for 28% of online advertising revenues (DoubleClick.com 2003).

While an interactive measure like clickthrough, allows for exact response quantification, it may not be suitable for all types of advertising, particularly those focused on achieving memory rather than instantaneous response. Several researchers suggest that repeating banner ads has a positive impact on brand awareness and recognition (Briggs and Hollis 1997) even without clickthrough. However memory-based communication measures like recall and recognition are difficult to measure on an ongoing basis, and there is a need to understand the relationship between impressions, clickthroughs and communication outcomes. In this research we study the impact of repeated ad exposures with same executions and varying executions on behavioral clickthrough response as well as memory-based outcomes—recall and recognition.

CONSUMER INTERACTION WITH BANNER ADS ON THE WEB

A banner advertisement is a section of on-line advertising space that typically consists of a combination of graphic and textual content and contains an internal link to target ad pages (the advertiser’s information on the host site) or an external link to the advertiser’s website via a clickthrough URL. Click rates have declined from 2.4% in 1994 (Williamson 1996), when the Web first gained acceptance as a mainstream medium, to an average of 0.54 in 2003 with a range between 0.61%–0.76% based on size (DoubleClick Ad Serving Trends 2003). However banner ads remain the dominant ad unit online and accounted for 58% of the \$4.9 billion online advertising revenues. The number of banner ad impressions delivered per day has consistently increased from 440 in 1999 to 950 in 2003 (DoubleClick.com 2003).

Several researchers have investigated how consumers process banner advertising on web pages. Chatterjee (2001) proposes a model of processing of banner ads which proceeds through a hierarchy of stages of preattention, attention, click decision and finally comprehension and elaboration of advertising message in the advertiser’s target ad page. Consumers visit websites to process content on web pages, hence attending to, clicking on and processing information in banner ads represents a secondary task. Exposure to banner ads is typically incidental, in that they individually occupy a very small portion of the web page (10% of visual field) and have to compete for consumer’s attention with content on the web page and in most cases, with other ads. Banner ads typically have very little information, hence exposure without clickthrough can (at best) generate lower order communication outcomes.

Several studies in the academic and commercial sector report that most banner ads remain unnoticed by consumers (Benway 1998, Dreze and Husherr 2003). Usability experts studying eye-fixation patterns on web pages contend that eyes have been subconsciously trained to avoid areas of web pages where banner ads are typically placed, hence the term “banner blindness” to refer to non-perception of banner ads. This explains why clickthrough rates are low; consumers have to notice the banner ad in order to click on it but generally avoid looking at banner ads if they are preoccupied with specific tasks during their online activities.

Online advertisers have addressed banner blindness by developing more intrusive ad execution technologies to ensure that ads get noticed. Numerous studies show that colors, design and positioning of the banners did not have a significant effect on recognition. Creative executions of banner ads using animations, audio and video-enhanced, search capability enhanced, rich media, pop-ups, pop-unders, crawling banners may be more intrusive and effective in forcing immediate attention but they are also annoying and intimidating to users. Such technological solutions can collectively lead to more resistance to web advertising. Given the characteristics of the medium, Web users bombarded by numerous ads on the Web can adapt their navigation behavior to counter these technologies. When their novelty fades even the short-run benefits may disappear.

Banners ads need to be repeatedly exposed to consumers to have a chance to be noticed, attended and clicked on. This can lead to positive communication outcomes even in the absence of

clickthrough (Briggs and Hollis 1997), however we do not know if the communication outcomes accrue at lower or higher levels of exposure. Further, in comparison to the print and TV media, repetitions of banner ads are typically more numerous on ad-supported web-sites because of low CPMs (typically between \$25-\$40) and lower marginal cost of creating additional advertising space online. Industry experts coined a phenomenon “banner burn-out,” suggesting that advertising effectiveness in terms of banner click through rate reaches maximum point at the first exposure. On the Web consumers control the rate at which information is presented, hence there is sufficient opportunity for the consumer to process the ad and information at the first exposure itself. At a disaggregate level, the click through rate after the first exposure, tends to decline rapidly and reaches less than 0.05 percent at the fourth exposure (Chatterjee, Hoffman and Novak 2003). Thus, repetition of banner ads can lead to negative returns a lot earlier than in traditional media. The marginal impact of banner ad repetition on clickthroughs declines with each exposure (Chatterjee, Hoffman and Novak 2003) within a session however little is known about the impact on communication outcomes.

Displaying different versions of banner ads is an alternative used by practitioners to forestall the negative impact of repetition and increase effectiveness of banner ads without irritating consumers. Prior research in marketing and advertising in print and TV media have generally shown that ad variation can reduce the tedium effects caused by multiple exposures to the same ad and thereby maintain advertising effectiveness (Schumann & Clemons, 1989; Schumann, Petty, & Clemons, 1990; Burnkrant & Unnava, 1987). However, there is an important difference: TV ads are more likely to be consciously processed than banner ads on webpages. A TV ad completely occupies the TV screen when aired and is difficult to avoid without zapping to another TV channel. In contrast, banner ads can be easily overlooked hence not consciously processed. Hence there is a need to examine if ad variation can be effective in increasing banner advertising effectiveness. At most popular websites graphical executions of ads vary greatly, often rotated multiple times while the consumer is on the same page. It is a lot cheaper and faster to create multiple execution of web ads (costs range from \$0 to \$350) than print or TV ads. Since banner ads are in general ignored we do not know if changing banner ad executions will improve or be detrimental to communication outcomes and clickthroughs. This research aims to compare the effect of exposures to same and varied banner ad executions in natural Web browsing environments on behavioral (clickthrough) and memory-based (awareness, recognition, and recall) measures.

HYPOTHESES

Existing studies of effectiveness of banner ads at an aggregate level indicate that the after 3 exposures consumers are not likely to click at all (DoubleClick 1996). If most exposure to banner ads on the Web is incidental, does tedium set in after only 3 exposures? To avert wearout of banner ads due to repetition, ad networks display different creative executions of banner ads at each exposure. Further, a particular variation of the banner ad may be more effective than others and there will be increased opportunities to notice and click. If however most exposure of banner ads is incidental, are practitioners wrong in using varied executions of banner ads, sometimes several within the same session lasting under a minute? Can effects observed in traditional media derived for cognitive measures hold true for behavior-based measure like clickthrough? Is this misuse of the capabilities of the medium and detrimental to processing outcomes of banner ads? We seek to answer these questions in this section.

Effect of Navigation Orientation:

The hypertext nature of the Web provides users with unprecedented freedom to choose content, time, and speed of information exposure at their own will. Consumer involvement with the navigation task to achieve certain goals entails a clear distinction between goal-directed and experiential or exploratory web browsing that could affect processing of ad stimuli. If a consumer’s navigation through website is goal-directed toward a particular task, for example searching for a particular piece of information, attention is singularly focussed towards achieving extrinsic goals (Janiszewski 1998) and this will reduce the attention paid to peripheral stimuli like banner ads. Literature on preattentive processing suggests that when a person focuses his/her attention on a primary task, ad stimuli are placed outside of consumer focal attention area can still be processed unconsciously. Under these conditions automatic unconscious learning process which operates parallel with the main task will dominate and familiarity based inference process will determine communication outcomes. Please note that if banner ads are contextually placed (e.g. Overture Site Match service at Yahoo) processing of banner ad information may become the primary goal at least temporarily. Involvement with the brand or product category will lead to clicks (Cho and Leckenby 1999) and higher processing outcomes irrespective of navigation orientation. We leave this as a topic to be investigated for future research.

In contrast, experiential or exploratory orientation (i.e., surfing) represents engagement in the activity for intrinsic pleasure of the activity itself, without any extrinsic goals driving the browsing activity. When consumers are in exploratory browsing mode, they are more likely to process peripheral ad stimuli. There is greater opportunity to notice, attend and click on banner ads if the consumer is motivated. Danaher and Mullarkey (2003) found that recognition and recall scores are higher when consumers are experientially browsing rather than goal-directed. This could explain why search engines like Infoseek and WebCrawler have lower clickthrough rates (1.1% and 0.7%, resp.) than content providers like HotWired (2.8% Williamson, 1996).

Noticing and attending to a banner ad is a necessary but not sufficient condition for clickthrough to occur. Clicking banners is a voluntary and conscious decision by the consumer to see more detailed information provided by advertiser and requires willingness to deviate, and in some cases, abandon one’s original goal (by leaving the website to go the advertiser’s site) for visiting the website. Since achieving one’s goal is more important in goal-directed mode than in exploratory mode and clicking on banner ad represents a diversion from that goal, we can hypothesize

H1: Consumers are more likely to click in sessions when they are exploratory in their browsing behavior compared to sessions when they are goal-oriented.

We know from countless media reports that clickthroughs are rare events, hence it is possible that clickthrough rates will remain steady across all conditions primarily due to ceiling effects.

Effect of Repetition Level of Banner Ad Exposures

Repeated ad exposures are used to increase the likelihood that a brand name is remembered (Unnava and Burnkrant 1991) and strengthen the association between the brand name and the advertised product benefit in memory (Burke and Srull 1998). Prior literature on repetition effects in traditional media suggests a non-monotonic relationship between message repetition and message effectiveness (cf. Cacioppo and Petty 1979) however attempts to specify the nature of relationship has not been consistent (Nordheim

2002). Similar explanations of Berlyne's (1970) two factor theory inverted-U curve function of repetition were proposed by Cacioppo and Petty's (1979) dual processing model of attitudes and by Pechmann and Stewart's (1988) two-stage learning model. Pechmann and Stewart (1988) explain the inverted-U curve response of advertising in terms of "wearin" and "wearout." These effects will hold in online advertising environments if consumers have the opportunity to process banner ads or "wearin" at initial exposures, more likely to occur when consumers are surfing. Peripheral stimuli can compete for attention in exploratory behavior since attention is not so singularly focused (Janiszewski 1998) and consumers have sufficient opportunity and motivation to notice and attend to the banner ad at initial exposures. The declining marginal impact of exposure on affect will occur earlier than in goal-directed condition since banner ads as stimuli are relatively simpler, and exposure is self paced. Subsequent exposures to the same ad "wearout", are unnecessary, as there is nothing new (information) for the consumer to process.

Exceptions to the inverted U-shaped relationship have been reported when presumably respondents have little or no motivation or opportunity to elaborate on the stimuli being presented, similar to conditions of goal-directed browsing and incidental exposure to banner ads. In fact, no downturn in affective responses has been observed when respondents' opportunity to process stimuli consciously is constrained (Bornstein and D'Agostino 1992). The mere exposure effect (Zajonc 1968) suggests that a mere increase in exposure to stimuli would increase positive affect toward those stimuli. Under goal-directed conditions, the perceptual fluency/misattribution model posits that repeated exposure to a stimulus will create a feature-based representation of a stimulus (i.e., feature analysis) in memory that will facilitate encoding (perceptual fluency) and processing of the stimulus when viewed at a later time (Nordheim 2002). Unconscious processes drive effects of incidental ad exposure, hence response biases caused by exposure are beyond consumers' volitional control. Thus, even though consumers can avoid looking at banner ads, they cannot avoid being influenced by them subconsciously! Hence,

H2: Clickthroughs, unaided, aided recall and recognition scores will be higher (lower) under high ad repetition condition compared to low repetition condition in goal-directed (exploratory) navigation.

Effect of Varying Banner Ad Exposures

Past research on ad variation has demonstrated that varied ad executions (even slight) can enhance memory and liking for brand name over repeated same-ad executions (Mitchell & Olson, 1981; Schumann & Clemons, 1989; Schumann, Petty, & Clemons, 1990; Unnava & Burnkrant, 1991). Encoding variability effects and differential attention contribute independently to better memorability of varying ad executions. The encoding variability research (e.g., Melton 1967, Madigan 1969) indicates that when the time lag between exposures is short (as in the case of multiple banner ad exposures during a session), pairing a stimulus with two different cues is more effective (i.e., results in more learning) than exposing people to the same stimulus-cue combination twice. Under exploratory browsing conditions, consumers are more likely to allocate cognitive resources to attend to ad content. Hence we would expect more learning to take place when different banner ad executions are used than when the same ad is repeated. Each succeeding repetition of the same stimulus strengthens an existing memory trace by a smaller amount. However, when different cues are paired with the same stimulus, each cue results in a different memory trace. Variation in executions would be more likely to lead to varied

semantic encodings of the repeated information than the straight repetition of the same ad, generating multiple pathways to access same information from memory and improving communication outcomes.

Under goal-oriented browsing conditions, a large part of a consumer's processing of banners may be at the pre-attentive level. If ad executions change at every exposure to the banner ad several memory traces corresponding to each of the varied executions will occur, each of which will be weak to be retrieved from memory. The fundamental premise of the perceptual fluency model is that repeated exposure to a stimulus will result in a representation of the stimulus in memory which will be misattributed to familiarity with the stimulus thus leading to increases in recognition scores. Hence, a certain amount of repetition is a necessary condition for the unconsciously processed advertisements to have familiarity effects, which may not be the case if ad executions are varied on each exposure. Hence we propose an interaction between ad variation (same vs. varying) and consumer navigational goals (exploratory vs. goal-directed).

H3: Under goal-directed (exploratory) navigation, clickthroughs, unaided/aided recall and recognition scores will be higher (lower) for same banner ad executions than for varying executions.

EXPERIMENT

Design: The effects of repeated same and varying ad executions on clickthroughs and communication outcomes were tested using an experimental website developed by the career services department, represent a relevant context for our student sample. The career services department would place banner ads for 8 sponsors on content pages at the site. We developed fictitious brand names and banner ads to replace these sponsor names (all well known brand names) while retaining the product category of the sponsor. Since prior familiarity with the advertised brands could potentially confound our results (Dahlen 2001), we wanted to ascertain that subjects had no prior familiarity with the advertised brands or the website. Questionnaires administered at the beginning of the experiment (to measure experience and use of the World Wide Web and demographic information) and at the end of the experiment to collect dependent measures were integrated into the website so information could be collected electronically.

We used a 3x2x2 full factorial design. Ad exposure conditions were multiple exposures to same ad execution 1 (AE1) versus multiple exposures to same ad execution 2 (AE2) versus multiple exposures to varying ad executions 1 and 2 consecutively (AV). The two navigation orientations were goal-oriented navigation versus exploratory navigation. Level of banner ad exposure were low-4 exposures and high-15 exposures for the chosen sponsor. Approximately half of the students in each of the three ad exposure groups were in the goal-directed and the others in exploratory navigation orientation.

Subjects. Three hundred and two subjects from undergraduate introductory marketing classes participated for course credit and were randomly assigned to the treatment conditions.

Stimuli: The stimulus materials (developed with help from the career services department) consisted of four versions of the target banner ad for one of the sponsors—we named "Reliable Rental Car Agency". All banner ads in the study were 468x60 pixels, had the words "click here" on the lower right corner, and an image of a car with the words "Reliable Rentals, www.reliablerentals.com" on the right end. The copy consisted of two sentences in light yellow 16 pt font, a headline "Affordable weekend and weekly car rentals" followed by "Pick up and drop off free" flashing on a light green

(AE1) background. In version AE2 the first headline was flashed first then disappeared followed by the next one on a blue background.

Only one banner ad was displayed when a page was accessed (no rotation through banner ads) and the banner ads were dynamically placed on the top of 81 out of a total of 93 pages at the site with cache expiration activated. Banner ads were not placed on the target ad pages (i.e., pages with advertising information displayed when a banner ad is clicked). The content on the eight advertiser pages were modified so that fictitious brand names, URLs and claims/taglines were now displayed.

Subjects in the same ad execution conditions AE1 and AE2 were exposed to the same version of the ad on every fourth (high exposure condition) or tenth page (low exposure condition) accessed at the site while maintaining the total number of banner ad exposures during the session to 4 or 15 based on the condition. Subjects in the ad variation condition (AV) were exposed to a different version of the ad on every fourth or tenth page. The order of exposure to the different executions was counterbalanced across subjects. Exposures were deliberately spaced consistent with other encoding variability studies. On the other pages they were exposed to banner ads for the other seven sponsors—an insurance company, credit card company, pharmaceutical company, etc. now with fictitious brand names. Ads for several of these were repeated with same or varied executions served to minimize any contrast effects that could emerge if only the target ad were repeated. The presentation of several different ads also served to minimize the possibility of ceiling effects in the target ad clickthrough, recognition and recall.

Procedure: Subjects were invited to the computer lab under the pretext that a new career services department wanted to make students aware of their department and their website to be launched shortly. The website comprising the experiment was loaded locally and clickstream from each computer was uniquely collected. There were approximately twenty five students in each session, who were all given the same instructions for their task, goal-oriented on one session followed by experiential mode on the next session. Subjects in the goal-directed condition were asked to note information on counselors, internship and job listings that could be directly relevant to their qualifications and interests in order to answer a quiz and evaluate the website in an online questionnaire at the end of the session. Subjects in the experiential browsing mode were not given these instructions, but merely asked to browse through the site. Students were allowed to browse as they chose, for 30 minutes. They were not allowed to leave the test site or type in external URLs since access to the Internet was restricted. Care was taken to see that all hyperlinks to external sites were removed. If a banner ad was clicked, the advertisers' page(s) had detailed information and active email hyperlinks but hyperlinks to their (external) sites were removed. This was done to ensure replication of a natural web browsing environment. At the end of the session a web-based survey popped up to collect dependent measures, their browsing experience and their purpose for browsing. They were also quizzed (ten true/false questions) on the content provided at the site by the career services department and asked to provide suggestions and opinions about the test site. Participants were debriefed and thanked before leaving the room.

Dependent Variables. Clickthroughs on banner ads were automatically tracked by the server and made available to us. Memory-based outcomes were measured for each subject by means of an unaided recall, aided recall and followed by a recognition measure. These dependent measures were operationalized by considering each banner advertisement to have three elements: a brand

name or two benefit claims or a website address (or Uniform Resource Locator) and a score of 0.25 for each element recollected or recognized. In the unaided recall measure, subjects were asked to list information on the banner ads they remember seeing. In the aided recall measure, similar information was collected by providing subjects with category information. We also measured subjects' recognition memory by using sequential two-alternatives forced choice tests of brand name, claim information and URL in the banner ad.

Manipulation Checks. A pretest was conducted to see whether the two versions of banner ads differed in attracting clickthroughs and recallability. The difference in clickthrough on AE2 vs. AE1 was insignificant. To test the goal-oriented versus experiential orientation we used responses to a battery of questions (adapted from Novak, Hoffman and Duhachek 2002) provided by subjects in the pop-up survey at the end of the experiment. Responses where subjects provided a distinct purpose for browsing through the website included—"wanted to find marketing/advertising internships" were reflective of goal-oriented navigation. Subjects with responses indicating that they were "surfing," browsing or "clicking around" with no particular purpose were reflective of experiential or ritualistic orientation. The difference between the number of goal- and experiential oriented statements was significant across the navigation conditions ($p < 0.01$). Further subjects in the goal-oriented condition scored significantly higher ($p < 0.001$) compared to those in the experiential-oriented condition on the content quiz, 6.9 (s.d.=2.9) vs. 3.7 (s.d.=1.2).

RESULTS AND DISCUSSION

Preliminary analyses indicated 11% of subjects clicked on at least one banner ad during their session. Mean recognition scores (0.612, s.d. 0.21) were significantly higher than unaided recall (0.397, s.d. 0.29) and aided recall scores (0.24, s.d. 0.21). Ad claims were remembered and recall more than URL or brand name. A three-way multivariate analysis of variance (MANOVA) was conducted to determine the effect of navigation orientation, level of exposure and ad execution on repeated exposures on the dependent variables, unaided recall, aided recall and recognition. Since our memory-based dependent variables are correlated we use MANOVA instead of several univariate ANOVAs to test our other hypotheses to avoid inflating Type I error. Detailed MANOVA results are available from the authors. We only report on significant effects in Table 1. There were significant multivariate main effects for navigation condition (Wilks' Lambda=0.835 $F(3,288)=18.725$) and repetition level (Wilks' Lambda=0.967, $F(3,288)=3.259$) both $p < 0.01$, but not for ad variation. These main effects need to be viewed with caution since several two-way interaction effects were found.

Effect of Navigation Orientation: We found that subjects in exploratory browsing condition clicked more banners than those in goal-directed condition, $F(1,290)=4.395$ ($p < 0.01$). There was a significant univariate main effect of navigation orientation and H1 was supported. We found equivalent results using logistic regression for clickthrough. Analyses of variances (ANOVA) on each dependent variable conducted as follow-up tests to the MANOVA indicated that navigation orientation had a significant effect on unaided recall ($F(1,290)=2.721$), aided recall ($F(1,290)=4.101$) and recognition ($F(1,290)=4.613$) for the target ad, all p values < 0.01 . Recall and recognition scores were significantly higher in exploratory compared to goal-directed conditions.

Effect of Repetition Level: The ANOVA on aided recall ($F(1,290)=6.968$) and recognition ($F(1,290)=6.753$) due to banner ad repetition level was significant, both $p < 0.01$; however the effect

TABLE 1
Multivariate and Univariate MANOVA Results (all significant at $p < 0.01$)

Source	Multivariate F (df)	Univariate F
<i>Main effects</i>		
Navigation Orientation	18.725 (3, 288)	
Clickthrough		4.395 (1,290)
Unaided recall		2.721 (1,290)
Aided recall		4.101 (1,290)
Recognition		4.613 (1,290)
Repetition	3.25 (3, 288)	
Aided recall		6.968 (1,290)
Recognition		6.753 (1,290)
Ad Variation	0.528 (6, 576)*	
<i>Interactions</i>		
Navigation Orientation X Repetition	7.426 (3, 288)	
Unaided recall		2.707 (1,290)
Aided recall		5.12 (1,290)
Navigation Orientation X Ad Variation	3.427 (6, 576)	
Recognition		3.959 (2,290)

*not significant at $p < 0.1$

on unaided recall and clickthrough was insignificant at $p < 0.1$. We found a significant 2-way multivariate interaction effect of repetition and navigation orientation, $F(3,288)=7.426$, $p < 0.01$, thus supporting H2. Follow-up univariate ANOVA shows that the interaction effect is significant for the unaided ($F(1,290)=2.707$) and aided ($F(1,290)=5.12$), recall scores only, both $p < 0.01$ (see Figs. 1 and 2). In exploratory orientation, mean unaided recall scores were not significantly different for low and high repetition (0.29 vs. 0.36), however the difference was significant as we expected for the goal-directed condition (0.18 vs. 0.39), $p < 0.001$. Mean aided recall scores were significantly higher for low vs. high repetition (0.51 vs. 0.38) for exploratory orientation, and significantly higher for high repetition (0.45) vs. low repetition (0.29) in goal-directed condition, $p < 0.001$, as we hypothesized.

Effect of Ad Variation: The main effect of ad execution on clickthroughs or communication measures was not significant, Wilks' Lambda=0.989, $F(6,576)=0.528$, $p > 0.78$. However the navigation orientation and ad execution interaction was significant, Wilks' Lambda=0.932, $F(6,576)=3.427$, $p < 0.01$. The navigation orientation and ad execution interaction on recognition was significant $F(2, 290)=3.959$, $p < 0.01$. Pairwise contrasts indicate that in exploratory browsing mean recognition scores in the varying execution (0.74) are significantly higher than those in same ad (0.43) thus providing partial support for Hypothesis 3, $p < 0.001$. Under goal-oriented browsing, mean recognition scores in the same ad execution (0.53) were significantly higher than in varying ad execution (0.31) $p < 0.01$.

We hypothesize similar effects for all of our dependent variables, hence explanations for the inconsistent results are in order. The insignificant effect of repetition and ad variation on a clickthrough may be a result of ceiling effects and it requires a conscious decision by the subject to deviate from his (default) task. Cognitive learning measures recall and recognition are two types of information retrieval mechanisms from memory and requires conscious awareness of information stored in memory. In unaided recall, the information has to be reproduced from memory with no cues, hence ease of retrieval depends on the organization of information at encoding. Since most subjects in goal-directed mode are more likely to be preoccupied with navigation activities while being exposed to banner ads, subject are not likely to organize the information during exposure and encoding. They have to search for the information individually in memory (thus accounting for lower recall scores) hence more difficult to achieve than aided recall or recognition. Aided recall is assisted by the provision of retrieval cues that enable the subject to quickly access the information in memory, hence more easily achieved compared to unaided recall in H2. However under ad variation, memory traces of ad information were possibly not strong enough to be retrievable during a direct search of memory without or with cues, hence no significant impact on either recall scores (H3). In recognition, the presentation of the information provides the knowledge that the information has been seen before, and only requires a familiarity judgement. Recognition is of lesser complexity, as the information is provided as a cue, achieving significance in all our hypotheses. Hence recall scores

FIGURE 1
Unaided Recall: Repetition Level x Navigation Orientation

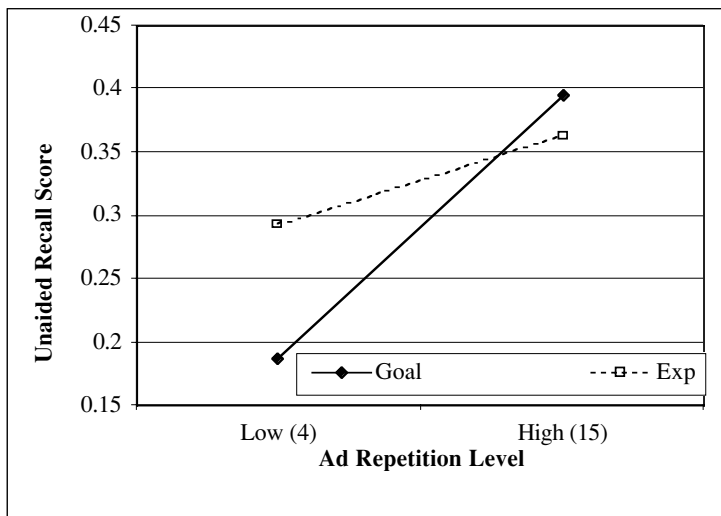
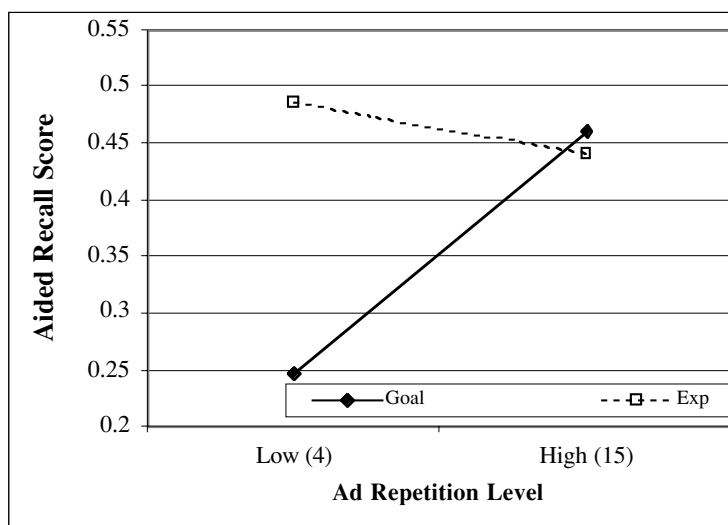


FIGURE 2
Aided Recall: Repetition Level x Navigation Orientation



are more appropriate for high involvement ad processing, while recognition can be achieving even for low involvement ad processing (Singh and Rothschild 1983).

IMPLICATIONS

Most existing research on web advertising has dealt with impact of banner ad features, repetition level and exposure duration on either clickthrough or communication outcomes. In this study we examined both components of a consumer’s response to advertising, clickthrough and communication outcomes. We demonstrated that the effects of level of ad exposure and ad execution on clickthroughs, recall and recognition measures differ based on navigation orientation of the consumer. Our results support the contention that banner ads on websites that encourage exploratory browsing (e.g. portals) are more likely to be clicked upon and remembered than websites where consumers are goal-directed. While

repetition levels or ad executions do not have any significant impact on clickthroughs, the gains from repetition on communication outcomes are higher when consumers are goal-directed than experientially oriented. The gains in memory-based communication outcomes from changing ad executions accrue when consumers are exploratory-oriented. In fact, changing ad executions appears to be detrimental to communication when consumers are goal-directed under high and low levels of ad exposure.

We find that the browsing orientation of consumer determines the likelihood of a clickthrough occurring in a session, a variable outside the control of the advertiser. Neither the repetition schedule nor execution changes have any impact on clickrate. This could be particularly worrisome for advertisers whose sole purpose for placing banner ads is to invite action, e.g. banner ads for surveys, entering sweepstakes, or requesting quotes. Sites that encourage goal-oriented browsing seem particularly disadvantageous in sell-

ing their banner ad space. Google.com's practice of presenting advertising messages in the form of text hyperlinks alongside relevant search results thus making them visually similar and more difficult for consumers to avoid can be appreciated. Investigating the effect of repetition of text-based ads and substantive (content) variations in banner ads (instead of cosmetic changes in this research) on clickthrough and communication outcomes is an important topic for future research. As post-impression tracking mechanisms online gain widespread acceptance, repetition effects of banner ads on post-impressions (visit to a website, after exposure to banner ad, *without* clicking on it, but tracked by a cookie) will provide higher accountability for memory-based measures.

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Reciprocity with Video File Sharing: Experimental Evidence

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ABSTRACT

We report on the findings of a controlled experiment on consumer reciprocity. The experiment resembled a purchasing situation in an online video on demand (VOD) system. All payments and video purchases had real consequences. We find that in a situation without monetary incentives, individuals largely differ in the percentage of videos shared with the other participants. Differences in this reciprocal behavior between individuals are related to a second measurement, proposals in a dual-role ultimatum bargaining game. Implications are discussed.

INTRODUCTION

A growing number of communities and services either depends on reciprocal consumer interactions or at least deeply benefits from them. This interaction or sharing of resources may occur in various fields such as open source programming (e.g., Linux), research communities, car sharing, or knowledge management. The growth of an active online community leads to for example *co-shopping* that facilitates the coordination of consumer groups purchasing in large quantities, *communities of special interests* that share ideas and experiences about products and services, and *peer-to-peer networks*, in particular file sharing such as music and video files swapped in Gnutella, KaZaA, etc.

All these networks depend on consumers who are not only taking from the community but are also giving back. While the motivation to download files for example is easy to understand, the motivation to contribute is less straightforward and becomes the bottleneck of all these networks. Thus, whenever the value of a community or service is increased by consumers' contributions, the (commercial or non-commercial) provider should understand and encourage reciprocal behavior.

Research in consumer behavior has largely neglected the phenomenon of reciprocal interaction. We are only aware of two research streams where reciprocity has been explicitly accounted for: self-disclosure (e.g., Moon 2000) and gift exchange theory (e.g., Joy 2001; Lowrey, Otnes, and Ruth 2004). Another related study was presented at the 2002 ACR conference held in Atlanta. In their contribution, Giesler and Pohlmann (2003) use a qualitative empirical approach and argue that users of Napster are in a situation that is similar to receiving and giving gifts.

The small scientific emphasis on this exciting phenomenon is surprising. At least for the case of file sharing that we chose as an example for our investigation, reciprocal consumer behavior has a clear managerial relevance. With the wide dispersion of broadband internet access and easy-to-use file sharing networks like Napster and its successors, the internet has become a new distribution channel for digital media contents. Despite the shutdown of the non-commercial Napster, file sharing in peer-to-peer networks has become even more popular. For example, in May 2003, more than 900 million files were shared on the KaZaA network by about 4.3 million users (Becker and Clement 2004), mostly in a non-commercial, illegal environment. In such non-commercial systems, only a small fraction of users is contributing the majority of the available content (Adar and Huberman 2000; Saroiu, Gummadi, and Gribble 2003; Becker and Clement 2004). Most recently, the media industry has been working on commercial business models offering digital

media files like music or movies on the internet for sale (e.g., iTunes.com or movielink.com).

Apart from the field of consumer behavior, reciprocity is and has been an important topic in several research fields, in some of them already for many decades. There is a vast number of reciprocity studies in sociology, and a growing number of studies in economics. Also in computer sciences and organization theory, studies that try to better understand online communities, peer-to-peer networks, and contributions to open source software can be found recently. We are going to briefly deal with selected approaches in the theory section and will propose a framework underlying our study.

We will then empirically test our framework in a controlled laboratory experiment that is incentive-compatible in the spirit of experimental economics (e.g., Smith 1976), i.e. the decisions of respondents have real consequences. The videos downloaded and the money spent or saved are *real*, for example the videos downloaded can be used at home. At the same time, our experiment may be called "realistic". The user interface was programmed so as to resemble a real online downloading and file sharing environment as much as possible. Thus, we see the most important contribution of our paper in testing of the predictions of economic theory, sociology, and psychology about reciprocal behavior in a controlled, but realistic buying situation.

The paper is organized as follows: The next section introduces theory. In the subsequent section, the experimental design is explained. The fourth section reports on the empirical findings, and the last section discusses the findings, derives implications, and deals with future research.

THEORETICAL DEVELOPMENT

This section provides the framework we are going to test in our experiment. Specifically, we deal with theories of reciprocity and motivation crowding, and derive consequences for the situation in focus.

"Reciprocity is concerned with giving to a community as well as taking from it" (Preece 2001, p. 351). However, some researchers argue that online communities and peer-to-peer groups might be vulnerable to social dilemmas in which most members take from the community without giving back (Kollock 1998). This concern would not be surprising to a neoclassical economist since cooperation between consumers such as file sharing indeed resembles the basic structure of a prisoner's dilemma where "defect/defect" is the Nash equilibrium. From the perspective of normative game theory, cooperation is thus difficult to stabilize unless, for example, the game is repeated *infinitely*. In more realistic scenarios, individuals have incentives to take advantage of individuals who cooperate. If this is anticipated, nobody should even try to cooperate. Specifically, for the case of sharing music files, "(...) there is little mystery as to why tens of millions of individuals have chosen to use the networks to *download* free, high-quality sound recordings. The more puzzling question is why tens of millions of individuals have chosen to *upload* free, high-quality sound recordings to their fellow anonymous users" (Strahilevitz 2002, p. 3).

However, it may already be misleading to describe a peer-to-peer file sharing group or a community as *anonymous*. Although

Gnutella users are objectively anonymous, this peer-to-peer group may be perceived as a loosely connected “family” by at least some of the individuals. Sahlins’ (1976) *social exchange theory* discriminates between different social distances or so-called tie strengths. In his famous monograph “Stone Age Economics”, he proposes a “balanced reciprocity exchange” as being functional for *middle* social distances.

Reciprocity may also be considered a social interaction *norm* (e.g., Goulder 1960; Ostrom 1998; Fehr and Fischbacher 2003). The idea is straightforward. When A helps B, then B feels obliged to return the favor, either by helping A, or by helping C (a third party who shares some characteristics with A). The norm is not limited to a three-person-interaction but may apply to much larger groups of individuals (Kahan 2002). Some economists explain reciprocity using evolutionary game theory (e.g., Sethi and Somanathan 2003). From the perspective of experimental economics and other empirical economic research, reciprocity is just very frequent: “(...) a pervasive and economically significant phenomenon in human interaction. The tendency to reward generosity and punish opportunism is encountered frequently both in long-term relationships and in sporadic interactions” (Sethi and Somanathan 2003, p. 1). However, as Charness and Haruvy (2002) demonstrate, non-pecuniary motives such as altruism-based, equity-based, or reciprocity-based motives may often simultaneously be relevant for decision making. But reciprocity motives may also be discriminated from other motives. For example, Gneezy, Güth, and Verboven (2000) experimentally demonstrate that for transactions without explicit contracts, reciprocity and trust could often be the more appropriate explanation than gift giving with distributional intention.

Summing up, despite differences between and some open questions in the different approaches to explain reciprocity, and although reciprocity motives may not always be perfectly discriminated from other non-pecuniary motives such as altruism, there are many similarities between the above thoughts adapted from different disciplines (i.e., sociology, anthropology, and *behavioral economics*) and based on different empirical evidence (i.e., field, experimental). Thus, despite economic disincentives, we expect people to cooperate in situations that are not perceived as completely anonymous. We expect them to do so even if they incur costs, and even if their behavior is not rewarded in monetary terms.

There is collected experimental evidence on large individual differences in altruism, sharing, cooperation, or reciprocating behavior (Fehr and Fischbacher 2003). Based on a number of studies, Fehr and Fischbacher (2003) summarize that, for example, the “(...) ultimatum game nicely illustrates that a sizeable number of people from a wide variety of cultures (...) are willing to punish others at a cost to themselves to prevent unfair outcomes or to sanction unfair behavior” (p. 785; italicizing by the authors of the current contribution). Although in principle the willingness to share or to reciprocate could be random or could follow difficult to understand but largely situation-dependent patterns, it seems to be more plausible that individuals differ in their tendency to reciprocate. Individuals that reciprocate in situation A may also have a tendency to reciprocate in situation B.

EXPERIMENTAL DESIGN

The participants took part in a laboratory experiment that was similar to an online video on demand (VOD) system. Participants could choose from a selection of 20 movies (taken from the top 20 DVD rental charts in Germany, summer 2003) for “download”. The whole download situation was simulated in a computer laboratory. Participants were instructed that they would receive a voucher at the end of the experiment that allowed them to watch each movie they successfully “downloaded” during the experiment once. At the

beginning of the experiment, participants were provided with € 10 (approximately US\$ 12.50) on a virtual account. They could keep all the money remaining on their account at the end of the experiment or spend more money and pay the balance. The duration of the experiment was limited to 30 minutes. All downloads had to be finished within the given time. Two providers A and B offered the same 20 movies but on different conditions (price, download time, quality, and sharing incentives).

The experiment aimed at analyzing three research questions: (1) the impact of uncertainty and ambiguity on consumers’ choice in this online buying environment, (2) reciprocity in file sharing activities without monetary incentives, and (3) the influence of monetary rewards on reciprocity. All aspects related to uncertainty and ambiguity as well as the effects of monetary incentives will be dealt with in a subsequent paper. We will thus focus on the aspects of the experimental design relevant to the investigation of sharing behavior without monetary incentives.

In order to make the experiment realistic and to simplify the participants’ decision making process, the graphical user interface was as close to existing video-on-demand applications as possible. The interface for taking decisions still remained simple: participants could i) select for each movie whether or not to download it and from which provider, ii) monitor and cancel downloads if necessary, and iii) decide which movies shall be shared with other players. A typical choice situation for downloading a movie is illustrated in figure 1.

All movies successfully downloaded from provider A could be shared with other players. Participants could decide which of their movies they would like to share (this decision could be revised at any time). A system message reminded the players at the end of each download that the movie could now be shared with other players. The availability level of a movie in file sharing equals the number of the players sharing this file (up to a maximum availability level of 5). Thus, the time needed to download a movie from file sharing directly depended on the sharing behavior of the group [download time=(20 minutes / availability)]. The experiment was conducted in groups of 9 players. To get the process started, two movies were available for file sharing right at the beginning of the experiment.

In non-commercial peer-to-peer networks, the costs for sharing large files are moderate but clearly above zero (e.g., costs for internet connection or opportunity costs for hard disk space and reduced bandwidth; Becker and Clement 2004). Costs for sharing movies were incorporated in the experiment by reducing the participants’ bandwidth (performance). For each movie shared at any given time during the buying experiment, a participant’s performance was reduced [performance=1-(.05 * shared movies)].

Therefore, the effective download time for each movie was increased for the subject [effective download time=(download time / performance)].

The effective download time was always calculated by the software and displayed as “duration” (see figure 1). The actual level of performance was displayed as “available bandwidth” and was constantly visible during the experiment at the top of the screen (see figure 1). Each download consumed bandwidth depending on its level of availability adding up to a total “requested bandwidth” always displayed just below the “available bandwidth”.

Whenever the “requested bandwidth” exceeded the “available bandwidth”, all downloads were slowed down proportionally. Hence, sharing (loss in performance) was more “costly” for those who wanted to download many movies but it was still noticeable for all players.

While still running, all downloads could be cancelled and the money was paid back to the player’s account. The whole download

FIGURE 1
Choice situation within the experiment

Java Applet Window

Welcome to FiSh, User7!

My account: €10 My credit points: 0

Available bandwidth: 100 %

Required bandwidth: 0 %

Remaining time: 30 min.

Search/Select Movies Traffic/Downloads Sharing/My Hard Disk

Provider A

Movies from server

Price per movie: € 2.50
Quality: High and certain
Availability: High and certain

Movie title	Avail.	Duration	Download
The Bourne Identity	5	4:00 min.	<input type="checkbox"/>
xXx - Triple X	5	4:00 min.	<input type="checkbox"/>
JackAss: The Movie	5	4:00 min.	<input type="checkbox"/>
Harry Potter 2	5	4:00 min.	<input type="checkbox"/>
Bowling for Columbine	5	4:00 min.	<input type="checkbox"/>
Minority Report	5	4:00 min.	<input type="checkbox"/>
8 Mile	5	4:00 min.	<input type="checkbox"/>
Matrix	5	4:00 min.	<input type="checkbox"/>

Movies from file sharing

Price per movie: € 1.50
Quality: High and certain
Availability: Depending on the number of sharing partners

Movie title	Avail.	Duration	Download
The Bourne Identity	2	10:00 min.	<input type="checkbox"/>
xXx - Triple X	2	10:00 min.	<input type="checkbox"/>
JackAss: The Movie	2	10:00 min.	<input type="checkbox"/>
Harry Potter 2	2	10:00 min.	<input type="checkbox"/>
Bowling for Columbine	2	10:00 min.	<input type="checkbox"/>
Minority Report	2	10:00 min.	<input type="checkbox"/>
8 Mile	2	10:00 min.	<input type="checkbox"/>
Matrix	2	10:00 min.	<input type="checkbox"/>

Provider B

Price per movie: € 0.50
Quality: uncertain
Availability: unknown

Movie title	Avail.	Duration	Download
The Bourne Identity	???	???	<input type="checkbox"/>
xXx - Triple X	???	???	<input type="checkbox"/>
JackAss: The Movie	???	???	<input type="checkbox"/>
Harry Potter 2	???	???	<input type="checkbox"/>
Bowling for Columbine	???	???	<input type="checkbox"/>
Minority Report	???	???	<input type="checkbox"/>
8 Mile	???	???	<input type="checkbox"/>
Matrix	???	???	<input type="checkbox"/>

Starting download

Download !

mechanism was an essential part of the instructions and very similar to real systems the participants were already used to.

In addition to costs for sharing, incentives for sharing were also included in the experiment. Even though there are two incentive treatments, this contribution will only deal with the “low incentives” situation where no bonus points are rewarded for file sharing.

The total of 216 participants (most of them students) was recruited from different schools at a major university in Germany. All participants who chose to participate in the study had to be experienced in file sharing networks (but not necessarily experts) and interested in movies. Experimental data were collected in June 2003. The recruitment activities pointed out that up to eight movie vouchers could be obtained in the experiment and that there would be an initial budget of $\square 10$. Participants were allocated to the two treatments (“with bonus points” and “without bonus points” for file sharing). In each treatment, there were 12 groups consisting of nine players. All participants were sitting in separate booths. Since this contribution focuses on the findings for the “without bonus points” condition, only $n=108$ respondents are underlying our analyses.

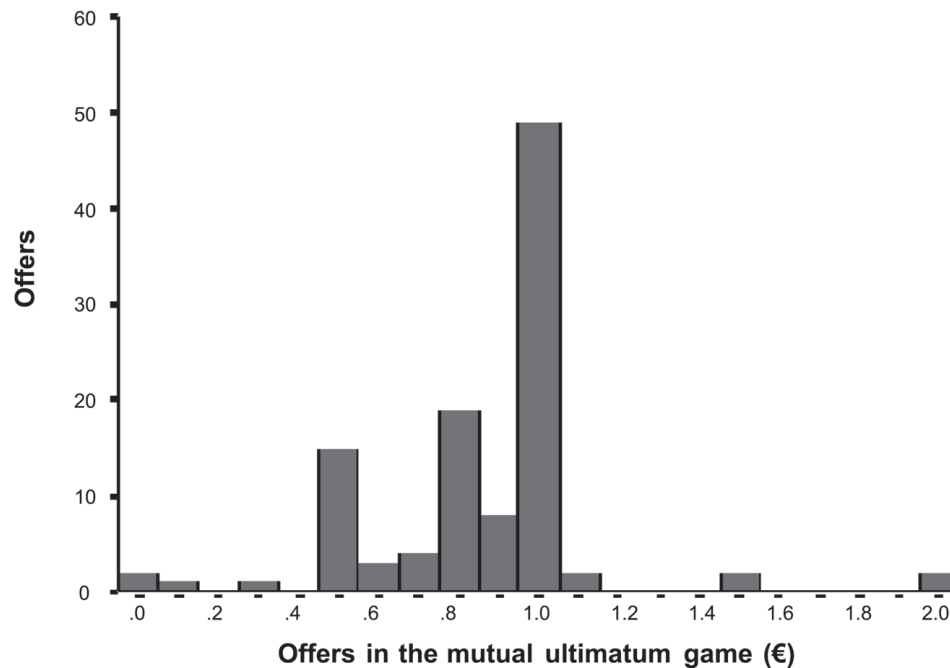
The experiment included an introduction to the software, the 30 minutes computer-based buying experiment, a questionnaire, and an incentive compatible dual-role ultimatum bargaining game with real payments (see below). Manuals with detailed information on all movies and the vouchers were handed out to all participants.

Three instructors and one system administrator were present at all times answering questions.

To have a second observation of participants’ willingness to reciprocate, we used a modified (details are provided below) ultimatum bargaining game (e.g., Güth, Schmittberger, and Schwarze 1982; Roth, Prasnikar, Okuno-Fujiwara, Zamir 1991; Henrich et al. 2001; Camerer 2003). In an ultimatum game, one player (“proposer”) makes an offer on how to divide an amount of money with another player (“responder”). There are no negotiations, so the responder can only either take the offer—both players will earn what the proposer suggested—or leave it. In the latter case, both players will end up empty-handed. If the responder maximizes his or her monetary pay-off, any positive offer should be accepted. Anticipating this, a profit-maximizing proposer should offer only very little. But we know from several experiments that the mean offer is 30–40%, median and modal offers are 40–50%. Many proposers offer half the money. Small offers are typically rejected half of the time (for an overview see e.g., Fehr and Schmidt 1998; Camerer 2003).

In this study, participants were supposed to propose how to divide $\square 2$. Contrary to the normal setting in ultimatum bargaining games, we did not split up the group in proposers and responders. Instead, every participant in the group had to make an offer to one other, randomly assigned respondent in the group, i.e., the offers were forwarded to another player of the group by the computer server. In a second step, every subject was in the role of the

FIGURE 2
Offers in the dual-role ultimatum game (n=108)



responder and had to decide—again simultaneously—whether or not to accept the offer they just received from a different person via the server. Thus, every participant was able to earn money twice in this game: First, by making an offer which is accepted by another group member, and second, by accepting the offer they received.

No player responded to the same player who had received the own offer, so there were no “partners”, and participants were informed about this fact. Instead, as in the file sharing part of the experiment, the whole group was the unit of reciprocal behavior. Specifically, respondents were provided with a written description of the situation and an oral instruction before every dual-role ultimatum game. Note that this procedure does not alter either basic structure or normative solution of the ultimatum game described above. However, from a behavioral perspective, this was supposed to strengthen reciprocal considerations. We felt that such a dual-role ultimatum bargaining game might somehow reflect an individual’s tendency to reciprocate in a group situation. While thinking about how much to offer as a proposer, participants knew that they would be in the role of the responder a moment later. What will be the minimum amount they are going to accept in this situation? What do they expect the other to give? Is there any behavioral norm existing? So, how much should they offer?

Dual-role ultimatum games require some reflection on self-interest, fairness, and (negative) reciprocity and the payoff could induce some information on other peers’ (non-)reciprocal behavior. To avoid any potential bias from the dual-role ultimatum game on sharing behavior in the laboratory experiment, we always started with the file sharing simulation first. The possible vice versa effect of sharing behavior on the dual-role ultimatum game offer is expected to be lower and was additionally reduced by the 15 minutes break for filling out the questionnaire.

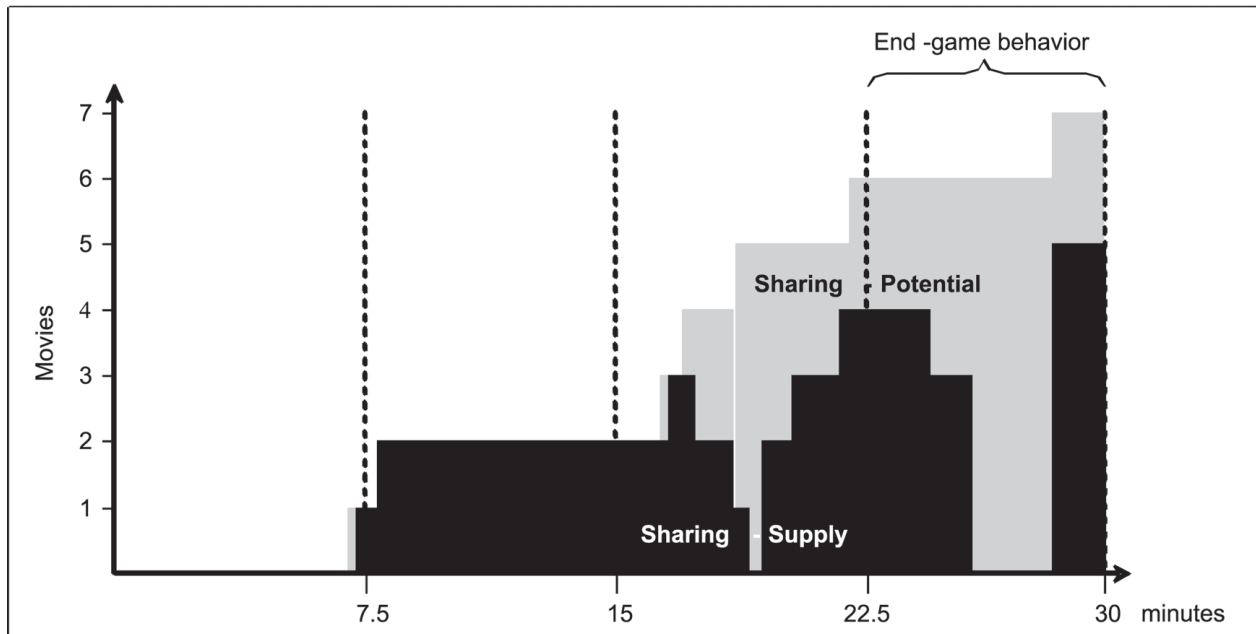
EXPERIMENTAL FINDINGS

At the end of the experiment, participants received their payoff in form of movie vouchers and the remaining of the € 10 initial budget on their accounts. In the non-bonus group, underlying our analyses, participants bought on average 5.9 movie vouchers. File sharing had an average market share of 47 % providing a large number of observations on sharing behavior. In our study, reciprocal behavior was measured in two different situations: in the dual-role ultimatum game and in the buying situation.

The distribution of the offers in our dual-role ultimatum game (see figure 2) is somewhat consistent with typical findings in “normal” ultimatum games (see e.g., Fehr and Schmidt 1998; Camerer 2003) where the median and the modal offer range from 40–50 % (in this study: median 49.5 %; modal 50 %). There are hardly any very low offers or offers in the “hyper-fair” category of 51–100 % (in this study: 2.8 % of all offers are below 20 % and 5.6 % are “hyper-fair” offers). However, 46 out of the 108 participants offer exactly 50 % (€ 1) and the mean value (42.7 %) exceeds the range reported by Camerer 2003 (30–40 %). Also, with 84 % the rejection rate is higher than typical rejection rates (50 %).

Both, the large number of 50 %-offers and the high rejection rate for low offers underline that our dual-role ultimatum game setting fosters reciprocal thinking. If participants believe that reciprocity is an accepted “norm” within the group, a 50 %-offer would ensure a “fair” outcome of € 2 for everyone. From this reciprocal point of view, someone offering less than 50 % (€ 1) is somehow trying to make an extra profit. Offers below € 1 are being rejected by 38 % of those who offered € 1 or more (only 9 % among those who offered less than € 1). Participants who believe that the group members are profit maximizing, would anticipate that (at least) moderate offers will be accepted. They might therefore offer

FIGURE 3
Sharing potential and sharing supply for user 117



significantly less than 50 %. We will distinguish between participants with a reciprocal offer ≥ 1 (“reciprocals”, $n=52$) and those offering less (“non-reciprocals”, $n=56$).

Our dependent variable is file sharing. For every download that had been completed in the buying experiment, participants were able to choose whether or not to share the movie with other players. This decision could be revised at any time, and it was also possible to share only a fraction of the movies one could have potentially shared.

An example of a real sharing pattern is illustrated in figure 3.

Even though we can observe participants’ sharing behavior during the entire experiment, there is no obvious way to measure “sharing”. One rather simple approach would be the maximum or average number of movies being shared by an individual. This measure would be highly dependent on the number of movies bought in the experiment. It would even be dependent on the distribution channels since they differ in download speed. Sharing 100 % of few available movies shows a stronger willingness to reciprocate than sharing a small fraction out of a larger number of files. Therefore, we will measure the sharing intensity by the ratio of the individual sharing supply and the total sharing potential aggregated over time.

$$(1) \quad \text{sharing ratio} = \sum_{\text{time}} \frac{\text{movies being shared}}{\text{movies available for sharing}}$$

This sharing ratio, scaled between 0 and 1, will be the dependent variable for most of the following analyses. The distribution of the sharing ratio is shown in figure 4.

According to figure 4, there are large individual differences in participants’ sharing behavior. Only a minority of participants shares nothing or little. This free riding group is small (9 % sharing zero and 16 % with a sharing ratio $< .1$). Hence, despite sharing being costly and without any incentives being provided for sharing,

participants still share significantly more than 0 % of their movies (p -level: .000; t -test, two-sided).

As within the dual-role ultimatum game, differences in participants’ revealed sharing behavior could be based on the individuals’ level of intrinsic, reciprocal motivation. If this is an explanation for both high offers and high sharing ratios, we expect a positive correlation between participants’ behavior in both situations. Therefore, we will analyze the revealed sharing behavior of the “reciprocals” and “non-reciprocals” as identified before based on the offers in the dual-role ultimatum game.

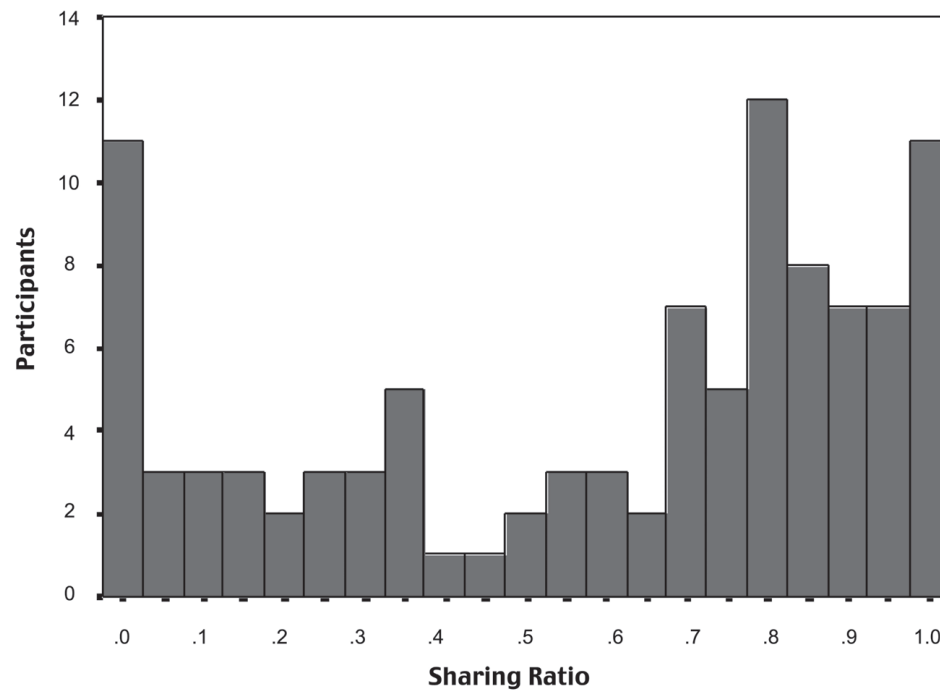
For the empirical test of this proposition, we will first look at the no bonus point treatment avoiding any potential impact of monetary incentives. Without an additional extrinsic motivation for sharing, participants with a reciprocal offer in the dual-role ultimatum game are expected to share more. We find that the reciprocals’ sharing ratio is 24.5 % higher than the one of non-reciprocals (mean sharing ratio .53 vs. .66). This difference is significant (p -level: .042; t -test, two-sided). So indeed, even though the effect is small, the observation from our dual-role ultimatum game is related to sharing behavior in a realistic buying environment.

DISCUSSION AND IMPLICATIONS

We have evidence that, although there are no monetary incentives and although this activity is costly, individuals engage in file sharing. This is consistent with earlier findings on reciprocal behavior. Consistent with real life observations, we also find large individual differences in participants’ sharing behavior. Furthermore, we are able to relate this behavior to proposals in a dual-role ultimatum bargaining game. Thus, there is evidence that sharing is not a situation dependent activity or random. Rather, individuals seem to differ in their general tendency to share and to reciprocate.

Our findings are important for two reasons. First, the replication of the real life phenomenon of the voluntary uploading of files

FIGURE 4
Sharing ratio in the computer-based buying experiment (n=102)



in peer-to-peer networks in a controlled experiment is important because real life observations may be organized by alternative explanations. For example, the related activity of contributing to open source software has often been “rationalized” by potential motives such as gaining reputation as a programmer, signaling skills, etc. by several authors. Although more difficult, it is possible that similar explanations could be “invented” for uploading activities. Our controlled experiment has the advantage that it does not allow for alternative interpretations outside the reach of the experimental situation.

Second, our experiment partially solves the puzzle of the large differences in individuals’ sharing activities. Individuals may differ in their tendency to reciprocate. Future research is necessary to substantiate these findings, for example based on alternative measures of the tendency to reciprocate. If there are stable groups, the propensity to share may be an interesting segmentation criterion in markets where this behavior plays a role.

Another interesting aspect to be investigated in further research is whether the tendency to reciprocate is a solid personal trait variable such as extraversion or risk aversion.

Future research should also address the relevance of monetary incentives in the context of sharing and reciprocity. Does reciprocal behavior and monetary incentives add up, or do we have to expect a more complex relationship? We are partially able to deal with this question based on our experiment but this question was beyond the scope of this paper.

Future research should furthermore focus on alternative environments where reciprocity plays a role such as joint buying environments, etc.

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The Effect of Playful Web Experiences on Brand Attitude Formation

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ABSTRACT

Enjoyable immersion in online information search, an affect-laden experience referred to as perceived play, is examined in relation to attitude formation. Framed by the attitude-toward-the-ad literature and theory related to the influence of affect on evaluative outcomes, the relationship between perceived play, attitude-toward-the-Web site (A_{web}), and focal brand (A_{brand}) were modeled under high versus low involvement search conditions. Under heightened involvement, only play surfaced as a significant predictor of brand attitudes. However, when engaged in low involvement search, A_{web} and perceptions of play combine to influence A_{brand} . This finding suggests the value inherent in play exerts a meaningful influence on attitude formation.

The Role of Anticipated Regret in the Endowment Effect

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Ayelet Fishbach, University of Chicago

EXTENDED ABSTRACT

Numerous studies have demonstrated that people persistently demand more money to give up one object than they're willing to pay to purchase the same object (e.g. Kahnman, Knetsch, and Thaler 1990; Knetsch 1989). This violation of economic norms, commonly known as the endowment effect, is generally explained by loss aversion, the fact that pain from loss exceeds the happiness from acquisition. However, existing literature devoted little attention to the emotional experience individuals have in determining an acceptable price for purchasing or selling an item. This research sets to explore the role of anticipated feelings of regret in creating the persistent disparity between individuals' willingness to pay (WTP) and willingness to accept (WTA). We propose that people anticipate intense regret if their decisions to buy or sell later turn out bad, and therefore set extreme threshold to both buying and selling to avoid possible regret.

Based on previous research we assumed that people constantly anticipate their feeling if certain outcome materializes and this has significant impact on various choices. To minimize potential regret, individuals not only switch to safer and more expensive options (Simonson 1992) but also reject options with greater expected utilities in some occasions (Bar-hillel and Neter, 1996). We propose, in the endowment effect situation, individuals demand high prices (offer low prices) in order to minimize the potential regret from acquiring an item (parting with an item). The artificial gap between people's willingness to pay (WTP) and willingness to accept (WTA) is thus a result of this conservative pricing strategy that is meant to eliminate possible regret.

Three studies were conducted to put this hypothesis into empirical test. In all 3 studies, participants first completed some surveys using a brand new Uni-ball pen. After the surveys, half of the participants (sellers) were told that the pen was theirs to keep and were then asked the minimum price they would sell the pen for; the remaining half (buyers) were not given the pen but were asked the maximum price they'd offer to purchase the pen. To ensure the elicited price actually reflects the value of the pen in their minds, participants were told that a pre-determined price of the pen will be revealed after they indicate their prices. If their buying price is higher than the pre-determined price or selling price lower than the pre-determined price, the actual transaction will take place immediately.

Study 1 examines how mood moderates the endowment effect. Compared with people in negative or neutral mood, people in positive mood are generally less concerned with possible negative outcomes, which they can better handle (Trope and Fishbach 2003). We therefore hypothesize that individuals in positive mood are more willing to trade and show smaller difference between their WTP and WTA. We primed positive and negative mood by asking the participants to describe life experiences that have made them really happy or sad respectively. As predicted, our results suggest that individuals in positive mood were more willing to trade and the disparity between WTP and WTA diminished. Study 2 looks into how the transaction is framed influences the difference between individual's WTP and WTA. Various studies have demonstrated that compared with inaction, action is associated with more regret (e.g. Baron and Ritov 1994; Landman 1987). All previous endowment effect studies presented the transaction as action. We propose that when transactions are presented as inaction rather than action,

people are less concerned with potential regret and thus the endowment effect should be eliminated. The results supported our hypothesis: when the act of buying was framed passively as "not returning the pen to the experimenter" and the act of selling was framed passively as "not keeping the pen", the WTP-WTA disparity was eliminated. Finally, Study 3 tested whether the type of anticipated regret changes the valuation of an endowed object. Compared with omission regret (failure to act), commission regret (taking the wrong action) is usually associated with more intense regret (Baron and Ritov 1994). We proposed that when people are primed with omission regret, they become more willing to trade and set lower threshold for transaction. Participants in this study were primed to consider commission regret by describing things they wish they had not done and of omission regret by describing things they wish they had done. The results confirm our hypothesis, showing that only participants in the commission regret displayed the traditional endowment effect. By contrast, among participants primed with omission regret, the buying and selling prices were trivially different.

Together, the 3 studies demonstrated that anticipated regret plays a critical part in producing the persistent disparity between people's willingness-to-pay and willingness-to-accept. The goal to minimize potential regret increases the threshold individuals set to change their status quo by buying or selling an object. Understanding of people's valuation of an object process is of critical importance for all marketing practices and our finding provides insights into the emotional experience individuals have in determining acceptable prices for them to make a transaction.

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Choosing to Consume Later: Determinants of Future-Biased Choice

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EXTENDED ABSTRACT

Introduction

For most items, the default behavior is to consume quickly. However, there are various situations where seizing the immediate occasion to “use it now” is traded off against waiting for better opportunities. The decision to wait (via procrastination) occurs most often for negative experiences. But are there cases where delay occurs for positive opportunities? This paper addresses this question by examining two timing rules of thumb: occasion matching and option preservation. General aspects of the situations that cause each rule to be invoked are outlined. Situations where the rules result in systematic future-bias are then explored in more detail.

Occasion matching

Many consumption choices come down to the question of finding the optimal time. We question whether now is the time to take our vacation days, drink that special bottle of wine, or use up our frequent flier miles. In each case the dilemma is between seizing the immediate occasion and waiting for a (possibly elusive) better occasion in the future. One way to simplify the problem is to define a rule based on matching item to occasion: the consumer predefines an “optimal” occasion at which consumption should happen and then holds the item until the criteria for that optimal occasion is met. There are three conditions under which such occasion matching leads to future bias:

1. *Occasion matching leads to future bias when the satisficing occasion threshold is set too high.* Consumption thresholds are likely to be set high when an item’s usage is highly constrained to ensure that rare or indulgent items are not used indiscriminately. This will be most true for singleton items and for indulgences, which are often constrained by mental accounting and other self-control rules (Thaler 1985, 1999, Heath & Soll 1996, Kivetz & Simonson 2002). Once the threshold is set, psychological effects of thinking about that focal outcome will make its probability of occurrence be overestimated (Koechler 1994, Wilson, Wheatley, Meyers, Gilbert & Axsom 2000). Focal thinking can also lead to undervaluing of second-best outcomes, such that individuals are unwilling to settle for anything below their threshold.

Study 1 explores a situation in which highly focal outcomes serve as satisficing thresholds in an optimal timing problem. Participants bought a series of airplane tickets from several pre-defined distributions of ticket prices, but also had access to one coupon to be used for a single free flight. One highly focal but low probability outcome was present within each distribution. Consistent with future-bias, individuals held too high of a usage criterion. The level of future-bias was unaffected by providing a higher value second-best outcome. However, future-bias was reduced when the probability of the focal outcome was increased.

2. *Occasion matching leads to future bias when the conjunctive probability of meeting multiple occasion criteria is overestimated.* For some occasions to be judged an optimal match, they are required to excel on multiple dimensions. Consider the ideal occasion to open a special bottle of wine: it must be special across many measures – perhaps a night that is romantic, follows a good week at work, when kids are asleep, and dinner was exceptionally well-prepared. Again, saved items are likely to be indulgences whose used is constrained by self-control rules. In addition, the

multi-dimensional aspects of the occasion imply that this strategy will be even more pronounced for experiential indulgences (Van Boven & Gilovich 2003).

Studies 2 and 3 investigate the likelihood of delayed consumption for a variety of items. Results show that hedonic measures, experiential measures, and likelihood of purchase are all significant in predicting respondents’ likelihood of saving the item for a special occasion. A significant interaction term also suggests that it is not just any hedonic items that are saved, but specifically hedonic items that are not regularly purchased by the consumer. Respondents indicated that they were waiting for a “perfect” occasion to consume saved items, and agreed that occasions for saved items were rarer than for non-saved items.

3. *Occasion matching leads to future bias when tomorrow is always predicted to be a better match than today.* The distant future is often construed at a higher, more abstract level than the present (Lieberman, Sagristano & Trope 2002, Trope & Liberman 2003). The desirable aspects of distant future occasions are most salient, while the detailed feasibility aspects of the same occasion are neglected. Thus, when planning an enjoyable event, the future always seems like a better match than today. Unfortunately, this is a myopic perspective; once the future arrives, feasibility aspects are again salient, and the choice is again to delay. The delaying decision will continue to be repeated so long as we fail to realize that future periods are no better than the current state. Prescriptive advice for counteracting myopic procrastination is to restrict the individual’s options by making the window of opportunity to complete the task more limited (O’Donoghue & Rabin 1999). For example, Kivetz & Simonson (2002) show that individuals who fail to indulge regularly use precommitment techniques to force themselves into a specific planned indulgence. Another example is the difference between living in a city for many years and visiting it; the visitor is likely to see the major local landmarks while the resident always plans to go but never does.

Study 4’s results support the prediction that differences in temporal construal make the far future seem like a more appealing time to consume an indulgence (a trip to a spa) than the near future. As expected, there was a significant effect of temporal distance on predictions of spa gift certificate usage. Respondents considering use within the next week expect to be busier than those predicting use in a week a month from now; they also have a higher willingness to pay to extend the certificate’s expiration date.

Discussion

Although not discussed in detail within this abstract, a second rule, option preservation, also contributes to delayed consumption. Under option preservation, the consumer is focused on keeping future options available even at the cost of overall lower utility. These option preservation motives lead to future bias when expensive options are maintained “just in case” they may be needed later (Wansink, Brasel & Amjad 2000, Shin & Ariely 2004), when lesser alternatives are chosen over preferred outcomes just to avoid immediate waste (Arkes 1996, Schweitzer & Cachon 2000, Krishna & Zhang 1999), or when the probability of immediate defeat is outweighed relative to loss probabilities in later stages (Yates & Watts 1975, Keren & Wagenaar 1985, Thaler 2000).

Understanding future-bias and its effects on consumption provides additional insight into the boundaries of self-control and time inconsistency. Where previous research has demonstrated the

ways in which individuals fail at self-control efforts, cases of future-bias seem to suggest that there are situations in which individuals are overly successful at restraining themselves. By better understanding this behavior, we may also be able to identify prescriptive advice that helps people learn to indulge and enjoy their long-saved luxuries.

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Forgotten Rejections and the Rebuilding of Personal Preferences

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EXTENDED ABSTRACT

All decisions are the result of a complex interplay between approach and avoidance motives. The relative emphasis that is placed on these two motives depends on the decision context. Sometimes, consumers must decide between two aversive options, and final selections are simply the result of rejecting the worst alternatives. In spite of this, people tend to interpret actions as choices, rather than rejections. Previous research has shown that observers tend to perceive approach motives in the decisions of others, even when their own decisions are guided by avoidance motives (Miller & Nelson, 2002). This notion is consistent with the work on the positivity bias, which shows that people initially default to a liking response when evaluating stimuli, and only subsequently adjust to a disliking response (Cacioppo, Gardner, and Berntson 1999; Diener and Diener 1996; Boucher and Osgood 1969; Herr and Page 2004). Although the robustness of this inferential bias has been demonstrated, the underlying processes and the consequences for subsequent decisions has not been studied.

In Study 1 we investigated the memory construction processes underlying this inferential bias. If observers focus on what is chosen, rather than what is rejected, then the features of the chosen option should be over-represented in memory. Participants read about a job hiring decision and were told that an executive made a decision between two possible candidates. After a time delay, observers remembered decision makers' choices better than their rejections. This effect emerged regardless of whether the decision was described as a rejection or as a choice, indicating that it reflects a fundamental way of how people interpret decisions. If people tend to better recall the choices of others, how do they think of their own decisions in retrospect?

Study 2 investigated the role of perspective. After examining the attributes of two graduate programs, participants either made a decision between them, or were told about someone else's decision. Both groups initially reported which features they thought were most influential on the decision, and after a time-delay, attempted to recall the attributes of each school. Consistent with the prediction that people judge themselves to be less approach motivated than others, participants listed more chosen attributes when analyzing someone else's decision than when analyzing their own. When observing the decision of someone else, participants showed impaired recall for information about the rejected option. Although the asymmetry in memory for chosen and rejected options was significantly reduced when personally making a decision relative to simply observing someone else, surprisingly, it was not totally eliminated. There was still a tendency for participants to remember more information about the option that they chose than they rejected.

If people interpret their own past decisions as choices rather than rejections, and infer corresponding approach motives, than over time, they should develop a skewed understanding of the preferences underlying their original decision. Studies 3 and 4 investigated the hypothesized asymmetries in how past decisions influence subsequent decisions.

In Study 3, participants evaluated two letters from the English alphabet and reported their preference. Participants in the Positive Frame condition compared a positive letter (A) with a neutral letter (O), while participants in the Negative Frame condition compared the same neutral letter to a negative letter (F). In the first phase of

the experiment participants indicated the letter they preferred, and then reported their liking for each letter. After a delay, they were asked to recall their original decision, and to provide a new rating for the letter O. Despite a lifetime of familiarity with both letters, people who had chosen O over F in the initial phase of the study showed an increase in their liking for O relative to participants who had chosen A over O. These findings provide further confirmation that people can interpret own past decisions as implying a liking for the selected option. More importantly, this bias leads to an increase in current liking for the previously chosen option, where the decision context is discounted.

Study 4 examined whether the observed bias in liking judgments carry over to subsequent choices. In the first phase of the experiment participants evaluated the attractiveness of female faces. Participants were randomly assigned to one of three conditions. Some participants compared a highly attractive face to a face of average attractiveness (Positive Frame), while others compared an unattractive face to the same neutral face (Negative Frame). Remaining participants evaluated the neutral face in isolation (No Frame). In each of the choice conditions participants identified which face they preferred, and subsequently, participants in all three conditions provided attractiveness ratings for each face. After a time delay, participants recalled the neutral face from the first phase and compared it to a new, slightly more attractive neutral face. All participants identified their preference between the two neutral faces, and rated the attractiveness of each. Consistent with our predictions, when the neutral face was compared to the unattractive face, she was found to be much more attractive than when she was compared to an attractive face or when she was evaluated in isolation. Accordingly, participants in the Negative Frame condition chose the original neutral face more often than participants in either of the other conditions.

Taken together, findings from the four studies show that the memory gap between chosen and rejected options that was previously documented for observers persist for self-choice. The possible outcomes of a decision have asymmetric influence on successive ratings such that liking for the chosen option increases in the subsequent choice occasion, whereas liking for the rejected option does not decrease. This finding illustrates the emphasis that decision makers put on choices as opposed to rejections. Most importantly, we find that the inferential positivity bias affects consequent choices. The fact that an option is chosen, even over a truly unattractive option, still renders it more desirable in memory. As a result people make subsequent decisions that reflect an initial liking for the chosen option, violating preference transitivity and leading to preference reversals in a subsequent choice occasion.

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ROUNDTABLE
Researching Visual Consumption
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This roundtable discussed methodological and theoretical issues of aesthetics, images, and vision as it pertains to consumer behavior via interdisciplinary research examples and exemplars. We surveyed recent efforts in studying visual issues in consumer behavior, including Web browsing and design, advertising interpretation, digital photography and visual tools in research. This session presented research methods for studying visual consumption, with an emphasis on interpretation, representation, and interdisciplinary methods. We introduced key literature sources, and draw upon participant's own research to generate new insights into visual methods and topics in consumer research.

Visual issues are being recognized as important issues in consumer behavior and consumer research. Visual images constitute much corporate communication about products, economic performance, and social responsibility, and also inform governmental efforts to create positive attitudes for citizens, consumers, and organizations. Brand image, corporate image, advertising images, and images of identity all depend upon compelling visual imagery. Various referred to as the attention economy, the aesthetic economy, and the experience economy, this visual turn in marketing may call for new perspectives and research approaches. What does the production and consumption of images mean for marketing and society? How does the handling of images in the allied fields of visual studies, art history, film theory, design management, and corporate identity shed light on the relationships between visual processes and consumption? Visual consumer research cuts across methodological and topical boundary lines—the possibilities and problems of visual approaches encompass experimental and interpretive realms, and include such varied topics as information processing, image interpretation, and research techniques.

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SPECIAL SESSION SUMMARY

Cognitive Mechanisms That Underlie Reference Price Effects

Manoj Thomas, New York University

SESSION OVERVIEW

It is widely accepted that price evaluations involve some form of comparisons. That is, when faced with a stimulus price, the consumer evaluates that price by comparing it with some form of comparison standard. This comparison standard is often referred to “reference price.” Two basic forms of comparison standards have been proposed in the pricing literature: Internal reference price (IRP) and External reference price (ERP). When consumers evaluate a stimulus price by comparing it with an internal, memory based price standard, they are said to use an internal reference price. But when the comparison standard is a price observed in the shopping environment (e.g., advertised price or the regular price), then consumers are said to use an external reference price. Though scanner panel data based choice models and experiments have established beyond doubt that price evaluation often, if not always, entail a reference price, the underlying cognitive process is far from clear. The three papers presented in this session seek to delineate the cognitive processes that underlie reference price effects.

The Price Cognition Process

Pricing research has traditionally been a domain of economists. However, over the past three decades, consumer psychologists have unraveled substantive findings that augment (and sometimes challenge) the traditional perspective on pricing. In this special session, we have three papers that draw on findings in cognitive psychology and social psychology to explore how reference prices affect price encoding and the magnitude perceptions of a stimulus price. Given that price is one of the most important elements of the marketing mix, this is an interesting and potentially rewarding area for both practitioners and researchers in consumer behavior. The session synthesizes work employing different theoretical perspectives.

The first paper by Janiszewski and Lichtenstein examines the process by which advertised reference prices affect price evaluations. The extant models of ARP effects suggest that advertised reference prices actually shift the internal standards and thus affect price evaluations. Drawing on recent work in social cognition on semantic priming and selective accessibility, the authors suggest an alternative model to explain the effects of ARPs. They suggest that ARPs activate exemplars, which in turn serve as semantic anchors in subsequent judgments. Through three experiments they test the predictions of the semantic anchor model and the IRP shift model and find that data supports the former.

The second paper by Thomas and Menon argues that mental price comparison (i.e., stimulus price vs. internal standard) is a cognitive skill. As with any other skill, repeated mental comparisons lead to proceduralization of price knowledge. Based on this premise they suggest that for frequently purchased goods, consumers’ can evaluate prices without explicitly recalling the internal price standards. Three different effects of repetition are presented to support this argument. First, repetition systematically reduces the time taken for price evaluation; response time for price evaluation follows the power law of learning. Second, the distance between the internal standard and response time affects experts’ response time but does not affect novices’ response time. Finally, experts are relatively more sensitive to price increases than novices.

The third paper by Adaval and Wyer proposes that contextual reference prices can have an assimilation effect or contrast effect on stimulus price judgments. Traditional pricing theory suggests that

a stimulus price is always contrasted with a contextual standard. Their experiments show that contextual anchors bias participants’ estimates of actual price, but these assimilative effects of contextual prices vanish when people were asked to list all the thoughts they had about the product category.

The three papers address the same issue, namely—how external and internal reference prices affect price evaluations. The first one compares two alternative process explanations, the second one examines the effect of repetition on mental comparison process, and the third one examines situations when external reference prices lead to assimilation effects rather than contrast effects. Together, the three papers present a framework that facilitates a better understanding of the process by which reference prices affect price evaluations.

“Advertised Reference Prices as Semantic Anchors”

Chris Janiszewski, University of Florida

Donald Lichtenstein, University of Colorado

Julia Belavsky, University of Florida

Advertised reference prices (ARPs) are a popular sales promotion technique. Retailers often pair a high advertised reference price (e.g., “Regularly \$69.95”) with a low offer price (e.g., “Sale Price \$29.99”) to encourage the consumer to conclude that s/he is paying a lower than normal price for the advertised product. The use of ARPs is pervasive across merchant types, product and service categories, and media vehicles (e.g. newspapers, radio, direct mail, television, in-store signage). In fact, their use is even quite common in situations where consumers act as resellers. For example, sellers might include a price reduction (e.g., “price reduced \$20,000; now \$399,500”) or an original list price (e.g., “original costs \$1,600; must sell \$500”) in their price offer.

There is an abundance of evidence that ARPs positively influence a range of consumer price-related responses, including perceptions of the fair price, the normal price, the lowest available price in the market, potential savings, and purchase value (e.g., Ahmed and Gulas 1982; Bearden, Lichtenstein, and Teel 1984; Berkowitz and Walton 1980; Biswas and Blair 1991; Blair and Landon 1981; Burton, Lichtenstein, and Herr 1993; Grewal et al. 1998; Lichtenstein and Bearden 1988, 1989; Lichtenstein et al 1991; Urbany, Bearden, and Weilbaker 1988). The consistency of findings regarding the effect of ARPs across an array of consumer responses led Grewal et al. (1998, p. 54) to state “price comparison advertising is a widely used price promotion tactic. Although research investigating issues on the relative effectiveness of this tactic spans nearly 20 years, we are still trying to understand how and why it works.”

At issue in the current investigation is not the influence of ARPs per se, but rather, the influence of implausible ARPs. That is, there is considerable research evidence that when consumers encounter ARPs that they disbelieve, they are none-the-less influenced by the ARPs (Blair and Landon 1981; Lichtenstein and Bearden 1989; Lichtenstein, Burton, and Karson 1991; Urbany et al. 1988). As noted by Blair and Landon (1981, p. 62), “consumers may understand that a reference price is inflated or be skeptical of it, yet may not completely discount the claim; that is, consumers may be influenced even if they are skeptical.”

We find that people increase their estimate of a fair price as the advertised reference price (ARP) of a product increases from plausible to exaggerated to implausible (a liner relationship). We

also find that people decrease their purchase likelihood when the ARP of a product increases from plausible to exaggerated and increase their purchase likelihood when the ARP of a product increases from exaggerated to implausible (a U-shaped relationship). We investigate two reasons for increased purchase likelihood in the implausible ARP condition. First, people may consider the implausible price so outlandish, they do not believe it is exerting a bias on their fair price estimate. Second, people may consider the implausible price to be a signal of the quality of the product and recruit information consistent with this higher quality good, thus their fair price estimate and purchase likelihood response correlate. The data are consistent with the second explanation.

“Effects of Repetition on Price Comparison Process”

Manoj Thomas, New York University

Geeta Menon, New York University

It has been known for long that consumers' memory for past prices affects their evaluations of a stimulus price. For instance, Gabor (1988, p 236) suggests that the consumer “judges the prices of different goods and services by comparing them, more or less subconsciously, with some standard which may not, of course, be the same for all persons.” The memory-based price standard that consumers' use to make such comparisons is often referred to as internal reference price (Monroe 2003, Winer 1986). Several econometric studies (Kalyanaram and Winer 1995, Mayhew and Winer 1992, Winer 1988) as well as experimental studies (Adaval and Monroe 2002, Janiszewski and Lichtenstein 1999) have demonstrated that internal price standards have significant effect on price evaluations.

While there is considerable empirical support for effects reference price on price evaluations, not much is known about the cognitive mechanisms that underlie these effects. In fact, the concept of a memory-based reference price itself has been brought into question by several price recall surveys. Data collected from several surveys indicate that consumers have very poor memory for prices. Dickson and Sawyer (1990) approached shoppers while they were in the supermarket and asked them to recall the prices of products that they had just put in the shopping cart. Less than half the respondents (47.1%) could accurately recall the prices of products that they had just put in the shopping cart. Krishna, Currim and Shoemaker (1991) found that only 34% of buyers were correct within 20 cents of the actual price. More recently, Vanhuele and Dreze (2002) observed that 21.3% of their respondents could recall prices within five percent of actual prices. The fact the consumers have poor recall for past prices has led some researchers to question consumers' ability to use memory-based price information in evaluating prices. Zeithaml (1988, p.10) observed that consumers' knowledge of prices “appear to be considerably lower than necessary for consumers to have accurate internal reference prices for many products.” Contrary to the above findings, results from choice models suggest that consumers have brand-specific internal price standards for all major brands in most product categories that they frequently buy. Based on scanner panel data for peanut butter, coffee and tissue, Briesch et al (1997) inferred that consumers behave *as if* they remember the past prices of all the major brands in these categories.

How can consumers' brand choices be so sensitive to changes with respect to past prices when they are not able to accurately recall the past prices? Consistent with the views of Monroe and Lee (1999), we suggest that consumers learn to evaluate new prices without explicitly recalling past prices from memory. Drawing on findings in memory research, we examine the distinction between declarative and non-declarative price knowledge (Schacter and

Tulving 1994). When a consumer explicitly recalls an internal standard for the brand to evaluate the stimulus price, she is relying on her declarative price knowledge. We refer to such evaluations as analytical evaluations. However, repeated evaluations of same product substantively affect the underlying cognitive process (Anderson 1993). Consumers no longer have to verbally rehearse the past price to evaluate a new price. Rather, they learn to associatively evaluate the price. The hypotheses and the experimental designs presented in the paper are pivoted on two basic paradigms: (i) associative price evaluations do not depend on declarative price knowledge (ii) associative price evaluations do not involve an explicit comparison process.

Understanding the distinction between declarative and non-declarative price knowledge not only enables us to resolve the apparently contradicting findings in pricing literature but also addresses the implications of repetitive evaluations on price cognition process. While the effects of repetition of advertisements and persuasive claims have been studied in considerable detail (e.g., Janiszewski and Meyvis 2001), little is known about the effects of repeated evaluations of the same product's prices. There is a growing body of evidence in the numerical cognition literature, which shows that repetition makes many numerical cognition processes, like addition and multiplication, associative in nature (Dehaene 1992, 1997). However, not much work has been reported about the effect of repetition on magnitude comparison mechanisms per se. So our findings augment not only the theory of price cognition but also add to the literature in numerical cognition.

We present three experiments designed to examine the effects of frequent evaluations on the underlying cognitive processes. Study 1 shows the dissociation between response time for price recall and price evaluation. Participants who were given prior experience in price evaluations of the target products had significantly lower response time for evaluations than those who were evaluating the prices for the first time. However, response time for price recalls was unaffected by prior experience in price evaluations. This suggests that associative evaluations do not entail explicit recall of past prices. Study 2 shows that for infrequent buyers of a product, the distance between the stimulus price and internal price standard affects the ease of evaluations. The smaller the distance, the greater is the response time for evaluations. But for frequent buyers, the distance between stimulus price and the internal price standard does not affect response time. Study 3 shows that frequent buyers are relatively more sensitive to price increases and less influenced by contextual price information than infrequent buyers. Together, these results support the thesis that while infrequent buyers construct their evaluations at the point of purchase, frequent buyers retrieve pre-existing evaluations associated with price magnitudes.

“Assimilation and Contrast in Consumer Price Perceptions”

Rashmi Adaval, Hong Kong University of Science and Technology

Robert S. Wyer, Hong Kong University of Science and Technology

Research on price perception has identified two directionally different effects. First, when people are exposed to an external reference price (an anchor), their internal reference price (or price estimate) shifts in the direction of the anchor (Lichtenstein and Bearden 1989; see Briesch et al. 1997 for a review). Second, when a price is encountered in the context of others, the context prices are often used as a basis of comparison in evaluating it. Thus, a product might be judged as more expensive when people have been exposed to lower prices than when they have been exposed to higher prices

(Adaval and Monroe 2002). These effects are not only directionally different but appear inconsistent. Our research attempts to circumscribe the conditions under which the anchoring and the perspective effects are likely to occur.

Traditional explanations for the anchoring phenomenon have been based on adaptation-level theory (Helson 1964) and assimilation-contrast (Sherif and Hovland 1961). More recently, however, work by Mussweiler and Strack (1999) suggests that when people are asked to decide if a product's price is above or below a certain value (e.g., a high external reference price), they activate concepts about products whose values fall within the range of those implied by the anchor. As a consequence, their later estimates of the actual price of the product, which are based on these concepts, are biased toward the value they are asked to consider. Perspective effects, on the other hand, are based on social judgment theory and are believed to occur because the stimulus values to which people are exposed along a dimension influence the perspective they use to assign subjective values to stimuli along this dimension. Thus, for example, a particular product's price is judged as subjectively less expensive when it is considered in the context of other high-priced products than when it is considered in the context of low-priced products. Note, however, that the contrast effects that are produced by perspective shifts occur in the course of translating stimulus values that are defined in physical units (e.g., dollars) into subjective units (e.g., units of "expensiveness"). Moreover, their effects on actual behavior (e.g., purchase decisions) are likely to occur only when people actually report the subjective values along a scale, and then retrieve these judgments out of their original context for use as a basis for behavior decisions (Sherman, Ahlm, Berman, & Lynn, 1978).

We conducted five studies to demonstrate when anchoring effects (like those implied by Mussweiler and Strack's research) are likely to occur. In the first study, participants were asked to indicate "Is the average price of product A greater or less than X (high/low anchor)?" They were then asked to indicate the average price of the product (a price estimate). The first experiment showed that the anchor not only biased participants' estimates of the product's actual price, but also influenced the price that participants were willing to pay for a product of the type being described. (That is, even though the price estimates were higher in the presence of a high anchor, the willingness to pay was also higher, suggesting that the anchor might have activated thoughts about the type of product to which the anchor pertained.) The estimates did not depend on whether the judgments referred to a general type of product or to a specific brand and, in the latter case, did not depend on whether the brand had a good or bad reputation for quality.

In the second study participants were first asked to decide whether the typical price of a product is greater or less than a value that was either very low, average, plausibly high, or implausibly high. Then, some participants estimated the actual price of the product, followed by estimates of its subjective cost, its quality, and the average price they would be willing to pay for it. Other participants were asked to make the last three ratings without estimating the actual price of the product. Results showed that estimates of willingness to pay were assimilated towards the anchor in both conditions. However, the anchor had no effect on subjective perceptions of cost or quality (subjective judgments made on a rating scale). These results suggest that the anchor might have elicited anchor related thoughts and at the same time shifted people's perspective in the direction of the anchor leading the average price of the product to be judged the same in both low and high anchor conditions.

To validate the assumption that the anchor elicits anchor related thoughts and influences willingness to pay, we conducted a

third study in which people were asked to either list all the thoughts they had about the product category before exposure to the anchoring task or were given the anchoring task without the thought generation exercise. Activating a broader sample of thoughts about the category led to a significant reduction in the anchoring effect although it did not completely eliminate it. To determine if the anchoring effect was likely to occur even if the anchor related thoughts were unrelated to the judgment at hand, we conducted a fourth study in which we presented the anchoring question for one product category (e.g., high technology products) and asked participants to indicate how willing they were to pay for a second product category (e.g., articles of clothing). Four replications were selected for high tech products and four for clothing related articles. Results showed that when the anchoring question pertained to high tech products, estimates of willingness to pay for clothing articles were not affected. However, when the anchoring questions pertained to clothing articles, willingness to pay estimates for high tech products were affected. These cross category effects on willingness to pay have been found elsewhere (Nunes and Boatwright 2004). However, reasons for their occurrence as well as the asymmetry are unclear.

To determine whether types of thoughts were responsible for the asymmetry in cross-category effects, we conducted a fifth study where we gave people the anchoring question about one product category (e.g., a DVD player—a high tech product) and asked them to write down either experience related thoughts about that category or function related thoughts about that category. We then asked people to estimate willingness to pay for the second category (e.g., running shoes—an article of clothing). The two categories were counterbalanced so that participants sometimes wrote thoughts about a DVD player and at other times wrote about running shoes. The effects of anchors on willingness to pay were limited to conditions in which the thoughts were (a) the sort that were normally generated in the course of making the comparative judgment and (b) were applicable to the judgment that participants made subsequently. Specifically, when participants made comparative judgments pertaining to running shoes and then generated experience-related thoughts, comparison prices had a positive influence on the price they were willing to pay for a DVD player. When they had generated function-related thoughts about running shoes (which were irrelevant to judgments of a DVD player), this was not the case. When participants made comparative judgments of DVD players, the comparison price had little effect on judgments of running shoes regardless of the type of thoughts they had generated.

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SPECIAL SESSION SUMMARY

Ordering, Layering, and Mixing Emotions: The Impact on Advertising Response

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Patti Williams, University of Pennsylvania

SESSION SUMMARY

Complex blends of mixed emotional experiences have been observed in a variety of consumer situations, from “once-in-a-lifetime” highly engaging events such as planning for one’s wedding (e.g., Otnes, Lowrey, and Shrum 1997) to more mundane, much less engaging events such as watching television commercials (Edell and Burke 1987). Consumers, it appears, often experience mixed emotions (e.g., Polivy 1981). Despite being commonplace, mixed emotions have, until recently, been largely overlooked in both psychology and consumer research. Instead, researchers have focused on identifying emotion antecedents (e.g., Ellsworth and Smith 1988), typologies (e.g., Richens 1997), or dimensions (e.g., Holbrook and Batra 1987). Or, they have attempted to understand one specific emotion (e.g., fear: Anand-Keller and Block 1995), a particular relationship between a single-valenced emotional reaction and decision-making (e.g., negative: Luce 1998; positive: Isen 1989), or the direction of influence between a generalized emotional state and cognition (Pham, Cohen, Pracejus, and Hughes 2001).

However, recent studies have begun to investigate mixed emotions, shedding initial light on ways in which consumers cope with and respond to such oppositional feeling states. For example, recent research has shown that while individuals can simultaneously feel happy and sad (Larsen, McGraw, and Cacioppo 2002), the degree to which they actually feel torn between these two emotions may vary across cultures or age cohorts (Williams and Aaker 2002). Nevertheless, many questions about mixed emotions and their role in consumer behavior remain unanswered. This session focused on the importance of order in mixed emotional appeals and how mixed appeals heighten the emotional response impacting behavioral outcomes.

Overview of Issues/Papers

The three papers presented, strived to understand how consumers respond to mixed emotions. In the first paper Labroo and Ramanathan looked at the impact of mixed valence ads. They hypothesized and found that under conditions of high relevance, ads are evaluated more favorably when positive affect precedes negative affect. However, there is a reversal under conditions of low relevance. Thus, they illustrated the importance of the order in which consumers encounter the different emotions in a mixed emotional appeal.

In the second paper, Lau-Gesk and Kramer looked at the impact of mixed emotional ads (happiness and sadness) as compared to straight positive and negative emotional ads. They hypothesized and found that mixed emotional ads result in amplification effects that can result in either more favorable evaluations than straight positive appeals or more unfavorable evaluations than straight negative appeals depending upon whether an approach or avoidance system is activated.

Having established the importance of order in mixed valence appeals and the potential for mixed emotions to heighten intensity the third paper looked at the impact of order and emotional intensity within negative mixed emotional appeals. Grasshoff and Williams hypothesized and found that layering two negative emotions that differ in their sense of responsibility and control (e.g. fear and

regret) enhances emotional intensity and compliance with the ad over a corresponding single emotional appeal (e.g. either pure fear or pure regret). They hypothesized and found that the enhanced emotional intensity and related increased compliance was a result of consumers’ preference to feel in control, thus overriding their usual resistance to negative emotions.

Contribution and Audience

Despite much progress, current understanding of how emotions influence consumer behavior is far from complete. This session built a richer understanding of emotion’s influence which will aid understanding of nearly all areas of consumer research, including research on satisfaction (e.g., Westbrook and Oliver 1991), advertising response (e.g., Batra and Ray 1986; Edell and Burke 1987), attitudes (e.g., Petty, Caccioppo, and Schumann 1983), memory (e.g., Isen 1989), and decision making and other behaviors such as compulsion, impulsive, complaining, risk-seeking, and variety-seeking (e.g., Luce 1998; O’Guinn and Faber 1989; Kahn and Isen 1993).

“Feeling Good, Feeling Bad ... Feeling Sad, Feeling Glad: Order and Perceived Relevance of Ad-Emotion Affect Processing of Neutral Information”

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Suresh Ramanathan, University of Chicago

Sometime before Valentine’s Day, New York Life Insurance ran an ad that first evoked strong positive/loving feelings about ones partner followed by negative emotion relating to death. The ad then went on to present facts about their Life Insurance policies. This ad was in contrast to their earlier ad that had made consumers experience negative emotion (about death) before evoking loving feelings about the partner. The question this research addresses is whether the order in which emotions are evoked, perceived self-relevance of emotionality and the perceived appropriateness of the emotionality to the ad affect liking of the ad and of the product.

Extending the literature that indicates that positive emotions provide the resources to cope with and process relevant negative information (Raghunathan and Trope 2002), this paper suggests that the experience of positive emotion prior to negative emotion facilitates coping with the negative emotion when the emotionality is perceived either as self-relevant or appropriate to the ad (by reducing the experience of negative affect). This enhances liking of the ad and of the product, and the data suggest that this occurs because of direct affect transfer and not due to elaboration about the ad information/product features.

This effect is replicated in two experiments. In experiment 1, we manipulate order of emotionality and appropriateness of use of mixed emotions. In addition, consistent with previous literature on ability to cope with duality of emotions (Williams and Aaker 2002), we also examine these effects on those from eastern and western cultures. Participants evaluated either an ad for National Motorists Association (NMA, against drunken driving, for which the use of mixed emotions pre-tested as relevant and appropriate) or for Watson Life Insurance (emotions rated as less relevant). Prior to evaluating the information in the ad (and the product), participants saw a picture of three teenage boys and read “That’s John, right

there in the center. Look at him, such a live wire! So much Fun, Laughter, Friendship ...” followed by “John crashed his car. One bad judgment, a life gone by, a grieving family, just memories left behind ...” or read the same emotional information, but in reverse order. Results indicated that when positive emotion preceded negative emotion, participants from Eastern cultures indicated they liked NMA and its ad significantly more than they did Watson or its ad. No differences in liking were observed between NMA and Watson among participants of Eastern cultures when negative emotion preceded positive emotion. In contrast, participants from Western cultures were least favorable to Watson when negative emotions preceded positive ones. They were much more inclined to have a positive opinion of Watson and its advertising when positive emotions preceded negative ones.

This study suggests that even among participants who are better at dealing with emotional duality, namely, those from Eastern cultures, order of emotionality matters such that positive emotion experienced prior to negative emotion affects responses differently based on perceived appropriateness of the emotionality. Interestingly enough, we also find that those from Western cultures are adept at dealing with duality regardless of order of emotionality when the emotionality is perceived to be appropriate. For this group, order of emotions matters only when the use of such emotions is seen as less appropriate to the product category.

In our second study, we wished to examine whether manipulating perceived self-relevance of emotions could independently affect evaluations of a product (Watson Film) for which the use of mixed emotions was considered less relevant. Order of emotion was manipulated among participants by making them either read a passage in which the narrator described the wonderful times that he/she had with his/her grandfather and then how the grandfather passed away, or a passage that first described the death of the grandfather and then told participants about the earlier wonderful times. Self-relevance of emotion was manipulated by instructing participants to try and imagine the situation depicted in the ad or not. Results indicated that the ad was liked most when positive emotions preceded negative ones, and when the emotion was perceived as self-relevant. Interestingly, when positive emotion preceded negative, and when the emotion was perceived as non-relevant, participants were most likely to recall features about the ad/product and were also most likely to raise concerns about the marketer being unethical in using emotion as a method of persuasion. Furthermore, the interaction between order and relevance affected mismatch between experienced emotion and perceived ad emotion, which in turn influenced the number of thoughts about product/ lack of ethics, and then influenced ad liking. Relevant positive prior to negative emotion led to minimum mismatch between experienced and perceived emotionality but this did not lead to elaboration about the product, suggesting that people were focused on and succeeded in overcoming the negative emotion, because the ad was liked most under this condition. Irrelevant positive prior to negative emotion led to maximum mismatch between experienced and perceived emotionality and also increased thoughts about the product/ tactics and lowered liking of the ad, suggesting that participants paid attention to the product/ad features, but also generated negative associations to the marketer. Relevance did not affect liking of the ad/number of product or ad thoughts/ethics thoughts (all low) when negative emotions preceded positive ones.

At a theoretical level, this paper adds to the coping literature (e.g., Fredrickson 2001; Raghunathan and Trope 2002) as well as to literature on consumers’ use of persuasion knowledge (e.g., Friestad and Wright 1994). It suggests that sequential manipulation of consumer emotions in western advertising leads to very different

coping strategies among consumers depending on perceived self-relevance and appropriateness of the use of such mixtures of emotions. While using positive emotions prior to negative ones leads to more positive attitudes towards the ad and product regardless of perceptions of appropriateness of the use of such emotions, consumers may significantly derogate products that are inappropriately using mixed emotions if these emotions are not self-relevant at the time of exposure.

“Exploring Response Amplification: Polarizing Consumer Responses to Mixed Versus Pure Emotional Appeals”

Loraine Lau-Gesk, UC Irvine

Thomas Kramer, Baruch

A visit to Disneyland often elicits more than pure happiness. Rather, consumers experience a wide range of mixed emotional experiences during their visit to the “Happiest” place on earth, from irritation and excitement while waiting in long lines before a popular ride, to fear and hope that Mickey Mouse will single them out and shake their hands as he parades down Main Street. While most marketers advocate the need to remove negative cues from a consumption experience, the current research offers evidence that challenges such a view. Instead of focusing on how to create experiences void of negative emotions, we argue that marketers should be more concerned about how to manage them effectively. Indeed, we explore conditions under which consumers may react more favorably to a mixed emotional experience composed of particular positive and negative emotions than to a purely positive emotional experience. At the same time, we demonstrate the dangers of mismanaging mixed emotional experiences by outlining conditions under which they might lead to less favorable consumer responses than even purely negative emotional experiences.

Recent consumer research shows that mixed emotional experiences often produce feelings of discomfort by individuals who have a lower (versus higher) tolerance for duality (Williams and Aaker 2002). Accordingly, much research shows how consumers try to avoid mixed emotional experiences (Nowlis, Dhar, and Kahn 2003) or employ coping strategies to help reduce the feelings of discomfort (McGraw and Levav 2003; Otnes, Shrum, and Lowry 1997). In particular, findings in psychology suggest that consumers who experience mixed emotions formulate polarized attitudes toward the mixed (vs. pure) emotion producing source to help reduce feelings of discomfort (Katz 1981). When primed with positive (vs. negative) aspects associated with a target object, attitudinal responses tend to be more (vs. less) favorable among individuals ambivalent versus non-ambivalent toward the target object (Hass, Katz, Rizzo, Bailey, and Eisenstadt, 1991). To illustrate, Bell and Esses (1997) found that participants who are ambivalent toward Natives and exposed to a positive or negative essay on Native land claims report more extreme attitudes than non-ambivalent participants.

Studies in neuroscience reveal that by evoking oppositely-valenced emotions, two independent systems in memory are activated: Positive emotions correspond to the approach system in memory; negative emotions correspond to the avoidance system in memory (Cacioppo, Bernston, and Petty 1997). Moreover, research indicates that the simultaneous activation of both these systems generates conflicting feelings, which in turn, leads to feelings of discomfort (Newby-Clark and Zanna 2002).

Given the link between oppositely-valenced experiences and the approach-avoidance systems in memory, we propose that frames that activate distinct self-regulatory systems may produce response amplification effects. In particular, Higgins (1997; see also Aaker and Lee 2001) demonstrates that individuals with a

chronic or situationally-induced promotion focus are motivated to approach desired, positive end states, whereas individuals with a chronic or situationally-induced prevention focus are more motivated to avoid undesired, negative end states. We therefore hypothesize, and find, that promotion- versus prevention-based frames can produce response amplification effects for mixed, as opposed to pure, emotional experiences.

Specifically, findings from experiment 1 reveal that promotion-based mixed emotional ads (i.e., happiness and sadness) are more favorably evaluated than purely positive emotional ads (i.e., happiness) whereas prevention-based mixed emotional ads are less favorably evaluated than purely negative emotional ads. Both findings support the hypothesized emotion amplification effects. A second experiment extends these findings and reveals a similar pattern of results with a unique pair of emotions. Hope and fear were reflected in the mixed emotional ads whereas only fear was evoked in the pure emotional ads.

“Layered Not Stirred: Negative Mixing for Emotional Intensity”

Kirsten Grasshoff, UPENN

Patti Williams, UPENN

The study of mixed emotions is receiving increasing attention in both psychology and consumer behavior. For example Williams and Aaker (2000) demonstrate that ads may evoke a mixed emotional response that in turn impacts persuasion. However, this work so far has focused only on mixing positive and negative emotions together. It is possible, however, that consumers may often experience mixed emotions of the same valence, such as both fear and anger or both happiness and warmth.

A significant amount of recent work has demonstrated that different negative emotions have substantially different implications on judgment and choice, based on differences in underlying appraisal tendencies associated with the discrete emotions (Smith and Ellsworth 1985). For example, Lerner and Keltner (2000) showed that fearful people make pessimistic choices while angry people make optimistic choices. Similarly, Raghunathan and Pham (1999) found differences in risk seeking between sad and fearful participants. Thus, not all negative emotions are the same in terms of motivational or behavioral outcomes.

Research on differences between negative emotions suggests that one of the key dimensions on which they differ is whether or not they make people feel responsible and capable of favorably changing the situation. For example, part of the reason why fearful people flee a situation is because they neither feel responsible nor able to mitigate the danger. Angry people stay and fight because they feel capable of thwarting the threat. This example exemplifies a key distinction among negative emotions: some make people feel out of control and incapable of managing the situation themselves while other emotions make people feel capable and responsible.

In this research, we studied the impact of negative mixed emotional appeals, focusing on emotions that differ in their underlying dimensions of responsibility and control. We assumed that consumers resist feeling negatively and feeling out of control and thus are resistant to negative appeals and low control emotional appeals, making it, for example, extremely difficult to induce an emotion like fear through a short advertisement. However, we hypothesized that peoples' resistance to feeling out of control will override their resistance to negative emotions thereby enabling mixed emotional ads to more readily and intensely evoke negative emotion. That is people will accept the high control negative emotion as a way to resist the low control negative emotion. Furthermore, we hypothesized that this increased emotional inten-

sity will enhance compliance with the ad. The negative emotion evoked by the ad must be intense enough that people feel the need to mitigate it through action (Levenson, 1999). We compared responses to pure emotional appeals featuring either fear (low control) or regret (high control) or appeals that mix fear and regret. In addition, in the mixed appeals we vary which emotion is evoked first, thus manipulating the sense of control consumers feel upon completion of the ad.

We tested our hypothesis in three studies on 300 undergraduate business students in two contexts (Spring Break packages and GMAT preparation courses). This enabled us to compare both the impact of mixed ads to single emotion ads within negative valence and if the preference for control can help override resistance to feeling negatively.

In the first two studies we found strong support for our primary hypothesis as participants in the fear to regret mixed condition experience strong emotional intensity, for both emotions while participants in the single emotion condition experience little or no emotion at all. This is all the more surprising as participants in the mixed scenario saw only half of the fear manipulation from the straight fear ad and half of the regret manipulation from the straight regret ad, but nonetheless reported significantly more of each emotion. Unexpectedly, the regret to fear ad was nearly as effective as the fear to regret ad at evoking emotion.

In addition, as hypothesized, we found differences in likelihood to comply with the different emotional appeals. In the GMAT study significantly more students in the high intensity mixed emotion conditions intended to use an almost completely unknown preparation course, Veritas, over its two very well known competitors, Kaplan and Princeton Review.

As we did not find an impact of order, the third study tested more specifically the impact of ads that move towards control vs. ads that simply mix low control emotions. Thus we tested mixed *low control* emotion ads (fear and sadness) to mixed *high control* emotion ads (fear and anger) and mixed *high and low control* emotion ads (sadness and regret). Again we found strong support for our primary hypothesis as participants in the sad to regret mixed condition experience strong emotional intensity, for both emotions while participants in the single emotion conditions and the mixed low control condition experienced little or no emotion at all. The increased emotional intensity in the mixed control condition, (sadness and regret), resulted in increased intentions to comply with the ad.

In summary, though our mixed control appeals may feature only half the single emotion manipulations, they result in increased emotional intensity relative to the pure emotional appeals and the mixed low control appeals. Our research thus far indicates that this is a result of consumers' preferences to feel in control over their preference to feel positive. We also find that increased emotional intensity in the mixed emotion conditions translates to increased intentions to comply with the ad. This research contributes to existing literature on mixed emotions by focusing on specific emotions within a single valence, and demonstrating how these mixed appeals facilitate emotion induction.

SPECIAL SESSION SUMMARY
Religion and Consumption: The Profane Sacred
Güliz Ger, Bilkent University

SESSION OVERVIEW

While religion is against consumption, there is a new religious commercialism which can only serve to escalate the criticized profane consumption. This apparent paradox is the focus of this session. All major world religions hold a critical position against consumption—against the greed, waste, and self-indulgent hedonism seen to be inherent in consumption (Belk 1983, Ross 1991). In modernity, “spiritless” consumerism is seen to replace spirituality and sacrifice human moral aspirations at the altar of comfort, convenience, and safety (Clapp 1998). Furthermore, religion in modernity is commodified as apparent, for example, in the commercialized celebrations of Christmas. Accordingly, various religious groups such as “Alternatives” voice resistance to consumption (www.simpleliving.org). While religious voices have been increasing their calls against consumption, industries, stores, and websites (e.g. www.catholicshopper.com) that provide religious souvenirs, home decorations, clothing, devotional objects, and music have been multiplying. Such items objectify the sacred and take various forms in different geographies: Jesus Christ action figures in the USA, crosses and nativity figurines featured on the stalls in front of the Vatican in Italy, incense, lotus-shaped candles, and Buddha figures in the rows of “temple” shops in China, heaps of amulets in open bazaars in Thailand, and religious calligraphy, bright colored clocks with lights and a picture of Kaba (in Mecca), and jewelry with Islamic scripts in the marketplaces set up on mosque grounds in Turkey. Furthermore, fashion, the most prominent feature of consumerism, pervades even in Islamic dress and head covering (Sandıkcı and Ger 2001). In addition, commercialized and entertaining trendy church services are thriving. Davis and Yip (2004) discuss the growth of New Christian Movement Churches in Australia. These churches engage in multiple business ventures from tele-evangelical services to lucrative music businesses and have slick websites offering ‘online shopping’. Such objects and experiences mix devotion with material indulgence and luxurious leisure pursuits.

The session focused on the growing consumption of religious objects and experiences and discussed the sacred-profane dynamic that underlies religious commercialism and material culture. We explored the interplay of morality and consumption and interrogated the supposed opposition between the profane and the sacred. We discussed issues such as: How is it that while religion is against consumption so many religious objects and experiences are produced and consumed? What makes an object or experience sacred despite commercialization? Is there an opposition between the sacred and the profane? If not, how does the sacred religion appropriate the profane consumption or vice versa; how does the spiritual interplay with the material? What does the lack of an opposition between the sacred and the profane imply for conceptualizations and understanding of consumption?

LONG ABSTRACTS FOR PAPERS

“Negotiating Competing Dogma: Religion and Mundane Consumption”

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A fundamental Christian dogma concerns the freedom from possessions. Concentration on material wealth is condemned not

only in the Christian tradition, but in all the organized religions (Belk 1983, Ross 1991). Religion, as a force in the lives of many individuals is influential in that it defines ways of doing things in terms of certain axiological precepts (Delener 1994), and links consumers to a style of life that determines what, how much, and why something is consumed (Hirschman 1983). Therefore, proscriptive religious logic is likely to affect how possessions and possessing are understood and internalized by consumers for whom religion impacts life choices.

The widely shared “You cannot serve God and Mammon” principle has evolved into divergent interpretations. In the spirit of the “protestant ethic,” the partial resolution of acquisitiveness typical of consumer culture is in allowing for the accumulation of wealth as a sign of virtue (Campbell 1987). Moreover in some currents of evangelical Protestantism, self-indulgence through consumption seems to have replaced moral asceticism (O’Guinn and Belk 1989). However, there are a number of Christian fundamentalist movements that advocate more radical norms of simple living and freedom from possessions. But even with such multiple interpretations, the attitude toward possessions as a sign of the corrupt influence of consumerist ideology in religious discourse remains prominent.

The moralized character of this discourse poses a certain dilemma for religious consumers in that, on the one hand, these consumers attempt to see the world in terms of proscriptive implications linked to ideals (Aquino and Reed 2002) of Christian simplicity and limited possessions, while on the other hand, the ideology of consumption with its abundance of goods is at odds with the pursuit of religious fulfillment. In fact, modernity witnessed a revolutionizing of the relationship between the self and morality. If, throughout western history, pursuit of self-interest (accomplishing the good life through possessions being one of the examples) was considered the root of much evil and the function of institutionalized morality was “to place checks and limits on the self...moral virtue meant overcoming the self” (Baumeister 1989), today self-interest has become the basis for moral value.

Two aspects of contemporary consumption are relevant. First, an inescapable fact of modern life is the definition and extension of self through consumption (Belk 1988) materialized in the attachment to favorite things (Wallendorf and Arnould 1988). Second, in the culture of consumption where pursuit of material goods has replaced the pursuit of religious goals, the ease of acquiring things that symbolize abundance, convenience, and comforts of the good life is seductive. These two aspects raise the issue of what levels of attachment, what kinds, and what quantities of possessions would be sanctioned by religious consumers without perceived violation of the commitment to moderation and simplicity.

Thus, religious interpretations of worldly possessions contain an inherent contradiction in the context of contemporary consumer culture: two models of the good life. How do religious consumers negotiate this inherent contradiction between the dogma of Christian freedom from possessions and the “dogma” of a material culture fixed on possessions? How is the “freedom from possessions” understood and practiced by these consumers in pursuit of Christian righteousness and virtues in the world of proliferated consumer goods? How do these consumers draw a boundary between possessions that will not degrade their allegiance to the Christian ideal, and possessions that are inappropriate or even

dangerous for this purpose? These are the questions that this research will address in order to uncover the relationship that religious consumers have with worldly possessions. Caught up in the whirl of competing discourses about what constitutes “good living,” consumers are engaged in negotiation of boundaries between demands on their commitments and consumption routines.

We conduct semi-structured interviews with a purposive sample of religious consumers from Protestant, Catholic, and Eastern Orthodox communities which represent distinctive Christian traditions. Interviews reveal that these consumers attempt reconciling the dictates of the two ideological worlds in their consumption practices. The interviews focus on eliciting the ways in which consumers attempt to juggle between the proscriptions of religious dogma and the inducements in contemporary consumer culture. Uncovering how these consumers define, interpret, and negotiate “freedom from possessions” principle on a daily basis furnishes new insights on the structuring forces at work in the process of cultural production of virtue and virtuous consumption.

“Creolized and Modernized: Religious Consumption in the South Indian Church”

Teresa Davis, University of Sydney – Australia

The Syrian Christian Roman Catholic church in the South Eastern state of Kerala (Malabar) is one of the oldest forms of Christianity in the country. It draws on a rich tradition of orthodoxy and Roman ritual and form. This church, while maintaining strong links to traditional Roman Catholic form, has not been immune to the creolization brought by the centuries of colonization and the demands of modernity. The practice and structure of Christianity has changed over centuries with waves of foreign influences through early trade with the Middle East and colonization. Orthodoxy which was the distinctive feature of the pre-Portuguese church was changed by the Portuguese influence in the 1500s, most clearly seen in the church architecture and the focus on the Weberian idea of the ‘theodicy of suffering’ (Baudrillard 1998). Post independence and modernity have transformed the church in terms of its rites and customs. In the post colonial period, modernity appears in the shift away from simplicity to ostentation and ritually manifest materialism. Syncretism (Woodward 2001) became more apparent than under the colonial yoke. Elements of Brahminism and Indianization became stronger and many of the traditional ceremonies of birth, marriage, and death grew closer in form to ceremonial Hindu and Buddhist tradition than Roman Catholic. With globalization, economic deregulation and high levels of migration and remigration from and to the Southern states (especially Kerala), the forces of modernity have created dominant themes of secularization and manifest materialism.

This paper focuses on this transformation using the modern day marriage ceremony in the Syrian Christian Roman Catholic tradition as a focal point to identify the multi-layered creolization that has transformed the ritual. Elements of the Hinduism, Syrian Christian tradition, Anglicized customs, popular Western culture as well as present-day ‘Indianization’ are all identified in the ritual. This paper analyses the ritual to reveal the consumption orientation inherent in the celebration and the multiple sources of the symbols and tradition drawn upon.

The themes of syncretism, secularization, and creolized form of ritual worship are highlighted in the modern day Syrian Christian Roman Catholic wedding ceremony. The ceremony itself is conducted mostly in the ‘Syro-Malabar’ form. However, elements of the ‘Romanized’ rite are also seen. The exchange of rings and vows are of the ‘Roman’ form, but are ‘Indianized’ by the ‘tying of the 3 knots’ of the traditional Thali central to the Hindu marriage ceremony. The dress of the bride and the groom are a study in syncretic

form. The bride could be dressed in white and gold keeps Indian tradition with golden hair ornaments, but wears a white veil and white silk in the Roman tradition (the colour worn only by the widow in Hindu tradition). Handmade Belgian lace and Benares silk come together in unlikely harmony in the bridal ensemble. The ceremony and the following celebratory meal are symbols of not only religious commitment and tradition, but of social status display where the effects of modernity are seen clearly from the many manifestations of materialistic display. Modernity in the form of materialism, syncretism, and secularization (Giddens 1991) appear along side a creolized ritual. Part of the creolization is in itself the result of desire for material display and not the result of the interweaving of different historical and religious tradition. Comparison of the wedding ceremonies of two decades ago and today show the move away from the focus on simplicity in the Syrian Christian Roman Catholic wedding ceremony to a far more elaborate consumption oriented celebration.

The choice of this form of religious practice goes against the ‘Dominus Iesus’ issued in 2000 by the Vatican encouraging the maintaining of religious orthodoxy in the Roman Catholic church (Woodward 2001). The rigorous ‘purity code’ from the book of Leviticus has been replaced by a ‘globalized’ creed by today’s new Kerala Christians. Consumers take what fits with their needs from the Bible and mix and match it with local religious traditions, using a ‘consumer decides’ approach to religious choice and practice. The elaborate wedding ceremony builds up a visually and experientially spectacular consumption experience which is focused on the material aspects of status display, wealth, and aesthetics rather than religious tradition or the spiritual aspiration.

“Religious Material Culture: Morality, Modernity, and Aesthetics”

Güliz Ger, Bilkent University

Richard Wilk, Indiana University

While the concentration on material wealth is condemned in all the religions of the world, the belief systems regarding the sacred and the profane vary. Some religions and cultures do not consider materialism and spiritualism to be opposites. For example, in India and China the material and spiritual worlds are less divided and objects have spiritual meanings in addition to their aesthetic and functional meanings. We explore the religious material culture in China and compare it to the illustrations from and the literature on Christian material culture. Through this comparison we address the conceptual issues of the interplay between the sacred and the profane, the spiritual and the material, and the implications for conceptualizations of the consumption-morality interaction. As moral ideologies have secular as well as religious bases, our discussion also involves the negotiation of modernity and aesthetics in the consumption of religious objects.

First, we explore the conceptual underpinnings of the religion-consumption interaction. The continual scrambling of the sacred and the profane is evident even in Christianity (McDannell 1995) and the economic and political context plays a significant role in such a blend (Starretts 1995, Tambiah 1984). Second, we examine the materiality of religion, the material culture itself and what people do (rather than solely what people think) in order to understand the relationship between religion and consumption. The sensual and aesthetic aspects of an object are the source of its capacity to objectify myth and values. We investigate the material culture of religion within its historical and present political and social context, that is, both the material representation and the ideology that surrounds a belief system. By studying the specific materiality of the religious objects as well as the social symbolism of these objects and their political and social context, we aim to

enhance the understanding of the sacred-profane dynamic that underlies religious commercialism and material culture. Thus, we hope to contribute to the understanding of how economic, political, and ideological domains interact through the field of cultural production.

Data sources are interviews and observations in homes and temple shops in Shanghai and Beijing. In-depth interviews with lower and upper middle class consumers are conducted with the help of an interpreter. We explore what objects are considered to be belief objects, their meanings, and how are they used, kept, and displayed. We study how consumers experience the spirituality or the sacredness in things despite commercialization. We also focus on the multiple ideologies manifest in the competing discourses about taste, aesthetics, modernity, and official state policies.

The streets around the Buddhist and Taoist temples in China are lined with scores of stores that sell 'religious' (not an emic term) objects such as offerings for ancestor ceremonies, incense to burn at the temple, figures of Buddha in various forms, jade pendants, lotus lamps, good-luck turtles and many other objects that are believed to provide protection, health, and wealth. Monks sacralize amulets, tablets, and pendants by enclosing holy words inside them or chanting holy words to increase the potency of these objects. The abundance of such objects is striking given the historical Communist hostility towards religion, the current official view that many such things objectify outdated superstitions that modern Chinese should not heed to, and the broader ideology of rational modernity.

We investigate the meanings and uses of objects that are considered to be spiritual or sacred in China where traces of Confucian morality, Buddhism and Taoism coexist with communist-capitalist modernity. We examine how consumers negotiate modernity with morality where the movement to modernity is a movement away from communist and Confucian prudence and frugality to a higher regard for aesthetic and sensual experience and material pleasures as well as to a higher regard for rationality. Analyzing the relation between religion, consumption, and modernity and exposing the types and usage of objects that have a spiritual connotation for the owner, the relationship between people and their sacred things, and how these consumers interpret and negotiate the spirituality of objects furnishes new insights on the forces that shape the cultural production of morality, aesthetics, and modernity.

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SPECIAL SESSION SUMMARY

Goals and Mindsets in Consumer Choice

Alexander Chernev, Northwestern University
Ran Kivetz, Columbia University

SESSION OVERVIEW

The importance of goals and frames of mind has been underscored by numerous researchers in the field (Gollwitzer 1999; Higgins 1997). Building on the existing literature, this session contributes to a better understanding of the role of goals and frames of mind in consumer decision processes. Research papers presented in this session investigate the impact of goals and mind-frames on choice from multiple theoretical perspectives, offering a broader perspective on the role of goals and frames of mind. In particular, the papers presented in this session addressed the following issues:

Research presented by Fishbach and Dhar examines the relationship between the perceived goal progress and the actual goal pursuit. They show that in the course of self-regulation people balance inconsistent personal motivations (e.g., saving and spending). As a result, the pursuit of a focal goal—or merely the intention to pursue that goal—has a liberating effect on the pursuit of inconsistent actions. These predictions are supported by the data from five experiments.

Research presented by Chernev examines the role of price as a diagnostic criterion for choosing from assortments in which options are differentiated by subjective factors such as taste, flavor, and color. In particular, he identifies conditions in which parity pricing facilitates choice and leads to stronger preferences for the selected alternative, as well as conditions in which differential pricing facilitates choice. The observed impact of price parity and price differentiation on choice is attributed to the consistency of consumers' choice-related goals. These propositions are supported by the data from two empirical studies.

Finally, research presented by Urminsky and Kivetz examines the mindsets that determine whether decisions are made based on probability judgment or rather on salient reasons and principles. It is argued that in many real-world situations, including in effort-reward tradeoffs, outcome probability is implied rather than explicitly stated. In such cases, consumers may neglect probability and instead rely on compelling psychological principles, often contradicting likelihood considerations. However, such a preference structure defies probability, because consumers are less likely to comply with higher effort, and therefore, should weigh less the contingent (and unlikely) reward. The paper examines different situations in which the psychology of effort and reward oscillates between probability and principle.

At the end of the session, co-chairs led the discussion to integrate the individual presentations into a more general framework. In doing so, they engaged the audience participants in a discussion aimed at facilitating a broader understanding of goals and mindsets and their implications for choice.

“Goals as Excuses vs. Guides: The Liberating Effect of Perceived Goal Progress on Choice”

Ayelet Fishbach, *University of Chicago*
Ravi Dhar, *Yale University*

People's choices are usually driven by multiple conflicting goals. For example, individuals simultaneously believe in saving for retirement as well as taking luxurious vacations, studying long hours and socializing with friends, etc. Research in social psychology has portrayed the processes of self-regulation as setting abstract goals, which are then assumed to motivate a consistent choice of

actions (cf., Gollwitzer 1999; Higgins 1997). The empirical work supporting this premise has focused on situations where the individual has a single goal. If individuals simultaneously hold multiple goals, an account of consumer behavior needs to address the manner in which consumers pursue choices motivated by these potentially conflicting goals.

This research examines consumer choice between two actions, one of which is consistent with the further pursuit of an initial goal, while the other is consistent with another, unrelated or even conflicting goal. We propose that when individuals are motivated by multiple goals, the pursuit of the initial goal (hereafter referred to as the focal goal) in an initial choice may liberate the individual to pursue unrelated or even conflicting goals in subsequent choices. For instance, the opening of a new savings account may suggest to an individual that her saving objectives are being actively pursued. As a result, the new saver might become more willing to spend money on unnecessary luxuries. In a similar way, signing up to participate in an upcoming marathon may promote a sense of progress toward important health objectives, possibly resulting in an increase in the consumption of culinary fattening delights. As these examples illustrate, people sometimes self-regulate between conflicting motivations so that pursuing a behavior toward one goal increases the likelihood of engaging in a subsequent behavior that is inconsistent with that goal. Furthermore, merely *planning* to pursue a focal goal in the future may liberate an individual to pursue other actions that are goal-inconsistent.

The aim of the current investigation was to explore some of the theoretical conditions that facilitate the selection of goal-inconsistent actions. The different studies examine choice between two options, one of which is viewed as being consistent with the focal goal and the other as being inconsistent or even conflicting with the focal goal. Based on the literature on the effect of goals on subsequent choices (Dhar and Simonson 1999), we propose that the effect of initial action on subsequent choice depends on whether the pursuit is viewed as indicating progress toward or commitment to a goal. Specifically, goal pursuit in the progress-framing condition liberates the individual and thereby increases the likelihood of pursuing the inconsistent goal, whereas commitment framing elicits a general tendency to maintain the pursuit of the focal goal. As a result, the relative preference for items that are inconsistent with the pursuit of the focal goal will be stronger in the progress-framing condition than in a commitment condition.

Five experiments, involving real and hypothetical choices, tested our prediction of disengagement in progress framing and increased engagement in commitment framing. In these studies we used simple manipulations that determine whether the focal goal is framed as highlighting commitment- or progress-related thoughts. We specifically investigated three principles that characterize the effect of perceived goal progress. First, progress focus enhances the pursuit of alternative goals whenever the progress is fast. Second, social comparison allows individuals to acquire feedback on their relative goal progress. This relative progress will proportionally increase their tendency to switch to alternative objectives. Third, overly optimistic evaluations may lead people to overestimate their future goal progress. As a result, they are more likely to select inconsistent actions when considering future as opposed to past goal progress. People may thus express the same overconfidence

with future goals as they do with future resources such as time and money (e.g., not waiting to actually receive money before spending it).

Our studies demonstrate the aforementioned principles across different goals (e.g., exercising, studying, saving money, losing weight) and different experimental procedures (e.g., hypothetical scenarios, self-report surveys, field studies). Study 1 shows that the choice of an action may be evaluated to indicate that either progress was made toward a given goal or that the person is committed to the focal goal. These progress/commitment inferences would then determine whether a person subsequently pursues a non-focal goal by selecting an inconsistent action, or whether a person maintains pursuit of the focal goal by selecting a similar action. Studies 2 and 3 find that perceptions of goal progress are influenced by accessible social comparison information. Thus, low standards elicit perceptions of fast goal progress and facilitate choice of goal-inconsistent actions, while high standards elicit perceptions of slow progress that inhibit the choice of goal-inconsistent actions. Study 4 finds that overly optimistic evaluations increase choice of inconsistent means when considering future as opposed to past goal progress. Finally, Study 5 demonstrates some of the behavioral implications of perceived goal progress. We conclude with a discussion of the theoretical implications of our findings, suggesting that relative preferences may depend on the aspects of a goal (commitment vs. progress) that are used to evaluate these choices.

“The Price of Choice: Differentiation and Parity in Assortment Pricing”

Alexander Chernev, Northwestern University

Consider a consumer who is thinking about buying a bottle of wine and is deciding among an assortment of four varietals: cabernet sauvignon, merlot, pinot noir, and syrah. Would this consumer be more likely to choose one of these options when they are priced at parity or when they vary in price?

This research examines the role of parity-pricing and differentiation-pricing strategies on consumer choice by focusing on assortments differentiated by subjective attributes such as taste, flavor, and color, which do not convey any quantitative information and do not imply a natural ordering of options' values. This research posits that because such assortments do not imply a natural value-ordering, non-parity pricing can influence choice by making price a diagnostic attribute that can differentiate choice alternatives. I further propose that the impact of pricing on choice is a function of the diagnosticity of the non-price attributes, that is, the degree to which consumers can form preferences based on the performance of options on non-price attributes. To better understand the interplay of consumer preferences derived from options' performance on price and non-price attributes, I link price parity to concepts of consumption and resource-allocation goals (Dhar and Simonson 1999).

Building on prior findings, this research differentiates two types of goals: consumption goals, aimed at optimizing the product-specific benefits, and resource-allocation goals, aimed at managing resources such as money, time, and effort. I further propose that resource-allocation goals can be further divided into two categories: frugality, aimed at minimizing monetary expenditures, and indulgence (splurging), aimed at maximizing monetary expenditures.

This research argues that the impact of assortment pricing on choice is influenced by the availability of articulated consumption goals and their consistency with a consumer's resource-allocation goals. In this context, I propose that in the presence of an active resource-allocation goal, consumers who cannot readily identify their most preferred option will be aided by non-parity pricing

because it will help them to differentiate the available alternatives. In contrast, for individuals who can readily identify their most preferred option, the impact of differential pricing on choice will be a function of the degree to which options' prices match individual consumption goals. Thus, when consumption and resource-allocation goals favor the same alternative, differential pricing is likely to facilitate choice. In contrast, when resource-allocation and consumption goals favor different alternatives, non-parity pricing is likely to have an adverse impact on choice.

To illustrate, consider a consumer whose goal is to indulge herself after a work-related success by splurging on a delicious dessert. In this context, she is likely to search for the option that satisfies both consumption and resource-allocation goals. Based on the degree to which she has articulated dessert preferences, there are two possibilities. First, imagine that this consumer does not have articulated preferences; that is, she finds several options to be very attractive and is unsure which of the available desserts she will enjoy most. This research argues that in this case she might find it easier to make a choice when options vary in price, since in the absence of articulated product-related preferences the dispersion of options' prices can serve as a reference point for goal fulfillment. Thus, consistent with her intent to splurge, she might simply choose the highest priced option. In contrast, when options are equally priced, the choice becomes more complicated because of the uncertainty associated with identifying an option that best satisfies this consumer's goals. Therefore, I argue that for consumers without articulated preferences, differential pricing is more likely to facilitate choice than equal pricing.

Now imagine that this consumer has articulated preferences and finds one of the desserts, say *crème brûlée*, to be more attractive than the other available options. I propose that in this case her choice is likely to be influenced by the dispersion of prices across different options. This scenario implies three different option-price patterns. First, when options are priced at parity, this consumer's decision will be guided by her articulated preferences and she can readily choose her favorite *crème brûlée*. When options' prices vary, however, her decision will be influenced by the price of her ideal option relative to the other options in the set. Thus, when the *crème brûlée* is the most expensive dessert on the menu, she is likely to choose that option not only because it is her ideal dessert but also because it satisfies her desire to splurge. Therefore, this research argues that in this case differential pricing is more likely to facilitate choice than when options are priced at parity.

Finally, consider a scenario in which the *crème brûlée* is the least expensive dessert. In this case, the consumer is likely to experience goal conflict, whereby the option favored by the consumption goal (*crème brûlée*) is not the option favored by the resource-allocation goal. As a result, this consumer will have to trade off the two goals in order to make a choice. I propose that the presence of a goal conflict induced by differential pricing is likely to “hurt” choice. Consequently, this consumer will be less likely to identify a single most attractive option and will be more likely not to make a choice than when options are priced at parity.

The above rationale can also be applied to a scenario in which a consumer's resource-allocation goal is to save rather than spend money. In the absence of articulated consumption preferences, differential pricing is more likely (relative to equal pricing) to facilitate choice by identifying the option that best matches this consumer's desire to save money. In contrast, when this consumer has articulated consumption preferences, differential pricing will “help” choice when the most preferred option is also the least expensive and will “hurt” choice when the most preferred option is the most expensive.

The proposition that the impact of assortment pricing on the strength of preferences is a function of the availability of articulated consumption goals and their consistency with a consumer's resource-allocation goals is empirically tested in two experiments. The first experiment shows that in the absence of articulated consumption goals, equally priced assortments led to stronger preferences than did differentially priced assortments. In the presence of articulated consumption goals, however, strength of preferences was a function of the consistency of an individual's consumption and resource-allocation goals, such that price-differentiated assortments in which goals were consistent resulted in stronger preferences than did equally priced assortments. In contrast, price-differentiated assortments in which consumption and resource-allocation goals were inconsistent resulted in weaker preferences than did equally priced assortments. Building on these findings, the second experiment further documents that the impact of consistency of consumption and resource-allocation goals on strength of preferences is a function of individuals' need for justification. Thus, the data show that price-differentiated assortments with inconsistent consumption and resource-allocation goals were more likely (relative to goal-consistent assortments) to lead to choice deferral when respondents were explicitly asked to provide the rationale for their decisions. The data analysis is followed by a discussion of the theoretical contributions and managerial implications of this research.

"Principles or Probabilities: When Value Overshadows Expected Value"

Oleg Urminsky, Columbia University
Ran Kivetz, Columbia University

Most theories of decision-making, normative and descriptive, assume that people consider the probability of uncertain outcomes (e.g., Kahneman and Tversky 1979; Savage 1954). However, in many real-world situations, the relevant probabilities are implied rather than explicitly stated. The current research argues that, when facing implicit uncertainties, consumers are more likely to rely on salient psychological cues than on likelihood considerations. Such salient cues often co-vary with probability estimates; for example, when a reward is contingent on greater requirements, earning the reward is both more effortful (a psychologically salient cue) and less probable. Critically, such cues often evoke decision principles (e.g., justice) that are diametrically opposed to probability judgment. The current paper examines exactly such situations in which principle and probability conflict. It is shown that different consumer mindsets may foster decisions based on either principles or probabilities.

A series of experiments investigated this conceptualization by considering how the effort required to earn a reward influences consumers' sensitivity to the magnitude of that reward. It is first argued that consumers should (normatively) care less about the magnitude of the reward when the required effort is high, because higher effort implies lower probability and frequency of attaining the reward. Accordingly, it is demonstrated that prompting consumers to consider their likelihood of completing the required effort stream decreases their sensitivity toward the magnitude of the reward.

For example, in one study, consumers were told that they could earn a reward after they completed a certain number of surveys online. The required effort was completing either five or fifteen online surveys and the proffered reward was either \$100 or \$250 (both factors were manipulated between-subjects). One group of consumers was asked to consider the likelihood that they would complete the required effort prior to deciding whether to join this "online survey program." These consumers (obviously) estimated

a higher likelihood of completion in the low (5 surveys) than high (15 surveys) condition. Consistent with normative theory, these probability-prompted consumers were significantly more sensitive to variations in the reward size when the reward was contingent on completing five rather than fifteen surveys. Specifically, in the five-required-surveys condition, increasing the reward from \$100 to \$250 led to a significant increase of 15% in the decision to join; in contrast, in the fifteen-required-surveys condition, increasing the reward led to a negligible increase of 1% in the decision to join.

A diametrically opposed preference pattern arose for consumers who considered their likelihood of completion only after deciding whether to join the program. For such consumers, effort is a more salient cue for the decision to join than the corresponding (and implicit) probability of completion. Further, the evaluation of effort and reward evokes a compelling justice principle or reason for choice (Prelec and Herrnstein 1991; Shafir, Simonson, and Tversky 1993), namely equity (Adams 1965). According to the equity principle, outcomes should be proportional to inputs, which implies that increasing the required effort will sensitize consumers to the reward magnitude ("when the effort required of me is high, I deserve a large reward"). Indeed, when consumers were not prompted to consider completion probabilities, increasing the reward from \$100 to \$250 led to a significant increase in joining rates under high but not low effort requirements (27% vs. 3%).

The paper investigates additional decisions under uncertainty that exhibit probability neglect. Consistent with a principle of "post-reinforcement pause," it is shown that consumers prefer programs that offer a bundle of (non-complementary) rewards at the end of the effort stream ($e^{\circ}e^{\circ}e^{\circ}e^{\circ} \Rightarrow r_1^{\circ} \text{ \& \ } r_2^{\circ}$) rather than identical rewards spread throughout the effort stream ($e^{\circ}e^{\circ} \Rightarrow r_1^{\circ} \Rightarrow e^{\circ}e^{\circ} \Rightarrow r_2^{\circ}$). Here, too, consumers use the relationship between effort and reward as a salient psychological cue. Specifically, consumers seek to "shield" the pleasure of rewards from the dread of future efforts (cf. Prelec and Loewenstein 1998).

A series of studies supported the prediction that consumers prefer to receive rewards after—rather than throughout—the effort stream. In several tests, consumers were asked to indicate the likelihood that they would join a particular program, which offered rewards that were timed either after or during the effort stream (manipulated between-subjects). In other tests, consumers were asked to choose between two effort-reward programs. One of the programs served as a reference option and was held constant across conditions; a second (test) program was manipulated between-subjects and offered rewards either at the end or throughout the effort stream. The experimental design was as follows: (1) both conditions (reference program): stay 10 nights at a hotel \Rightarrow earn 5000 frequent flyer miles; (2) condition I (test program): stay 10 nights \Rightarrow earn \$50 merchandise certificate and one free night; (3) condition II (test program): stay 5 nights \Rightarrow earn \$50 merchandise certificate \Rightarrow then stay 5 more nights \Rightarrow earn one free night.

The results indicate that the test program was significantly more likely to be chosen (over the reference program) when the rewards were scheduled after rather than throughout the effort stream (i.e., in Condition I versus II, respectively).

While this preference structure is consistent with a principle of post-reinforcement pause, it violates dominance and negates likelihood considerations. For example, compared to a program that offers "spread rewards," a program that schedules all rewards at the end of the effort stream lowers the chances of reaching even a single reward. Indeed, respondents who were prompted to consider their probability of reaching rewards before making choices preferred programs with spread rewards. This reversal is consistent with the notion that consumer mindset can switch between probability and principle.

The paper investigates additional situations in which decision-making oscillates between probability and principle. The current research also examines the different types of mindsets and goals that influence whether consumers rely on probability versus compelling reasons and principles. The theoretical implications of this research are discussed.

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SPECIAL SESSION SUMMARY

Global Consumption: (How) Does Culture Matter?

Cristel Antonia Russell, San Diego State University
Ana Valenzuela, Baruch College

SESSION OVERVIEW

The marketplace has become a global playground: Global products, brands, and symbols are part of the everyday life of consumers around the world. Nevertheless, consumers' reactions and evaluations towards these global entities are not always the same... or are they? Cultural identity and values may affect the perception, judgment and choice of global consumption offerings. The overall adoption of global products or even their "universality" may, at the same time, blur cultural differences and generate a more homogenous "global consumer".

Although there is a growing interest in global consumption issues in the 21st century, relatively little is known about the generalizability of consumer behavior theoretical frameworks across diverse cultures. With the growing trend in the globalization of marketing activities, there is a pressing need to explicitly address whether existing frameworks are universal or laden with assumptions derived from Western cultures. The recent spurt of cross-country research in both marketing and social psychology supports the need to examine the role of cultural orientation in judgment and choice. The cultural psychology literature, for example, highlights the differential influence of cultural orientation on persuasion processes (e.g., Aaker and Maheswaran 1997), decision making (e.g., Briley, Morris, and Simonson 2000), causal attributions (e.g., Choi, Nisbett, and Norenzayan 1999), and social perception (e.g., Triandis 1995).

Despite the practical impetus and the growing theoretical interest in cultural psychology, relatively little work examines the effect of cultural variables on the acceptance of global products, brands, and symbols. The three papers in this session constitute a step forward in that direction. All three papers not only explore how culture affects consumer perceptions and choice of global brands and products but also how consumer choices may influence cultural identity as well. Despite their reliance on diverse methodologies, the papers are complementary and share a common focus on examining the relationship between cultural identities, consumer choices and, in general, consumption practices.

In the first paper, Askegaard discusses the changed role of the concept of culture in an age of cultural reflexivity. He argues that cultural reflexivity is increasingly prevalent as a social phenomenon, and that this has important consequences for the way in which consumer researchers must deal with processes of globalization. In the second paper, Erdem, Swait and Valenzuela examine cross-national cultural differences in consumer behavior in regard to brands as global signals. Their cross-cultural empirical analysis reveals that cultural dimensions impact the extent and the type of global brand effects. In the third paper, Russell and Russell draw upon the notions of cultural acceptance and resistance to articulate and test different mechanisms by which consumers respond to offerings in the global entertainment industry. The moderating effect of country of origin and cultural salience are tested experimentally in a cross-cultural setting.

Russell W. Belk briefly summarized the overlapping points across the three papers. Together, these three papers highlight the important influence of cultural orientation and cultural salience on consumers' responses to global products and symbols and begin to account for whether and how culture affects and is affected by

consumers' consumption practices. To extend the discussion, Russell Belk showed some Chinese-based videos that provided examples of global consumption symbols. To finalize the session, the audience participated in a discussion of areas of future research in the topic of global consumption and of the role that culture plays in influencing marketing effectiveness and choice decisions.

"Culture as the Water Fish Swim In? Consumption, Reflexivity and Globalization"

Søren Askegaard

The current accelerated phase of globalization refers to a period with changing and increasingly rapid global flows in which boundaries across national cultures are dissolving and the landscapes they demarcate are transgressed by new virtual "culturescapes" of technology, media, finance, mixed ethnicities and ideas (Appadurai 1990). Cultural encounters proliferate, which has led to an increasing interest in the identity-constructive processes in the globalising world, not least through processes of consumption (Friedman 1994). Various studies have addressed the specific marketing and consumption issues of this multicultural world (Costa and Bamossy 1995, Howes 1996) and the term "consumptionscapes" has been suggested to indicate the role of consumption as a global flow on top of those proposed by Appadurai (Ger and Belk 1996).

These, and related studies have brought the theoretical debates far beyond the discussions of the process of globalization centered around the themes of homogenization and heterogenization, standardization and adaptation so prevalent within the marketing literature. Especially intriguing in bridging the gap between such dichotomies has been theories of 'structures of common differences' (Wilk 1996) and "the globalization of fragmentation" (Firat 1997), both essentially incorporating homogenization as well as heterogenization processes in order to provide a more satisfactory explanation of the societal changes occurring as a result of the globalization process. Consequently, simplistic dichotomous explanations must be eschewed and classificatory systems such as global-local, East-West, and foreign-domestic must be used with some caution. This clearly has methodological implications for consumer and marketing research in relation to globalization.

Based on globalization theory, it is argued that reflexive culture is an idiom for the expression of a new type of consumer agency potential, a cultural response in a time where national and transnational political-economic entities no longer hold the same legitimacy and power to socialize through the provision of integrating values with which citizens can affiliate. Cultural reflexivity and its attendant consumption patterns may be turning into a general claim to integration and differential identity in an increasingly homogenized (marketized) global political economy. One of the most striking features about contemporary transnational consumer subculture is the fact that it is constructed through a process of marketplace *bricolage*. In other words, the essence of reflexive culture is that it produces and sustains new cultural identities through consumption of marketized and commodified cultural forms: food, attire, art, music, dance, architectural environments, and so forth. Thus, the situational and often ritualized performance of reflexive cultural identities becomes a critical mechanism of

cultural (ethnic, historical,...) boundary formation and maintenance. Hence it can be argued that in a globalizing consumer society, culture increasingly becomes something that is resulting from and hence explained by consumption practices rather than the inverse.

Identification through cultural reflexivity and ethnically bounded consumption may be the sign of a generalized wavering between affiliation with some future post-national world community as yet unformed, or the acceptance of homogenized mass consumption, or the development of (consumer) counter-cultures of resistance. Robertson proposes that we speak of “glocalization” since both homogenizing (globalizing) and heterogenizing (localizing) processes are part and parcel of globalization. Some of the manifestations of glocalization have been conceptualized as instances of ‘creolization’ or ‘hybridization’ which are essentially new cultural forms that emerge as the global is incorporated within the local (Pieterse 1995). The new cultural forms are seen as mixes of different often seemingly incompatible cultural symbols and practices but which nevertheless are considered local in meaning in the conduct of everyday life.

Glocalized consumption practices can be typified around two dimensions—scope and compatibility. Scope basically is a geographical dimension—i.e. whether the consumption practice is logically available on a global scale or whether it is logically tied to a specific geographical locality. Compatibility refers to the ‘fit’ certain consumption practices have with other consumption practices, that is, which practices can and cannot be changed, added to, fused etc. The decisive difference is the practice’s dependence on what is considered a pre-existing script describing the essentially culturally correct way of conducting it.

Based on ethnographic, observational and interview-based studies, the impact of cultural reflexivity on consumption practices is illustrated by the globalization process of yoga culture. This includes both reflections on how this ancient tradition is adopted into modern, Western consumer cultures, as well as how processes of glocalization and modernization are simultaneously changing the image of yoga in one of its cultures of origin: Nepal.

“Brands as Global Signals: A Cross-Country Study”

Tulin Erdem, Joffre Swait, and Ana Valenzuela

Brands potentially play many roles in consumer decision-making and choice behavior. Underlying many of the brand effects is consumer uncertainty about product attributes, and/or benefits, which arises from the existence of imperfect and asymmetric information that characterizes many product markets (i.e., firms are more informed about their own products than consumers). Thus, brands can play an important role in how consumers learn, encode and evaluate product information (e.g., attributes), and can influence consumer evaluations of both relative values of attributes/levels and decision strategies or combination rules.

Past research has already attempted to link consumer choices to a number of cultural dimensions. Particularly, Hofstede’s (1980) influential work on cross-cultural value systems identifies three aspects of cultural identity that can be related to brand choice, in general, and brands as credible signals, in particular: collectivism/individualism, uncertainty avoidance and power distance. Although Hofstede’s research was conducted in organizational settings, the values he identifies have been widely associated with consumer behavior. For example, Hofstede’s values have been associated with consumer’s tipping behavior (Lynn, Zinkhan and Harris 1993), country of origin effects on product evaluations (Gurhan-Canli and Maheswaran 2000), value-attitude relations (Gregory, Munch and Peterson 2002), persuasion effects (Aaker and Maheswaran 1997), consumer innovativeness (Steenkamp, Hofstede

and Wedel 1999) and behavioral intention models (Lee and Green 1991).

The individualism-collectivism dimension relates brand usage to social motivations (Hofstede 1980; Triandis 1995). Cultures high in individualism tend to seek variety and hedonistic experiences, whereas cultures high in collectivism correlate more with conformity and group behavior. Roth (1995) found support for the hypotheses that collectivist cultures find brands that reinforce group membership and affiliation more attractive, whereas individualistic cultures favor brands that reinforce their independence and provide individual gratification. Besides, collectivist societies value consensus and that makes them loyal to the dominant brand (Robinson 1996). Finally, research into the symbolic meaning of brands indicates that brand names have a higher symbolic meaning in collectivistic societies (Johansson, Ronkainen and Czinkota 1994).

Another cultural dimension, power distance, describes the extent to which a culture fosters social inequality. If one relates the aspects of cultural power distance to consumer needs, then it appears that social brand images should be the best fit for high power distance cultures since people are highly motivated by social status and affiliation norms. On the other hand, when power distance is low, social brand images will not match the cultural norm because consumers would not be motivated by group-related needs. In other words, products with recognized, exclusive, relatively expensive brand names will tend to have higher levels of social status attached to them than more generic, less exclusive brands. Given the relationship between brand name and social status, past research shows that consumers in cultures rating high in power distance attach more importance to the brand names of products than would consumers in cultures rating low in power distance (Bristow and Asquith 1999; Roth 1995; Robinson 1996).

The potentially most relevant cultural mechanism (given our focus on brands as signals) is uncertainty avoidance. This concept captures the cultural pattern of seeking stability, predictability, and low stress rather than change and new experiences. People in high uncertainty avoidance cultures are risk averse and resistant to change and variety seeking (Hofstede 1980). When cultures are high in uncertainty avoidance, consumers focus greatly on risk aversion and problem solving. As a consequence, consumers in cultures high in uncertainty avoidance favor credible and consistent brands more than consumer in cultures low in uncertainty avoidance (Robinson 1996; Dawar and Parker 1994).

A final cultural dimension that may moderate the effects of brands as signals is the value of time across cultures: Time constraints and the motivation to save time have been associated with the preference for brands with clear and credible positions (Wind 1977). For example, the consumer behavior literature has advanced the proposition that consumers under time pressure adopt brand loyalty as a strategy for avoiding the risks and demands associated with trying new brands (Howard and Sheth 1969). At the same time, there is some evidence that a time orientation based on the value of past-time and continuity (as in the case of eastern cultures) tends to make consumers very brand loyal (Yau 1988).

This review reveals that cultural dimensions may indeed impact the extent and the type of brand effects but given the many (sometimes counteracting) considerations, it is an empirical question whether overall such cultural dimensions lead to significant differences in behavior towards brands in general and the mechanisms through which the signaling effects of brands materialize in particular. We conduct our analysis using survey and experimental data on orange juice and personal computers. Data was collected from subjects in the U.S., Spain, Turkey, Germany, Brazil, India and Japan. We chose these countries to represent a wide range of

Hofstede's cultural dimensions (1980). The results obtained provide strong empirical evidence for brands as signals of product positions across countries that vary widely along various cultural dimensions. However, some differences emerge that are further discussed in detail.

“One Part Salience, One Part Origin, Stir, Sprinkle with Acceptance and Resistance, Bake for One Century and Voila: A New Cultural Casserole!”

Dale Russell and Cristel Antonia Russell

This paper presents the results of several cross-cultural investigations of consumers' reactions to entertainment products in an increasingly global entertainment industry. It is motivated by increasing concerns, particularly in Europe, over the Americanization of the global entertainment industry (Cowen 2002) and the potential power of US movies to instill local cultures with American ideals and values (Silj and Alvarado 1988). The research identifies and tests the processes by which global audiences respond to domestic versus foreign movies.

The acceptance proposition suggests that foreign movies may seem exotic and attract local audiences' interest. Consuming stories and fiction from other cultures has indeed been shown to increase openness to other cultures (Fox 2003), which in turn leads to greater acceptance of foreign products (Suh and Kwon 2002). This phenomenon is especially pertinent in the experience of TV series and movies, which are, by nature, contextually interpreted and culturally mediated (Salomon 1985; Abu-Lughod 1997). Alternatively, audiences may resist cultural products from other cultures simply because they cannot relate to them or are not familiar with the cultural schemas being depicted. In particular, non-American audiences may reject overpowering US movies, especially when reminded of the presumed cultural colonization of the US through film and television (Mathy 2000).

Based on an extant review of the literature, we propose that making the other culture salient should have opposite effects in the US and in Europe: by increasing acceptance of foreign products in the US and increasing resistance to American products in Europe. These propositions, and the moderating role of country of origin and cultural salience, were tested experimentally in a cross-cultural setting, comprised of American and French samples. Study 1, a cross-sectional survey, served to establish a baseline of cultural differences in movie consumption between France and the US. Study 2 experimentally manipulated country of origin of a movie and cultural salience in both countries to further understand the acceptance and resistance processes.

Cross-sectional data from study 1 confirmed that the ratio of domestic to total movies watched was greater in the US than in France. They also showed that ethnocentrism is associated to resistance to foreign movies whereas global openness is positively related to consumption of and desire for watching foreign movies. They also confirmed that animosity exists in both countries toward the other one, a situation that justified manipulating country of origin in Study 2.

Study 2 relied on a 2 (respondent country: US vs. France) X 2 (cultural salience: self or other) X 2 (movie origin: domestic or foreign) between-subject experimental design to test the effect of cultural salience and country of origin of a movie cross-culturally. Participants were asked to react to the synopsis of a new movie from their own or another country. Cultural salience was manipulated by making respondents aware of their own or of another culture before exposing them to the movie information (Briley and Wyer 2002). The experiment showed that reactions to the movie were affected by cultural salience but in different ways: prompting US respondents about French culture made them more likely to recommend the

French movie; however, prompting French respondents about the US culture made them less likely to recommend the US movie. These results were confirmed by the pattern of animosity scores across conditions: animosity was greater overall in France than in the US but exposure to a US movie further increased animosity among the French.

The studies' findings confirm that US movies dominate the global cinema scene commercially and this domination clearly affects consumers' movie choices. US respondents, though rarely aware of non-US movies, responded positively to foreign films when another culture was salient. French respondents have culturally diverse movie experiences but appear to resist the invasion of US movies only when prompted to think about the US culture. Implications for the global intertwining of cultures and entertainment products' role in shaping consumers' cultural repertoire and self identity were discussed.

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Not all Sponsors are Created Equal

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EXTENDED ABSTRACT

As the nonprofit sector becomes increasingly competitive, it is critical for nonprofit organizations to become more brand centered and clearly differentiate themselves. Although an abundance of empirical work focuses on developing strategies for creating strong brands and demonstrates the concrete benefits of doing so (Aaker 1991; Keller 2000; Keller 1993), most of this work implicitly addresses the for-profit sector. There is very little empirical work that addresses strategies for nonprofit organizations.

One way for-profit firms have successfully differentiated and leveraged their brands is through branding alliances, such as co-branding, brand extensions and sponsorships. Given that many nonprofit organizations receive a significant portion of their income from strong, branded corporate partners, brand alliances, specifically sponsorships, could prove to be quite powerful for nonprofit organizations. Through two studies we demonstrate that sponsorship can be used to positively influence brand image, brand credibility, perceptions of risk, brand feelings and ultimately behavioral intentions.

There is significant evidence that sponsorship programs provide many benefits to firms, including: 1) enhancing/reinforcing firm brand associations, 2) strengthening competitive positioning, 3) creating favorable affect, and 4) aligning social and economic goals (Gwinner and Eaton 1999; Gwinner 1997; Madrigal 2000; Porter and Kramer 2002; Simmons and Becker-Olsen 2003; Speed and Thompson 2000). We know that certain conditions must be met in order to maximize the positive impact of a sponsorship program for a firm and that there are even times when the effects of a sponsorship program can attenuate firm specific associations and positioning. Four factors that have been identified as moderating forces in the sponsorship relationship are personal interest in the cause (Gwinner and Swanson 2002; Sen and Bhattacharya 2000), firm reputation (Johar and Pham 1999; Speed and Thompson 2000), perceived motive (Speed and Thompson 2000; Webb and Mohr 1999) and fit (Madrigal 2000; Simmons and Becker-Olsen 2003; Speed and Thompson 2000). Our interest in this work is primarily the fit dimension.

We know from the branding, sponsorship and endorsement literature that fit (e.g., between a brand and its extension, or brand and endorser) influences consumer evaluations of products/brands. Specifically, when fit is high consumers experience cognitive consistency and generally respond more favorably than when fit is low (Aaker and Keller 1992; Boush and Loken 1991; Broniarczyk and Alba 1994; McCracken 1998; Speed and Thompson 2000; Simmons and Becker-Olsen 2003). When fit is low consumers experience cognitive inconsistency which negatively influences their responses and an attenuation effect occurs (Meenaghan 2002; Porter and Kramer 2002; Simmons and Becker-Olsen 2003; Speed and Thompson 2000). These lower evaluations are likely to have resulted because consumers value consistency in their thoughts (Meyers-Levy and Tybout 1989), and inconsistency can spark negative attributions and negative affect toward both partners in the sponsorship.

In study 1 we find that high-fit sponsorships positively influence all of our dependent measures (brand image, brand credibility, perceived risk, brand feelings, and support intentions) while low-fit sponsorships decrease favorability of overall attitudes, brand image

and brand feelings of sincerity and support intention, but do not have an impact on brand credibility or risk reduction.

In that it is not realistic to think that most nonprofits will refuse funding from or limit their sponsor base to companies that have a strong natural strategic fit with their organization, we believe that it is possible for a nonprofit organization to use their supporting communications to *create* a fit between the organization and the firm. This fit is created with specific communication details, thus allowing nonprofits to accept and even seek out funds from naturally low-fit sponsors without diluting their brand.

In study 2 we find that creating fit via sponsorship communications we are able to boost the favorability of responses for intrinsically low-fit sponsorship programs. Similar to high fit, created fit increases the favorability of responses for brand image, brand credibility, risk, brand feelings of sincerity and behavioral intentions related to financial contributions. Interestingly we found no change in behavioral intentions related to volunteering or recommending to organization. Thus, if the organization is one that relies heavily on volunteerism, such as Habitat for Humanity, creating fit may not help to attract more volunteers. If however, the organization is engaging in a capital campaign, creating a strong fit between large corporate donors and the organization may encourage individual donors to contribute financially.

We clearly show that nonprofits can use sponsorships to realize greater long-term brand benefits such as a stronger competitive position, increased credibility, more loyal donors and a steady stream of donor income that ultimately allows the organization to better address their social issue.

The Balance Theory Domino: How Sponsorships May Elicit *Negative* Consumer Attitudes

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ABSTRACT

Previous research has shown that fan identification with an entity contributes to a positive attitude toward companies that associate with that entity. In this study, we examine if sponsorship of an entity they *dislike* may actually alienate consumers and make them look at the sponsoring company in a less favorable manner. We surveyed NASCAR fans and found that, while there is a strong positive connection between attitude toward their favorite driver and attitude toward that driver's sponsor, the reverse was true as well. That is, respondents' attitudes for brands that sponsor their least favorite driver appear to be negatively impacted.

INTRODUCTION

Companies continue to increase their expenditures on sponsorships with hopes that positive emotions toward a property (e.g., sporting event, sport team, arts organization) will transfer to the sponsoring brands, therefore enhancing brand image and resulting in positive outcomes for the sponsors (Crimmins and Horn 1996; Gwinner 1997; Gwinner and Eaton 1999; Miyazaki and Morgan 2001). The magnitude of sport sponsorship is particularly impressive; according to the International Events Group (IEG), the leading sponsorship organization, even during the recent slowing down of the American economy, sponsorship continued to grow. Specifically, 30% of the companies surveyed indicated that they allocate 11-20% of their marketing budgets to sponsorship, compared to only 18% of respondents spending 10% or more of their budgets on sponsorship in 2001 (IEG Sponsorship Report 2003). Such growth is not limited to just the United States; sponsorship spending worldwide exceeds \$20 billion per year (Ukman 1999). Consequently, the need to demonstrate the effectiveness of sponsorships is becoming increasingly important.

Fan identification with the sponsored property has been found to be an important factor that influences response to sponsorships; highly identified fans tend to have more favorable attitudes toward sponsors and are more likely to use the sponsor's products (Dalakas and Kropp 2002; Madrigal 2000; Madrigal 2001). Sports organizations with strongly identified fans make a point of using the fans' identification as a way to attract potential sponsors.

Previous research has examined how a fan's identification with a sports team or an athlete makes consumers like the companies associated with that team or athlete. However, no attempt has been made to study if a company's sponsoring a sports property in hopes of winning consumers, in some cases may actually alienate consumers and make them look at the sponsoring company in a *less favorable* manner. Previous research has called for further investigation of this question by recognizing that fan identification might elicit negative attitudes toward sponsors of rivals (e.g., Dalakas and Kropp 2002). This can be particularly relevant in cases where fans' strong identification with one team or athlete is likely to elicit strong disliking for rival teams or athletes, and consequently, their respective sponsors.

Our study examines how fans' strong attachment to one entity is associated with negative attitudes toward competing entities, and whether this negativity translates into more negative attitudes towards the sponsors, thus, reducing the impact of a sponsorship. NASCAR provides a great context for this because it allows national companies from the same industry to sponsor competing racing teams. For example, Dale Earnhardt Jr. is sponsored by

Budweiser while rivals Sterling Marlin and Rusty Wallace are sponsored by other beer companies (Coors Light and Miller Lite respectively). Similarly, Tony Stewart is sponsored by Home Depot while competing driver Jimmie Johnson is sponsored by Lowe's.

The aforementioned discussion stresses that a company's decision to sponsor a team with fans that are extremely passionate, either positively or negatively should be carefully considered. This research topic merits further examination. Therefore, our study makes a meaningful contribution to the field by concentrating on whether or not sponsorships may backfire and actually elicit negative rather than positive attitudes.

BACKGROUND

The strong impact of fan identification on response to sponsors can be linked to Heider's balance theory (1958; also see Crimmins and Horn 1996). Consumer psychologists Eagly and Chaiken state that "balance theory has proven to be one of the most enduring of the theories that have been applied to attitudinal phenomena, and it has been pursued with considerable rigor" (Eagly and Chaiken 1993, p. 144). Balance theory claims that people, in general, prefer to have balance, order, and harmony in their lives. Therefore, every time there is imbalance, people would change their attitudes and/or behavior in a way that would restore balance. As a result, individuals will tend to like whatever is associated with what they already like and will tend to dislike whatever is associated with what they already dislike; otherwise, there will not be balance. The commonly known statements "my friends' enemies are my enemies" and "my enemies' enemies are my friends" illustrate nicely the key premise of balance theory.

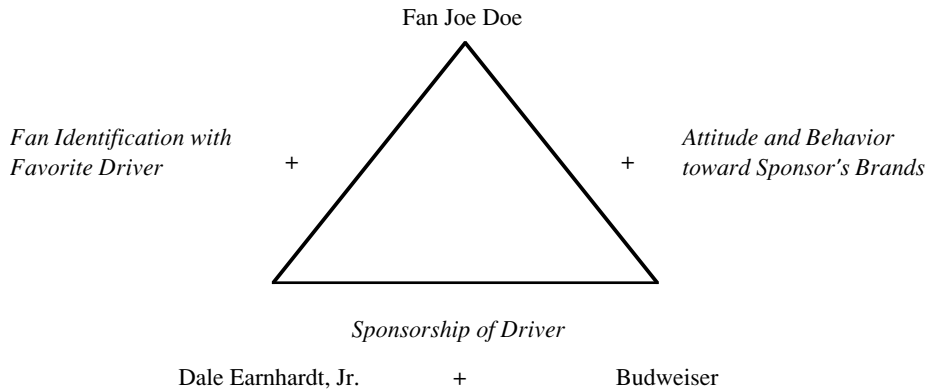
Within the context of sports and sponsorship, the implications of balance theory are straight-forward. When fans have a strong attachment to a sports team or athlete, the fans will have similarly positive attitudes toward the sponsors that become associated with their favorite team or athlete. The stronger the attitude toward the original object (in this case, the sports team), the more likely it is that this attitude will impact in a similar fashion whatever is associated with that object (in this case, the sponsor). This mechanism explains previous research findings linking fan identification to positive attitudes toward sponsors (e.g., Madrigal 2000; Madrigal 2001).

An analogous process is likely to occur when fans strongly *dislike* a sports property. The fact that many fans have very strong negative attitudes towards certain teams or athletes is well-established. The competitive nature of sports facilitates development of such attitudes (Hack 2002). Zillmann, Bryant, and Sapolsky (1989) found that in competitive contexts like sports, fans derive enjoyment by witnessing victory of their favorite party *and also* by witnessing failure and defeat of a disliked competing party. This explains why die-hard fans are elated when their favorite team beats a hated rival and, similarly, they are distraught when losing to a big rival.

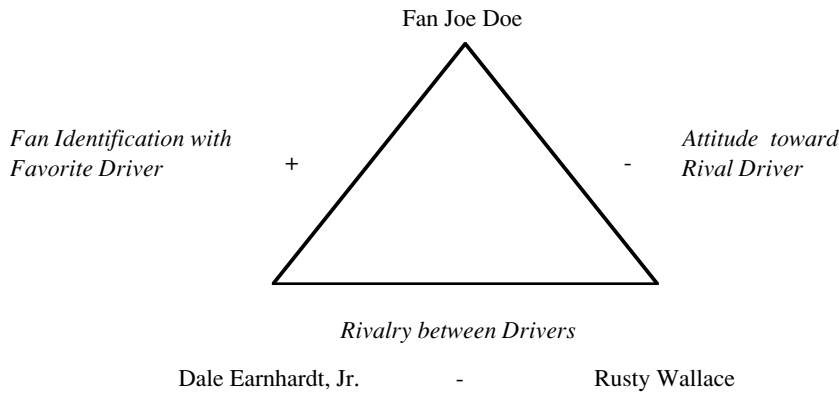
According to the premises of social identity theory (Hogg and Abrams 1988; Tajfel and Turner 1986), people define their identity in terms of the groups they like and, consequently, use a social categorization process of "us" and "them." The "mere perception of belonging to two distinct groups—that is, social categorization per se—is sufficient to trigger intergroup discrimination favoring the in-group" (Tajfel and Turner 1986, p.13). Based on this theory, we

FIGURE 1
Conceptual Links Between Balance Theory and Sponsorship Responses

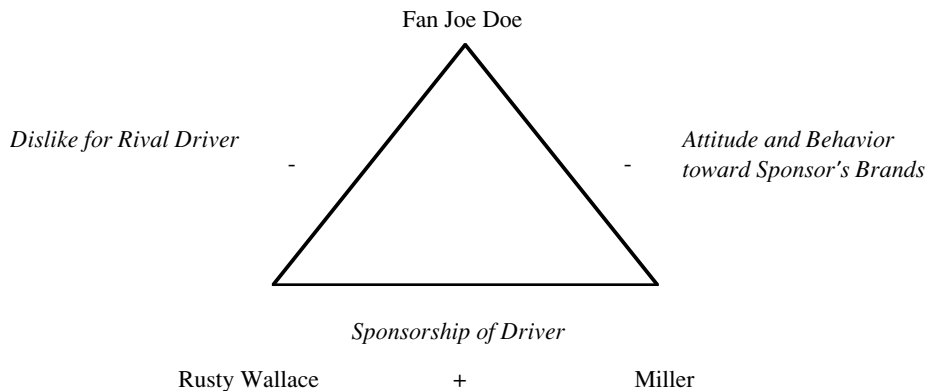
Panel A: Identification with Favorite Driver and Responses to Driver’s Sponsors



Panel B: Identification with Favorite Driver and Dislike for Driver’s Rivals



Panel C: Dislike for Rival Driver and Responses to Driver’s Sponsors



expect highly identified fans to strongly dislike their team’s rivals. As soon as a sponsor aligns with one of the competing parties, fans of the other party have to dislike the sponsor of their competitor. Therefore, sponsorships in sports as well as any other context revolving around competition, runs the risk of alienating some consumers while winning others. Consequently, we expect that such strong dislike should translate into a similarly strong dislike of a rival team’s sponsors.

RESEARCH QUESTION AND HYPOTHESES

Based on our discussion of balance theory (Heider 1958) and sponsorships in NASCAR, we expect that strong liking for certain NASCAR drivers inevitably would create negative attitudes towards competing drivers, and, consequently, elicit negative attitudes towards these drivers’ sponsors. Figure 1 illustrates how each step of this process relates to the premises of balance theory.

Previous research has examined consumer response to sponsorships primarily based on the relations depicted in panel A of Figure 1. Our study expands on this research by extending the applicability of balance theory through the relations described in panels B and C. Our main new contribution to sponsorship research lies predominantly in testing the relations in panel C; we propose that, within a context of highly identified fans, sponsorships may backfire by eliciting negative attitudes in certain fans.

Therefore, we propose the following hypotheses:

- H1: Fans will have favorable attitudes toward the sponsor of their favorite driver (panel A).
- H2: Given their liking for their favorite driver, fans will have unfavorable attitudes toward other competing drivers (panel B).
- H3: Given their dislike for competing drivers, fans will have unfavorable attitudes towards the sponsors of drivers they dislike (panel C).

METHOD

Data Collection

We collected data from NASCAR fans attending the Kroger 300 Presented by Oreo race in June of 2002. The selected race is a NASCAR Busch Series Race; the Busch Series is the second tier in NASCAR racing, under the Winston Cup Series. Our data revealed that most patrons of the Busch Series race are also fans of NASCAR Winston Cup racing. The race took place at the Kentucky Speedway in Sparta, Kentucky.

Respondents were intercepted in the campground adjacent to the Kentucky Speedway. The surveys were administered from approximately 9:00 a.m. to 3:00 p.m. The Busch Series race began at 8:00 p.m. In order to ensure that people in the campground were fans that were going to the race, they were asked "Are you going to tonight's race?" as a screener question. We approached 287 fans to participate in the survey. Of that number, 17 did not qualify because they were not going to the race and 42 did not want to participate.

A total of 228 fans agreed to participate. We obtained complete surveys from 220 of them. Sixty-eight percent of the sample was male; 58% were married; 50% had annual household income of \$60,000 or more, with almost 20% reporting annual household income of \$90,000 or more. The average age of the respondents was 38.7 years.

Measures

First, subjects were asked "How passionate of a NASCAR fan would you say you are? (1=Not passionate at all and 10=Extremely passionate) Then, subjects were asked to indicate how often they attend NASCAR races as well as how many times they watch NASCAR on television.

The next section of the survey asked subjects to write down their favorite NASCAR Winston Cup driver. After identifying their favorite driver, each respondent's identification with that driver was assessed through a modified version of the Sport Spectator Identification Scale (Wann and Branscombe 1993). Given that the original scale was developed to assess fans' identification with a sports team, rather than an individual driver, questions were adjusted to apply to the context of this study. The scale had seven questions, each using a 1-10 scale. Sample questions included the following:

- How important is it to you that this driver wins?
- How big of a fan of this driver do you see yourself as?

- How often do you follow this driver through the television and the radio?
- How often do you wear or display material with this driver's name or picture or number at home or at work?

After completing the fan identification scale, subjects were asked "How likely are you to purchase and use products from a company that sponsors drivers you like?" The answer options ranged from 1=not likely at all to 10=extremely likely.

Next, subjects were asked to indicate who their *least* favorite NASCAR Winston Cup driver was, as well as who the sponsor of that driver is, followed by the following question: "How likely are you to purchase and use products from a company that sponsors drivers you dislike?" The answer options ranged from 1=not likely at all to 10=extremely likely.

Attitudes toward 11 of the best known NASCAR Winston Cup drivers were then assessed on a 10 point scale, where 1=extremely dislike and 10=extremely like. To compile the list of drivers to include, we used the results from the 2002 NASCAR Winston Cup Most Popular Driver Award voting (Smith 2002) and selected the ten drivers that had received the most votes. By the time the survey was prepared, more than 130,000 votes had been cast. The ten most popular drivers were (in order of popularity): Dale Earnhardt, Jr.; Tony Stewart; Bill Elliott; Jeff Gordon; Mark Martin; Ricky Rudd; Kyle Petty; Rusty Wallace; Kevin Harvick; Dale Jarrett.

We assumed that popular drivers would have a strong following but would also be likely to have people strongly disliking them because of rivalries with other popular drivers. In addition to these drivers, we also included Sterling Marlin in the survey because he was ranked first in the Winston Cup rankings at the time the survey was conducted.

The next part of the survey measured attitudes toward companies or brands that sponsor each of the aforementioned drivers. A 1-10 scale was used, where 1=extremely dislike and 10=extremely like.

Sample Characteristics

Overall, the respondents were quite involved NASCAR fans. On average, during the 2002 season, they had attended in person almost 2 Winston Cup (out of a possible 14 at that time) and 2 Busch Series races (out of a possible 16 at the time). It is worthwhile noting that, at that point, the closest Winston Cup race to the Kentucky Speedway was the one in Bristol, Tennessee, which is located approximately 350 miles away. This fact confirms that our participants were quite involved NASCAR fans, willing to travel considerable distances to attend races. In addition, they had watched about 6 Winston Cup races and 2 Busch Series races on television. When asked "How passionate of a NASCAR fan would you say you are," the respondents' average score was 8.0 (s.d.=2.3) on a 10-point scale, where 1 corresponded to "not passionate at all" and 10 corresponded to "extremely passionate."

RESULTS

Favorite Driver

When asked to identify their favorite driver, two drivers were noticeably above the rest: Dale Earnhardt, Jr. (with 34.1% of the fans) and Jeff Gordon (with 21.1% of the fans). The top 5 also included Mark Martin (8.6%), Tony Stewart (7.6%), and Dale Jarrett (5.9%).

Consistent with previous studies that have used the Sport Spectator Identification Scale (e.g., Dalakas and Kropp 2002; Madrigal 2000; Wann and Branscombe 1993), scale reliability in

TABLE 1

Average score on the identification scale summary measure by fans who listed a driver as their favorite

Driver	Average Score (on 10-point scale)
Dale Earnhardt, Jr.	7.66 (s.d.=2.25); n=63
Jeff Gordon	7.39 (s.d.=1.90); n=39
Mark Martin	6.87 (s.d.=1.82); n=16
Tony Stewart	8.34 (s.d.=1.53); n=14
Dale Jarrett	7.66 (s.d.=1.64); n=11

this study was high ($\alpha=.87$). Thus, a summary (average) score was computed. Overall, fans were quite highly identified with their favorite driver. The average score on the scale summary measure was 7.40 (s.d.=2.0) on a 10-point scale. Table 1 lists the average score on the identification scale summary measure for each of the five drivers with the most fans.

Testing Hypothesis 1

We tested our first hypothesis, that fans will have favorable attitudes toward the sponsor of their favorite driver, in two ways. Consistent with our predictions and with previous research findings, respondents indicated a strong likelihood to prefer products from sponsors of their liked drivers. The average response score to that question was 7.20 (s.d.=2.81). Overall, almost all of the respondents (93.6%) identified correctly the primary sponsor of their favorite driver, without any cue. For example, 96.8% of the fans who listed Dale Earnhardt, Jr. as their favorite driver, listed Budweiser as his primary sponsor.

We also examined fans' attitude scores towards numerous companies/brands including the ones sponsoring NASCAR drivers. Table 2 summarizes the respondents' attitudes toward the different companies by showing both the overall average attitude score and the average score among the fans who had listed as their favorite driver the sponsored driver for each brand.

In all cases, the average attitude score among the fans of the sponsored driver was higher than the overall average. In four of the five cases, the average among the driver fans exceeded a score of 9 out of 10. These findings again confirm our hypothesis by showing a strong favorable attitude towards the company sponsoring one's favorite driver. This is consistent with other research that sports fans tend to have positive affect toward sponsors of their favorite teams (e.g., Madrigal 2001).

Least favorite driver

Interestingly, Jeff Gordon also topped the list of *least* favorite drivers, being mentioned by 39.9% of the respondents. This finding was not surprising, given that there are even web sites just for Jeff Gordon haters, like "Fans against Jeff Gordon page" and "I hate Jeff Gordon page." Parsons (2001) attributes fans' negative attitudes toward Gordon to the fact that when Gordon won an amazing 33 Winston Cup Series races between 1996 and 1998, he beat many of the fans' favorite drivers, like Dale Earnhardt, Bill Elliott, and Rusty Wallace. Consequently, because of their identification with those drivers, many fans developed a strong dislike for Gordon that was confirmed by our findings. Other drivers that were mentioned as least favorite included Tony Stewart (12.8%), Rusty Wallace

(11.5%), Jimmy Spencer (9.5%), Sterling Marlin (8.8%), and Kevin Harvick (8.1%).

Testing Hypothesis 2

We tested our second hypothesis, that given their liking for their favorite driver, fans will have unfavorable attitudes toward other competing drivers by comparing attitudes toward a driver between the fans of that driver and the fans of competing drivers. We looked at attitudes in terms of overall average and also by whom a fan had identified as his or her favorite driver (only including drivers that were mentioned as favorite by at least 5% of the respondents). Table 3 summarizes the findings.

The findings are quite revealing: fans of certain drivers dislike certain other drivers. In some cases, this dislike is quite strong, as the average attitude score was below the mid-point of the 10-point scale. Most noticeable are the following dislike relationships: Dale Jarrett fans, Dale Earnhardt, Jr. fans, and Mark Martin fans disliking Jeff Gordon (average attitude scores toward Gordon of 2.50, 4.41, and 4.94, respectively), Jeff Gordon fans and Mark Martin fans disliking Tony Stewart (average attitude toward Stewart of 4.18 and 4.73, respectively), Jeff Gordon fans disliking Rusty Wallace (average attitude score of 4.22) and Mark Martin fans and Dale Jarrett fans disliking Kevin Harvick (average attitude of 4.67 and 4.90, respectively). These findings confirm our hypothesis that the competitive nature of NASCAR, like all sports, fosters rivalries and elicits negative feelings by fans of one driver towards competing drivers.

Testing Hypothesis 3

The third hypothesis stated that fans will have unfavorable attitudes towards the sponsors of drivers that they dislike. Because this was our most important hypothesis, we tested it in several ways.

First, we examined respondents' awareness of who sponsors their least favorite driver. Interestingly, fans were quite aware of the sponsors of the drivers they dislike with 83% of the participants correctly identifying the primary sponsor of their *least* favorite driver. This unusually high level of awareness for a driver who a fan actively dislikes may suggest that fans make an effort to know who sponsors the drivers they dislike in order to *avoid* supporting that company. When asked "How likely are you to purchase and use products from a company that sponsors drivers you dislike?", the average response was 4.3 on a 10-point scale, reinforcing this possibility.

In addition to the self-report measure listed above, we further tested hypothesis 3 by comparing the mean attitude toward sponsors between subjects who listed a driver as their favorite and those

TABLE 2
Attitudes toward sponsoring brands by all fans and by fans of sponsored drivers

Company/Brand	Average Attitude Score Among All Fans (n=220)	Average Attitude Score Among Fans of Sponsored Driver
Budweiser (Earnhardt)	8.49 (s.d.=2.48)	9.39 (s.d.=1.50) n=61
Dupont (Gordon)	6.50 (s.d.=3.25)	9.42 (s.d.=1.20) n=36
Viagra (Martin)	5.97 (s.d.=3.21)	7.62 (s.d.=2.87) n=13
Home Depot (Stewart)	7.53 (s.d.=2.72)	9.54 (s.d.=1.66) n=13
UPS (Jarrett)	7.80 (s.d.=2.60)	9.50 (s.d.=.85) n=10

TABLE 3
Mean attitude ratings toward a driver for fans of that driver and fans of competing drivers (standard deviations in parentheses).

Driver	Avg Attitude	Earnhardt Fans n=61	Gordon Fans n=36	Martin Fans n=13	Stewart Fans n=13	Jarrett Fans n=10
Gordon	5.49 (3.67)	4.41 (3.10)	9.18 (2.48)	4.94 (2.98)	5.33 (3.23)	2.50 (3.24)
Stewart	5.70 (3.10)	5.90 (3.42)	4.18 (2.45)	4.73 (2.96)	9.67 (1.15)	5.60 (2.01)
Wallace	5.32 (3.00)	5.05 (2.86)	4.22 (2.61)	6.69 (2.96)	5.42 (2.91)	6.50 (2.95)
Marlin	6.17 (2.84)	5.95 (2.83)	5.27 (3.05)	7.06 (2.21)	6.92 (2.61)	6.40 (2.63)
Harvick	6.29 (3.14)	7.36 (3.03)	5.84 (2.86)	4.67 (3.39)	6.17 (2.62)	4.90 (3.57)
Earnhardt	8.12 (2.32)	9.65 (1.35)	7.32 (2.36)	6.50 (2.03)	8.33 (2.10)	6.70 (3.02)
Martin	7.11 (2.36)	6.87 (2.49)	6.95 (2.44)	9.94 (2.25)	7.92 (1.68)	6.40 (1.71)
Jarrett	7.02 (2.53)	6.56 (2.51)	6.71 (2.66)	8.00 (2.22)	7.42 (2.31)	9.90 (.32)

TABLE 4

Mean ratings of brands sponsored by subjects' favorite and least favorite drivers, and correlations between attitude toward drivers and attitude toward brands

Driver	Sponsor	Mean rating of sponsor for all respondents (sd)	Mean rating of sponsor for subjects who chose this driver as their favorite (n)	Mean rating of sponsor for subjects who chose this driver as their least favorite (n)	Pearson correlation between attitude toward the driver and attitude toward the sponsoring brand
Dale Earnhardt Jr.	Budweiser	8.49 (2.48)	9.39 (61)**	5.20 (5)*	.370
Jeff Gordon	Dupont	6.50 (3.25)	9.42 (36)**	3.87 (52)**	.681
Tony Stewart	Home Depot	7.53 (2.72)	9.54 (13)**	6.67 (18)n.s.	.397
Kevin Harvick	GM Goodwrench	7.48 (2.76)	9.14 (7)**	4.64 (11)**	.535
Rusty Wallace	Miller Lite	5.96 (3.3)	6.00 (4)n.s.	3.60 (14)**	.289
Dale Jarett	UPS	7.80 (2.6)	9.50 (10)**	6.50 (2)n.s.	.412
Sterling Marlin	Coors Light	5.82 (3.24)	5.67 (3)n.s.	3.08 (12)**	.228
Mark Martin	Viagra	5.97 (3.21)	7.62 (13)*	1.00 (2)n.s.	.170
Overall Means		6.89 (1.44)	9.08 (147)**	4.31 (116)**	.385

For mean differences between favorite driver's sponsor/least favorite driver's sponsor and mean rating of sponsor for all respondents, **=significant at the .01 level and *=significant at the .05 level. All correlations (last column) are significant at .01, with the exception of the correlation between attitude toward Mark Martin and attitude toward his sponsor (Viagra), which is significant at .05.

who listed that driver as their least favorite. Only those drivers who received a combination of ten or more "favorite driver" or "least favorite driver" votes were included in the analysis. As Table 4 shows, fans who rated a driver as their favorite were significantly more favorable to the sponsor than those who listed that driver as their least favorite. Overall, fans rated brands that sponsored their favorite driver a 9.08 on a 10-point scale. Conversely, fans rated brands that sponsored their least favorite driver a 4.31.

With the exception of Sterling Marlin (Coors Light), the average attitude score among the fans of the sponsored driver was higher than the overall average, and the average attitude score among fans who disliked the sponsored driver was lower than the overall average. These findings again confirm a strong favorable attitude towards the company sponsoring one's favorite driver. The findings also suggest that the transfer of affect can be just as powerful between disliked drivers and their sponsors. It can be seen from Table 4 that mean ratings of sponsors for subjects who chose the driver as their favorite were significantly higher than mean ratings for all respondents, and mean ratings of sponsors for subjects who chose the driver as their least favorite were significantly lower than mean ratings for all respondents (most of the non-significant results can be attributed to small sample size). These differences are of approximately the same magnitude.

These results confirm H3 and provide support for the notion that balance theory can help explain how attitudes toward drivers impact attitudes toward sponsors. To further explore this relationship, a set of bivariate correlations was computed on all subjects' ratings of drivers and brands that sponsor those drivers. As the last column of Table 4 illustrates, all correlations were significant in the

predicted direction, showing support for the notion that fans tend to reward sponsors of drivers they like, and punish sponsors of drivers they dislike.

CONCLUSION

Our findings confirmed the hypothesis that sponsoring one property usually evokes positive attitudes from fans of that property but may also elicit negative attitudes by fans of other properties. Given the competitive nature of sports in general, this possibility extends beyond just NASCAR and motor sports. Consequently, companies interested in being involved in sport sponsorships have a potentially challenging decision to make.

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The Effects of Prior Relationships on Consumer Retaliation

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EXTENDED ABSTRACT

Consumers who have a strong relationship with a service provider or retailer represent a major source of profit. Strong relationship consumers are more profitable because they shop more regularly, spend more per visit, are willing to pay a premium on the products and services they buy, and cost less to serve. In addition, these consumers are known to actively promote the quality of the services received and to spread positive word-of-mouth to potential customers. As a result of these effects, relationship building has become a top priority for service firms.

Despite a growing interest in Customer Relationship Management (CRM), prior research has not examined the effects of strong consumer relationships on responses to service failures and unfairness. Such an omission is surprising and calls for more attention from consumer researchers. Understanding how consumers with a strong relationship to a service firm respond to unfairness is important for service firms. These firms want to insure that service failures do not have the potential to change their most valuable customers into their "worst enemies," a consequence that would have disastrous effects on their profitability and reputation. This research specifically focuses on the effect of prior relationships on consumer retaliation, which is defined as *efforts to punish and make a service firm pay for the damages it previously caused* (cf., Skarlicki and Folger 1998). Despite the fact that retaliation represents a response that can have extremely damageable consequences on service firms, it has been overlooked in the consumer and service literature.

Two rival explanations exist as to the effects of prior relationships on retaliation. The "love is blind" effect argues that consumers with a strong relationship are more likely to forgive an unfair experience, and as a result are less likely to retaliate. These consumers are more reluctant to hurt a valued exchange partner or to terminate a meaningful relationship. On the other hand, the "love becomes hate" effect suggests that consumers who possess a strong relationship with a firm tend to retaliate more vigorously. Perceiving that they have been betrayed by a trustworthy exchange partner, these consumers feel greater pain and aggressively engage in retaliatory behaviors.

This research suggests a framework that reconciles both perspectives and argues that the effect of a relationship is contingent upon the attributions a consumer makes about the controllability of a firm over an incident. When consumers infer that a firm has little control over an incident, the «love is blind» rationale explains the effect of a prior relationship on a consumer's desire to retaliate. On the other hand, when consumers attribute a service failure to controllable factors, the «love becomes hate» effect characterizes the influence of relationship on retaliation.

A cross-sectional survey based on the retrospective experiences of the respondents is used to test the key hypotheses of this research. Respondents reported an experience with a retailer or a service provider in which they "felt, at the end of the day, dissatisfied and inadequately treated." Overall, 105 MBA students completed the questionnaire, from which four respondents were eliminated because of missing data.

A Partial Least Square (PLS) approach is employed to test the model of this research. PLS is a structural equation modeling approach which is based an iterative combination of principal

components analyses and regressions. According to Fornell and Cha (1994), PLS is ideal for the early stages of theory testing, as is the case in this research. In addition, PLS recently has been found to be an effective analytical tool for testing product-term interactions by accounting for measurement error.

Our findings support the rationale underlying the "love is blind" effect. When strong relationship consumers attribute a service failure to uncontrollable factors, they do not consider retaliation to be an adequate response. Given the quality of their prior relationship, they tend to forgive and to give a firm the benefit of the doubt. When low controllability is inferred, strong relationship consumers seem very unlikely to engage in behaviors that could have negative consequences on a firm's business, such as spreading negative word-of-mouth, exiting the relationship, or in the extreme cases, contacting the media or taking legal actions.

Evidence for the "love becomes hate" effect is more ambiguous. Although strong relationship consumers experience an intense desire to retaliate when they attribute a high level of controllability, they do not appear to be more inclined than weak relationship consumers to get revenge. Regardless of the prior relationship, consumers seem to experience a similar desire for retaliation when they attribute high controllability. When they perceive that a firm had control over a service failure, an event that is considered unacceptable, most consumers experience an intense desire to retaliate.

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When A Celebrity is Tied to Immoral Behavior: Consumer Reactions to Michael Jackson and Kobe Bryant

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EXTENDED ABSTRACT

When a celebrity's identity is linked to implications of immoral behavior, the reactions of consumers to the celebrity will determine whether their careers can continue to generate profits in the entertainment industry or as endorsers. However, the reactions of consumers tend to vary, from absolute belief in the celebrity's innocence to absolute belief in his guilt. For example, reactions to the recent charges against Michael Jackson and Kobe Bryant illustrate the widely varied reactions of consumers. In the case of Michael Jackson, the media coverage emphasizes the reactions of his ardent fans who believe he is absolutely innocent, in implicit contrast with others who believe that he is probably guilty of the charges against him. Similarly, the media coverage suggests that many people believe Kobe Bryant is innocent of the charges that were made against him. However, many of the companies who had used him as an endorser are not taking the risk that their products will become associated with a man perceived as a rapist in the minds of some of their consumers.

Social Identity Theory suggests that consumers' level of identification with celebrities like Michael Jackson and Kobe Bryant may help predict the way they react to such situations. I propose that consumers who are strongly identified with a celebrity are less likely to react negatively than consumers with a lower level of identification. Fans who have only a low level of identification with the celebrity may be unlikely to continue to buy merchandise endorsed or produced by the celebrity, whereas those who are strongly identified may continue purchasing the celebrity's products because they believe in his innocence.

Social Identity Theory describes the causes and consequences of identification with individuals and with groups (Brewer & Gardner, 1996; Tajfel & Turner, 1985), and has been used in marketing to describe consumers' identification (e.g. Bhattacharya & Sen, 2003). Identification describes the effect of a relationship on definitions of identity, and occurs when a relationship becomes relevant to identity (Reed, 2002). Consumers who identify with the celebrity would define their identities in part based on being a fan of the celebrity. Strength of identification depends on the importance of being a fan of the celebrity to the consumer's identity. Being a fan of the celebrity is an important part of strongly identified consumers' identity. However, consumers can also have a relatively weak identification with the celebrity, if the celebrity has become somewhat relevant to their identities but is not very important to them. For example, a consumer might be weakly identified if he or she had been a fan of the celebrity in the past.

The strength of consumers' identification is expected to predict reactions to the charges against the celebrity. Strongly identified consumers are expected to believe in the celebrity's innocence, whereas people who have a relatively weak identification with the celebrity are expected to be more likely to believe that he is guilty. As a result, weakly identified consumers are expected to be less willing to purchase or recommend the celebrity's products than are strongly identified consumers. In addition, emotions are expected to indicate consumers' feelings about themselves based on their connection to the celebrity following the accusations of immoral behavior.

I conducted an online survey to investigate the relationship between strength of identification and the reactions of consumers

when celebrities have been linked to charges of immoral behavior. Consumers were recruited to describe their reactions to the accusations of immoral behavior against Kobe Bryant and Michael Jackson. The reactions of consumers with a relatively weak level of identification were found to be more negative for Michael Jackson than for Kobe Bryant. Consumers who were weakly identified with Michael Jackson were less likely to be willing to purchase and recommend his products than were consumers weakly identified with Kobe Bryant. However, strongly identified consumers were no less likely to purchase and recommend Michael Jackson's products than were consumers strongly identified with Kobe Bryant.

Strongly identified consumers were more likely to believe that Michael Jackson and Kobe Bryant were innocent than were weakly identified consumers. Strongly identified consumers were also more likely to be willing to purchase and recommend the celebrity's products. In addition, strength of identification was found to predict emotional reactions. Strongly identified consumers were more likely to feel proud of being a fan, while weakly identified consumers were more likely to feel guilty and ashamed of being connected to the celebrity in any way. The results of this study indicate that strength of identification plays a role in shaping consumers' reactions to such celebrity scandals, and that Social Identity Theory can help to predict consumers' reactions to immoral behavior.

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When Feelings Influence Product Evaluations (and When They Do Not): Discrete-Affect-Validation and the Role of Consumption Motives

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EXTENDED ABSTRACT

A considerable body of research suggests that consumers rely on their momentary feelings when they make product evaluations, even when these feelings are contaminated by unrelated external sources (such as, for example, in-store music). While this research has exclusively focused on the effects of good versus bad moods and is largely silent about consumers' consumption motives, we claim that reliance on extraneous feelings during the formation of product evaluation is conditional upon these discrete feelings' match with consumers' current consumption motives. We assume that specific consumption motives are associated with a specific set of affective expectations. Therefore, discrete extraneous feelings should be more valid and informative when they match with motive-related affective expectations, resulting in more positive product evaluations. This discrete-affect-validation hypothesis was tested in two experiments. Shah and Higgins' (2001) work on the relationship between achievement and protection motives and discrete emotions was used as a framework to test our hypotheses. We activated consumers' consumption motives by exposing them to an ad that appealed either to their protection or to their achievement motives. We assumed that achievement motives were associated with cheerful and dejected affective expectations, whereas protection motives were associated with quiescent and agitated affective expectations. Therefore, an achievement appeal was hypothesized to result in greater reliance on cheerful and dejected extraneous affect, whereas a protection appeal was hypothesized to result in greater reliance on quiescent and agitated extraneous affect. To test this, we manipulated participants' extraneous affect by asking them to write about a recently experienced life event that made them feel cheerful, quiescent, dejected or agitated. Afterwards, in an ostensibly unrelated study, either the achievement-based or the protection-based appeal was presented to them. As expected, consumers were more likely to rely on their discrete momentary feelings when these feelings were compatible with their consumption motives. Our results moreover suggest that the hypothesized discrete-affect-validation mechanism is a low-effort heuristic process that is most likely to occur when consumers have limited processing motivation. Our findings point to the importance of looking beyond valence when accounting for the effects of extraneous feelings on evaluation.

Putting Your Best Face Forward: The Effects of Negative Affect on Agent Evaluation

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EXTENDED ABSTRACT

When consumers encounter a firm, they are typically confronted by a “face” whether it be a celebrity spokesperson or a customer contact employee. Typically these faces are happy, smiling faces. That is, the prevailing assumption seems to be that a *positive* face (i.e., a face that conveys positive affect) is the *best* face for a firm to put forward.

Yet imagine the following scenario. You are standing in line waiting to check-in for a flight. You have just had an awful day at work and the flight you were booked on has been cancelled. When you finally reach the ticket counter (seething), you are greeted by an enthusiastic agent who says to you with a huge smile, “Hi, how can I help you today?” The present research suggests that such an encounter would not only *discourage* a positive reaction, but in fact *exacerbate* your negative affect.

In contrast to research suggesting that negative affect motivates people to improve their affect, (Cialdini, Darby, and Vincent 1973) several studies have suggested that there are circumstances under which negative affect leads people to *avoid* tasks that are rated as happy (Wegener and Petty 1994), and instead choose alternatives closer in valence to their own affect (Erber, Wegner, and Theriault 1996), even though such choices would seem to perpetuate their negative affect.

It has been found that people will often use their affect as information to form judgments and make decisions (Clare et al. 2001; Johnson and Tversky 1983; Schwarz and Clore 1983; Wright and Bower 1992). Perhaps affect serves as a standard of comparison that could lead to assimilation *or* contrast (Herr 1986). If a target differed greatly from the standard (the affective state) perhaps it would lead to a contrast effect and a magnification of that agent’s attributes (affect-incongruent behavior) (Herr 1986). Thus, it is proposed that negative affect leads one to (a) form a more negative standard of comparison, (b) expect more negative behavior, and (c) perceive a magnified contrast between one’s affect and the behavior of a positive agent.

The current research seeks to examine how people in a negative affect state respond negatively to a positive agent. In the investigation that follows experiment 1 induces negative or positive affect in participants and exposes them to a positive, neutral, or negative agent via a TV advertisement. Experiment 2 induces a neutral or negative affect in participants and exposes them to a face-to-face interaction with a positive, neutral, or negative agent. Experiment 3 induces negative, neutral or positive affect in participants and exposes them to face-to-face interaction with a positive, neutral or negative agent to study the process underlying the response of negative-affect individuals to a positive agent.

Experiment 1

Following an affect manipulation, participants viewed a set of advertisements that featured a positive, neutral, or negative agent and tracked changes in their affect. Participants’ tracked changes in affect were coded for *transitions*. In support of hypothesis 1, an interaction among participant affect, agent affect and transition was significant and in the predicted direction ($F(2, 42)=3.83, p<.05$). Further, in support of hypothesis 2, the negative reaction to the agent carried over to product evaluation ($F(2, 42)=4.07, p<.05$).

Experiment 2

How might these effects carry-over to a service encounter where the interaction with an agent is face-to-face? Experiment 2 included two key differences: 1) a comparison of negative to neutral affect, and 2) face-to-face interaction with the agent.

Following an affect induction, participants interacted with an agent displaying positive, neutral or negative affect. Participants then evaluated the agent. In support of hypothesis 3, a participant affect by agent affect interaction found that the negative-affect participants negatively evaluated a positive agent ($F(2, 66)=3.03, p=.055$).

Experiment 3

Experiment 3 tested the proposed process whereby negative affect leads to a shift in people’s standard of comparison and greater expectation for affect-congruent behavior. As a result, people perceive a positive agent as displaying such extreme positive behavior that it is aversive.

Following a false feedback manipulation of affect, participants encountered a positive, neutral or negative agent. Participants then indicated how sad and negative they thought people are in general. Finally, participants rated the positivity of the agent’s behavior and assessed the agent’s behavior relative to people in general. Consistent with hypothesis 4, participants in the negative affect condition judged people in the general population higher on Negative Demeanor compared to neutral and positive affect participants ($M_s=5.76, 4.89, \text{ and } 5.04, \text{ respectively; } F(2, 73)=3.51, p<.05$). Consistent with hypothesis 5, an examination of participant ratings of the agent found a participant affect by agent affect interaction such that the positive behavior of the positive agent appears magnified for negative-affect participants ($F(4, 65)=2.62, p<.05$).

The findings have a number of implications for both theory and practice. Theoretically, the results provide evidence that the assumption that consumers are always looking for a positive agent is an oversimplification. In fact, there appear to be situations in which people in a negative affect state respond negatively to a positive agent. Is it possible that forcibly making someone engage in the processing of affect-incongruent behavior could have a detrimental effect on affect? While very challenging cognitive tasks can prove absorbing and improve affect, (Erber and Tesser 1992) perhaps less absorbing tasks can under some circumstances exacerbate a negative affect state? Also, given the important distinctions between negative and positive affect, the current investigation focuses on the more counterintuitive effects of negative affect. Further, this research provides suggestive evidence that the observed effect of negative affect could also occur for positive affect. However, future research is needed to test this possibility.

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Examining the Relationship Between Consumer Values and Positive and Negative Affect

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EXTENDED ABSTRACT

Introduction

The importance of affect in marketing is a topic that has long been of interest to marketers, especially with regard to consumer behavior, yet little research in marketing has examined affect as a stable personality trait. This paper examines positive and negative trait affect in relation to consumer values, using data from Canada and Norway.

Research Design

As part of a larger cross-cultural study, a ten-page questionnaire was administered to university students during class sessions in Canada and Norway. In Canada, the questionnaire was administered in English. In Norway, the questionnaire was translated into Norwegian, and back-translated into English to ensure that the meanings were correct. Completion of the entire questionnaire took approximately 15 to 20 minutes. In total, 498 usable questionnaires were obtained (212 from Canada and 186 from Norway).

Measures

Values (LOV). The List of Values (LOV; Kahle 1983) was used to measure the individual values of the respondents. Respondents rated nine value statements, identifying how important each value was in their lives, using nine-point scales (1="important to me" to 9="most important to me"). The nine values in LOV were grouped into three underlying dimensions: internal values, external values, and interpersonal values, to conform with previous theory and research (Homer and Kahle 1988; Kahle 1983, 1991). The Cronbach alpha for each of the three scale dimensions exceeded .70.

PANAS. The PANAS scale was used to measure the positive trait affect and negative trait affect of participants in the study. Participants were asked to rate the extent to which 20 affect items described how they usually feel (where 1="very slightly or not at all" and 5="extremely"). A factor analysis was performed on the 20-item PANAS scale for each country alone, as well as pooling data from the two countries together. In all cases, the factor analysis resulted in a 2-factor solution, grouping 10 items under the Positive Affect factor and 10 items under the Negative Affect factor, confirming previous validation of this scale. The Cronbach alpha for these two indices exceeded .70.

Results

Male/Female Differences in Positive and Negative Affect. A 2 x 2 MANOVA (sex: male vs. female and country: Canada vs. Norway) was conducted on the Positive Affect scale and the Negative Affect scale. No gender differences were found for Positive Affect, but females exhibited higher levels of Negative Affect.

Country Differences in Positive and Negative Affect. Norwegians exhibited higher levels of Positive Affect than Canadians, but levels of Negative Affect scale did not differ significantly. There were no interaction effects between sex and country.

List of Values. Median splits were performed on Positive Affect and Negative Affect. The resulting dichotomous variables were used as independent variables in two sets of ANCOVA

analyses in which sex and country were used as covariates. The 3 subscales from the LOV were used as dependent variables in these analyses. These analyses revealed that Positive Affect was positively and significantly related to both internal and external values. Negative Affect was positively and significantly related to external values.

Managerial Implications

To the extent that trait affect influences consumer judgments and behavior in a manner similar to the influence of mood, trait affect could be an inherently more useful concept for marketing managers, because of its stability over time and across situations.

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How Individuals Develop Brand Evaluations in Different Contexts—The Relative Impacts of Affect, Self-Relevant Thoughts, and Product-Attribute Thoughts

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ABSTRACT

This study is an examination of the impacts of affect, self-relevant thoughts, and product attribute thoughts for high-involved and low-involved participants in positive and negative affective conditions. Results indicate that context-induced emotions exert a direct impact on brand evaluations when participants are both in positive affective states and not highly involved with the advertised product category. On the other hand, context-induced emotions, either positive or negative, exert an indirect impact on participants' brand evaluations via priming affect-congruent attribute-related thoughts when participants are highly involved with the product category. Self-relevant thoughts determine brand evaluations under all conditions except the condition in which participants are both highly involved and their affective states are negative. In addition, product attribute thoughts affect brand evaluations only when participants are highly involved. Finally, this study also shows that an interaction between context-induced emotions and self-referencing emerges under all conditions except the condition in which participants are relatively less involved and their affective states are negative. Theoretical bases for these findings were also provided.

It has been well established that individuals' responses to ad messages are determined by their product involvement (e.g., Laczniak, Kempf, & Muehling, 1999; Muehling & Laczniak, 1988). High-involved participants are more likely to elaborate on product information than low-involved participants. On the other hand, it has been demonstrated that individuals' positive and negative affective states determine their message-processing strategies and thus alter the way they respond to advertising messages (Martin, 2003). It is also likely that individuals rely on their affective states as judgment inputs when they formulate product evaluations (Pham, 1998). The question that naturally follows then is how individuals with different levels of product involvement, in either positive or negative affective states, will develop their brand attitudes in the ad exposure process.

The ads explored in this study are image ads that depict product-user images. Past research has indicated that the effectiveness of image ads varies as a function of ad-self-congruency (e.g., Hong & Zinkhan, 1995). The congruency ratings between ad perceivers' self-images and ad images have been shown to motivate ad perceivers' self-referencing during ad exposure, which further leads to more positive emotional responses and more favorable brand evaluations (Chang, 2000a). In addition to self-referencing and emotional responses, the influence of ad-self-congruency on valenced self-thoughts will be explored in this study. Moreover, drawing upon Adval's affect confirmation theory, it is proposed in this study that there will be an interaction between participants' affective states and the degree of their self-referencing. Specifically, self-referencing is associated with more positive emotions (Baumgartner, Sujan, & Bettman, 1992; Sujan, Bettman, & Baumgartner, 1993). Therefore, the higher degree a participant refers to an ad, the more positive the affective responses will be, and this result enhances the likelihood that such participants will also rely on their context-evoked affective states to confirm how they feel about the brand.

Integrating past findings from emotion literature, involvement literature, and ad-self-congruency literature, this study will exam-

ine the influences of context-induced emotions, the interactions between context-induced emotions and self-referencing, valenced self-relevant thoughts and valenced product thoughts on product judgments under four conditions in which participants have either high- or low-involvement levels with the product category and their context-induced affective states are either positive or negative.

THE INFLUENCE OF AFFECT ON MESSAGE PROCESSING

Affect-as-Information

Schwarz and Clore (1983, 1988) asserted that affective states had informative functions in inference making. Rather than calculate features of information regarding the target, individuals may simply ask themselves, "How do I feel about it?" (Schwarz & Clore, 1988). To the extent that they feel more positive, they will generate more positive evaluations of the target being evaluated. Affect-as-information effects have been demonstrated in assessments of life satisfaction (Strack, Schwarz, & Gschneidinger, 1985), in judgments about the frequency of undesirable events (Johnson & Tversky, 1983), and in evaluations of heard music (Gorn, Goldberg, & Basu, 1993).

However, the influence of affect-as-information is not robust. Pham (1998) has reasoned that for feelings to be treated as inputs in a person's judging of a product, these feelings must be perceived to be relevant to the judgment. Pham demonstrated that when judgments were consummatory in nature, as opposed to instrumental in nature, reliance on the "how-do-I-feel-about-it" heuristic was more likely. It is argued in this study that ad perceivers in a natural ad viewing context seek entertainment in advertisements. Under such conditions, participants' affective states are more likely to be taken as judgment inputs.

Negative Affect and Message-Processing Strategies

In addition to serving as information input for evaluations, individuals' affective states can exert influences on message processing in other significant ways. One such way with which this study deals pertains to the different processing modes that are encouraged by positive and negative affective states. It has been well established in psychology literature that how a person feels may influence how he or she processes information (see Schwarz, 1990; Schwarz & Bless, 1991 for reviews). When individuals are in positive affective states, they are more likely to rely on heuristic cues and to pay less attention to details, whereas individuals who are in negative affective states are more likely to engage in systematic and detail-oriented processing (e.g., Bless, Bohner, Schwarz, & Strack, 1990).

The difference in terms of processing strategies can be attributed to motivation differences when individuals are in positive affective states as opposed to negative affective states (see Schwarz, 1990; Schwarz & Bless, 1991 for discussions). This explanation rests on the argument that individuals' affective states signal important information. When individuals are in positive affective states, they will probably perceive that there are no threats in the environment and thus will not be motivated to be alert. In contrast, when individuals are in negative affective states, they perceive that the environment is threatening and that they should therefore remain alert to avoid negative consequences. Therefore, they will

systematically elaborate on messages and engage in detail-oriented analytical processing (e.g., Bless et al., 1990).

Taken together, positive affective states increase individuals' motivation to process information on the basis of heuristic cues, whereas negative affective states reduce the likelihood that individuals will be engaged in heuristic-based processing. Even though affect-as-information can be treated as a readily accessible heuristic cue, it is hypothesized that negative context-induced affective states will reduce the likelihood that participants will engage in heuristic-based processing. Therefore, participants are less likely to simply rely on their feelings as information inputs for judgments.

H1a: For happy low-involved participants, but not for sad low-involved participants, context-induced emotions will influence brand attitudes.

Affect Priming Under Substantial Processing

Forgas (1995) has argued that, under substantial processing, in which individuals extensively process information by integrating upcoming information and preexisting knowledge structures, affect infusion may occur and exert an influence on judgments. According to Forgas, in situations in which substantial processing is engaged, affective states facilitate recall or activation of information that is congruent with the affective states, and this information can be further incorporated into judgments. Within the Elaboration Likelihood Model (ELM), it has been shown that, under conditions of low involvement, participants' positive affective states exert a direct impact on judgments, whereas under conditions of high involvement, positive affective states facilitate the recall of positive material in memory and lead to positive evaluations of message content (Petty, Schumann, Richman, & Strathman, 1993). That is, affective states can exert an indirect impact on judgments by encouraging affect-congruent thoughts.

Drawing upon Forgas' discussions, I argue in this paper that, when participants are highly involved with the product category, participants' substantial processing of the ad is likely. Under these conditions, context-induced emotions influence product judgments via priming affect-congruent information. As a result, context-induced emotions, specifically, will have a significant impact on the relative amount of positive or negative product-attribute-related cognitive responses, a result that further alters brand attitudes.

H1b: For high-involved participants, context-induced emotions will influence brand attitudes.

H2: For high-involved participants, context-induced emotions will influence valenced attribute-related thoughts.

THE INFLUENCE OF PRODUCT INVOLVEMENT

Consumers' processing strategies are influenced both by consumers' motivations and by consumers' ability to engage in message processing (e.g., Batra & Ray, 1986). One important factor that determines message perceivers' motivation to process messages is their involvement with the information stimuli (Celsi & Olson, 1988). Involvement is generally believed to be the degree to which an individual perceives the information stimuli to be personally relevant or instrumental in achieving self-related goals or values (Celsi & Olson, 1988; Zaichkowsky, 1985).

In advertising literature, a consumer's involvement has been shown to determine the manner in which he or she processes and responds to advertising messages (e.g., Celsi & Olson, 1988; Laczniaik et al., 1999; Petty & Cacioppo, 1988; Petty, Cacioppo, & Schumann, 1983). For example, Celsi and Olson (1988) showed that high-involved participants were more attentive to product

information, generated greater numbers of cognitive responses, and focused more of their comprehension processes on interpreting the product-related information than did low-involved participants. Laczniaik, Kempf, and Muehling (1999) demonstrated that the higher participants' product-class involvement was, the more brand-related cognitive responses they generated. High-involved participants and low-involved participants also developed their product judgments in different ways. Muehling and Laczniaik's (1988) study indicated that, for high-involved participants, but not for low-involved participants, product beliefs significantly determined their brand evaluations. It is thus argued that when participants are highly involved with the product category, their valenced thoughts regarding product attributes will exert significant influences on their brand evaluations.

H3: For high-involved participants, valenced attribute-related thoughts will affect their brand attitudes; for low-involved participants, valenced attribute-related thoughts will not affect their brand attitudes.

THE INFLUENCE OF SELF-CONCEPTS

Ad-Self-Congruency on Self-Referencing, Valenced Self-Related Thoughts and Emotions

A fair amount of research has indicated that self-congruent ads and brands are evaluated more favorably than self-incongruent ads and brands (e.g., Hong & Zinkhan, 1995; Wang & Mowen, 1997). Different mechanisms have been proposed to explain the effectiveness of ad-self-congruency effects. For example, Chang (2000b) suggested that self-congruent messages activated participants' self-concepts and encouraged them to relate ad messages to their self-concepts. In the process, participants generated higher levels of self-referencing, which in turn led to more positive advertising evaluations. In replicating her study, I contend that ad-self-congruency will lead to higher levels of self-referencing,

H4a: Ad-self-congruency will generate higher levels of self-referencing.

However, her study did not directly explore participants' cognitive responses. It is argued in this study that the degree of self-referencing can be reflected in the amount of, and in the valence of, self-related thoughts. Past literature has indicated that self-referencing to personal experiences is associated with positive affect (Baumgartner et al., 1992; Sujan et al., 1993). Baumgartner et al. (1992) argued that the reason why self-referencing autobiographical memories are associated with positive affects is that people are biased toward remembering positive life episodes and experiences. Krishnamurthy and Sujan (1999) also proposed that either relating the self to past scenarios or imagining future self-related experiences may evoke positive emotions. Therefore, it is proposed that to the extent that the ad image and the self image are congruent, participants will generate also more positive self-related thoughts in relative to negative self-related thoughts.

H4b: Ad-self-congruency will generate more positive self-related thoughts.

In line with Baumgartner et al.'s (1992) and Sujan et al.'s (1999) findings that referring to personal experiences is associated with positive affect, I also hypothesize that self-congruent ad messages will increase self-referencing and that this increase will, in turn, engender more positive affective responses. Therefore, to

the degree that higher levels of self-referencing are induced, more positive emotional responses associated with self-related memories will be elicited.

H4c: Self-referencing leads to more positive ad-evoked emotions.

The Interaction Between Context-Induced Affect and Self-Referencing

In addition, Adaval's (2001) affect confirmation theory suggests that individuals base their product evaluations on their affective reactions only when the affect is similar in valence. Therefore, it is argued in this study that, to the extent that a person's self-referencing evokes higher levels of positive emotional responses, the person's context-induced affective states are more likely to confirm how he or she feels about the ad, since the valence of the induced affect is consistent with the person's responses to the ads. Therefore, it is proposed in this study that an interaction between self-referencing and affective states on brand attitudes will emerge when positive affective states are induced.

H5a: For happy low-involved participants and happy high-involved participants, a significant interaction between context-induced emotions and self-referencing on brand evaluations will emerge.

It is important to note that self-other differences have been documented in research that explores affect priming under substantial processing. For example, in Forgas, Bower, and Krantz's (1984) investigation, happy participants see a greater number of skilled and positive behaviors in themselves and in their partners, whereas sad participants see fewer skilled and negative behaviors in themselves than in their partners. Similarly, Forgas, Bower, and Moylan (1990) have shown that negative affective states lead to self-critical attributions and other-enhancing attributions. These findings suggest that negative evaluation effects that are primed by negative affect are stronger when self-related judgments are involved. Extending this line of findings further, it is argued that, when more negative affective states are induced, higher levels of self-referencing will lead to more critical judgments of the ads that appeal to self-images. However, as reviewed, this phenomenon is limited to the context in which participants engage in substantial processing.

H5b: For sad high-involved participants but not sad low-involved participants, an interaction between context-induced emotions and self-referencing on brand evaluations will emerge.

The Influence of Valenced Self-Related Thoughts

Self-concepts are believed to be highly accessible constructs and have implications for judgments and information processing (Fiske & Taylor, 1991). It is therefore hypothesized that when participants, regardless of their affective states, are not highly involved with the target product category, conditions under which motivation to elaborate on product attribute messages is low, participants' valenced self-related thoughts will influence their brand attitudes.

On the other hand, for high-involved individuals, whether valenced self-related thoughts will influence their brand evaluations is determined by the valence of their affective states. When high involving participants are in positive affective states, as opposed to negative affective states, they are more likely to attend to the

hedonic nature of the product in determining product evaluations, which may involve more of their self-relevant cognitive responses. Therefore, the greater number of positive self-relevant thoughts that are generated, the more favorably participants will evaluate the product. In contrast, self-relevant thoughts should be relatively less salient and less important in product judgments in a high-involving and negative context. As a result, valenced self-relevant thoughts will not predict brand evaluations.

H6: For happy low-involved participants, sad low-involved participants, and happy high-involved participants, but not sad high-involved participants, valenced self-related thoughts will affect brand attitudes.

METHODOLOGY

Design

This study had a three factor between-subject design. The two manipulated factors were ad difference (feminine user profile vs. masculine user profile) and context-induced emotions (positive vs. negative). In addition, participants were categorized as either high-involved or low-involved based on a median split of their product involvement ratings.

Stimuli

Professionals wrote ad messages to fit different personality portrayals (feminine users vs. masculine users) and created visuals to fit message descriptions. Visuals and layouts were similar for ads with different user portrayals so that any possible confounding effects would be reduced. The products used in this study were sneakers. The same product attribute information was included in each of the two ads.

Participants & Procedures

A total of three hundred participants were recruited for this study from the campus of a large university in Taipei and were paid for their participation. Forty-five percent of the participants were male.

At the recruiting stage, potential participants were contacted and asked questions regarding their involvement with different product categories and other irrelevant questions that were included to distract participants' attention from the target involvement scale. Participants rated how involved they were with the advertised product category, sneakers, on a 10-item 7-point scale. The ten items were adopted from Laurent and Kapferer (1985). Cronbach's reliability alpha was satisfactory at .82. Participants were categorized into two groups based on a median split.

In the main experiment, high-involved and low-involved participants were randomly assigned to the four manipulated conditions (ad differences by affective states). Participants were informed that the main experiment involved three parts. First, participants were told that a professor from the department of psychology was collecting happy and sad life events for use in experiments, and participants were asked to do the professor a favor by writing down a real life event that they had experienced. This mood induction procedure was adopted from research conducted by Strack et al. (1985). Items were selected from the UWIST mood adjective checklist (Matthews, Jones, & Chamberlain, 1990) for manipulation checks. The three items were "happy," "cheerful," and "contented." The three negative items were "dissatisfied," "depressed," and "sad." Cronbach's reliability alphas for positive emotions and negative emotions were satisfactory at .89 and .78 respectively. ANOVA indicated that participants in the positive affective state

condition had significantly higher ratings on the subscale of positive emotions, $F(1, 299)=26.27, p<.01, M_{\text{positive}}=4.54, M_{\text{negative}}=3.94$, than did those in the negative affective state condition. Similarly, participants in the negative affective state condition generated significantly higher ratings on the subscale of negative emotions, $F(1, 299)=23.20, p<.01, M_{\text{positive}}=3.21, M_{\text{negative}}=3.93$, than did those in the positive affective state condition. Therefore, the results of the manipulation checks were satisfactory. All the items in the positive emotion factor were significantly negatively correlated with all the items in the negative emotion factor (all $ps<.01$). Therefore, ratings on items in the positive emotion subscale, as well as the reversed ratings on items in the negative emotion subscale, were summed and averaged to represent context-induced emotional responses.

The second part of the study started with participants' rating of their affective states. Then, the second coordinator told them that the primary study was designed so that the effect of various ad formats or layouts on readers' responses could be examined. Then, participants read a filler ad followed by the stimuli ad and another filler ad. After reading the ads, participants provided their cognitive responses. Next, participants rated both their self-referencing levels to the ads and their perceptions of the user images in the ads, after which they rated their ad attitudes and product attitudes. Finally, participants were told that the same researcher was conducting a survey regarding college students' values and lifestyles. The students were asked to rate themselves on Bem's Sex Role Inventory (1974) as well as other self-related filler scales. The purpose of including irrelevant scales was to reduce participants' sensitivity to the scale that they had used to rate the product users portrayed in the ads and the one that they were about to use to rate their self-concepts.

Measures

Ad-Self-Discrepancy

Two ad-self-discrepancy scores were calculated, one for the masculinity dimension and the other for the femininity dimension. Ad-self-discrepancy on masculinity was first calculated by subtracting the mean ratings of the portrayed users with regard to masculinity from the mean ratings of the self with regard to masculinity. The sum was then squared because the study concerned only the degree of discrepancy, not the direction of discrepancy. Similarly, ad-self-discrepancy on femininity was first calculated by subtracting the mean ratings of the portrayed users with regard to femininity from the mean ratings of the self with regard to femininity, and the difference was squared.

Self-Referencing

Participants rated how they related themselves to the users described in the ads using a 10-item 7-point Likert scale. Four of the items were adopted from Debevec and Iyer (1988). They were: "picture oneself in setting," "picture oneself in position of ad character," "similarity to life experience," and "similarity to ad character." The other six items were invented for the purpose of the study. They were "feel as if I have gone through the same thing as the ad character," "feel like experiencing the same thing that the ad character experienced," "can easily imagine myself being in the same situation," "the ad reminds me of my past experiences," "the ad makes me imagine possible experiences in the future," and "the ad makes me feel that the portrayed content is for someone like me." Cronbach's reliability alpha was satisfactory at .92.

Ad-Evoked Emotions

Participants rated how the ad made them feel on a 10-item 7-point Likert scale. The items were selected from Edell and Burke (1987). The five positive items were "happy," "joyful," "cheerful,"

"delighted," and "satisfied." The five negative items were "annoyed," "bored," "depressed," "dull," and "sad." Responses to the positive items and the reversed negative items were summed and averaged to be the index for ad-evoked emotions.

Cognitive Responses

Participants were asked to provide their cognitive responses to the ad and the advertised products. Two coders who were not aware of the research purposes coded their responses. The coding units were "sentences." First, the two coders coded one-third of the responses independently for inter-coder reliability checking. Cohen's Kappa (Cohen, 1960) was employed to assess inter-coder reliability. Cohen's Kappa was deemed satisfactory at .87. Then, the two coders split up and coded the rest of the responses.

Valenced self-related thoughts (VST). Participants' cognitive responses were categorized as either self-relevant or self-irrelevant. Self-related cognitive responses were further categorized into positive cognitive responses, negative cognitive responses, and neutral cognitive responses. VST were calculated by subtracting negative self-related responses from positive self-related responses.

Valenced attribute-related thoughts (VPT). Participants' cognitive responses were categorized as either product attribute-related or ad-related. Product attribute-related cognitive responses were further categorized into positive, negative, and neutral cognitive responses. VPT were calculated by subtracting negative product attribute-related cognitive responses from positive product attribute-related cognitive responses.

Brand Attitudes

Brand attitudes were measured with a 5-item 7-point Likert scale. The items were adopted from Mitchell and Olson (1981) and Holbrook and Batra (1987). They were "good," "like," "pleasant," "positive," and "high quality." Cronbach's reliability alpha of this scale was deemed satisfactory at .94.

RESULTS AND ANALYSES

For happy low-involved participants, when brand attitudes were regressed upon context-induced emotions, the interaction between context-induced emotions and self-referencing, VST and VPT, the impact of context-induced emotions was significant, $\beta=.45, t=1.97, p=.05$ (H1a), and the impact of the interaction between the context-induced emotions and self-referencing was significant, $\beta=1.05, t=2.78, p=.01$ (H5a), as was the impact of VST, $\beta=.21, t=2.29, p=.02$ (H6). On the other hand, but also consistent with expectations, the impact of VPT was not significant, $\beta=.11, t=1.20, p=.20$ (H3).

For sad low-involved participants, the impact of context-induced emotions was not significant, $\beta=-.34, t=-1.23, p=.22$ (H1a). The impact of the interaction between the context-induced emotions and self-referencing was not significant, $\beta=.77, t=1.63, p=.11$, either (H5b). In contrast, the impact of VST was significant, $\beta=.24, t=2.12, p=.04$ (H6). Finally, consistent with expectations, the impact of VPT was not significant, $\beta=.17, t=1.66, p=.10$ (H3).

When responses of happy high-involved participants were analyzed, consistent with expectations, the impact of context-induced emotions was significant, $\beta=.59, t=2.33, p=.02$ (H1b); the impact of the interaction between the context-induced emotions and self-referencing approached the significant level, $\beta=1.00, t=1.87, p=.07$ (H5a); and the impact of VST was significant, $\beta=1.41, t=3.23, p=.01$ (H6). In contrast, but also consistent with expectations, the impact of VPT was significant, $\beta=.18, t=2.17, p=.03$ (H3).

For sad high-involved participants, the direct impact of context-induced emotions was significant, $\beta=-.67, t=-2.02, p=.05$ (H1b); the impact of the interaction between the context-induced emotions

and self-referencing was significant, $\beta=1.10$, $t=2.21$, $p=.03$ (H5b); and the impact of VPT was significant, $\beta=.41$, $t=3.87$, $p=.01$ (H6). In contrast, but consistent with expectations, the impact of VST was not significant, $\beta=.14$, $t=1.21$, $p=.23$ (H3).

For happy high-involved participants, when context-induced emotions were regressed upon VPT, as expected, the impact of the context-induced emotions approached the significant level, $\beta=.22$, $t=1.95$, $p=.06$. Similarly for sad high-involved participants, when context-induced emotions were regressed upon VPT, as expected, the impact of context-induced emotions was significant, $\beta=.22$, $t=2.02$, $p=.05$. H2 was supported.

Regression analyses indicated that ad-self-discrepancy with regard to masculinity had a significant negative impact on self-referencing, $\beta=-.21$, $t=-3.70$, $p=.01$. Similarly, ad-self-discrepancy with regard to femininity had a significant negative impact on self-referencing, $\beta=-.29$, $t=-4.93$, $p=.01$. These findings indicated that the lower the discrepancy, the greater the degree of self-referencing that was evoked. Therefore, H4a was fully supported. Regression analyses indicated that the impact of ad-self-discrepancy with regard to masculinity on VST approached the significant level, $\beta=-.11$, $t=-1.83$, $p=.07$. On the other hand, ad-self-discrepancy on femininity had a significant negative impact on VST, $\beta=-.20$, $t=-3.36$, $p=.01$. These findings suggested that the lower the discrepancy, the higher the number of positive self-related thoughts there were in relation to negative self-related thoughts. Therefore, H4b was mostly supported. Finally, regression analyses indicated that participants' self-referencing had a significant impact on ad-evoked emotions, $\beta=.58$, $t=12.74$, $p=.01$, and this finding supported H4c.

CONCLUSIONS

The role of affect in persuasion has drawn increasing research interest. Two patterns of influences exerted by affective states were found in this study. First, context-induced affective states exerted a direct impact on brand evaluations in contexts where low-involved participants were in positive affective states. Second, context-induced affective states exerted an indirect influence on brand evaluations via priming affect-congruent attribute-related thoughts in contexts in which participants were highly involved with the advertised product. The findings provided additional support to Petty, Schumann, Richman, and Strathman's (1993) assertions regarding the multiple role of affect in ELM.

Consumption is in service of the self (Sirgy, 1982). Self-related thoughts appear to be important predictors of brand evaluations. Moreover, the context-induced emotions interacted with participants' self-referencing and, together, determined brand evaluations. The interplay between affect and self is also a relatively less explored area in advertising. Social psychology literature has shown that, in processing self-relevant information, affect plays an important role (e.g., Trope, Ferguson, & Raghunathan, 2001). In light of newly-ignited research interest in the interaction between affect and self in social psychology, it seems that the interaction between affect and self may warrant attention as an important area to be investigated for advertising researchers, as well.

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Affect, Empathy and Predictions of Others' Risk Tolerance

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EXTENDED ABSTRACT

People frequently have to predict the risk tolerance of others. For example, a marketer of investment services might be interested in how certain investors would react to the additional risk of stocks as compared to bonds; the executives at a biotechnology firm might attempt to understand whether doctors would prescribe a novel, risky, but potentially highly effective treatment over a standard, safe, but less effective treatment.

In this research we examine people's accuracy in predicting the risk tolerance of persons with whom they are not familiar. In three studies, we contrast (i) risky choices made for the self with (ii) predictions of others' risky choices. Risky choices made for the self reveal how risk tolerant people are; predictions of others' risky choices reveal how risk tolerant people believe others are. In our studies, we draw both of these groups from the same population and compare their responses to assess the accuracy of perceptions of others' risk tolerance and to establish the form of any inaccuracies.

We draw on the research on an affective interpretation for the observed pattern of overweighting and underweighting of probabilities (Rottenstreich and Hsee, 2001). This research suggests that even a tiny probability of obtaining a positive outcome might generate a great deal of excitement, hope and similar emotional reactions that seem to go beyond the mere numerical difference between a zero probability and a just slightly higher probability. Likewise, even a tiny probability of not obtaining a positive outcome might generate a great deal of anxiety, stress and similar emotional reactions that seem to go beyond the mere numerical difference between a probability of one and a just slightly lower probability. As a result, when incorporating likelihood into their decisions people may in essence be "unduly" over-impressed with small probability outcomes and "unduly" underimpressed with large probability outcomes. But research on empathy gaps (Loewenstein 1996; Van Boven, Dunning and Loewenstein 2000; Loewenstein, Weber, Hsee and Welch 2001) suggests that although people's reactions to risk and uncertainty may in part reflect such affective reactions, they may not appreciate that other people have as strong affective reactions. As a result, people might predict that others' choices will reveal relatively little overweighting and relatively little underweighting, even though their own choices will reveal such patterns.

Study 1 tested this prediction in the domain of positive outcomes. Participants were asked to make a risky choice involving either a small or large probability to win a large sum of money in a marketing promotion, either for themselves or for a random-student. Participants were then also asked to complete an empathy scale (Davis, 1983). In the domain of positive outcomes, overweighting of small probabilities corresponds to more risk tolerance and underweighting of large probabilities corresponds to less risk tolerance. In line with our predictions, we find that people predict others to be less risk tolerant than themselves and actual in small probability but more risk tolerant than themselves and actual in large probability. Furthermore, in line with the affect / empathy-gap explanation for this pattern, we find that participants with high empathy scores show significantly smaller degree of these mis-predictions.

Study 2 extends this pattern to the domain of negative outcomes. In this domain, overweighting of small probabilities corresponds to less risk tolerance and underweighting of large probabili-

ties corresponds to more risk tolerance, the reverse of the pattern in the domain of positive outcomes. In line with our prediction, we find that participants predict others to be more risk tolerant than themselves and actual in small probabilities but less risk tolerant than themselves and actual in large probabilities.

The pattern of self/other differences in risk tolerance established in studies 1 and 2, where the direction of the mis-prediction depends on the level of probability and valence of outcomes, qualifies Hsee and Weber's (1997) suggestion that people always perceive other as more risk tolerant than themselves, tested at a mid-level probability. Study 3 integrates our findings with those of Hsee & Weber by testing for self/other differences in risk tolerance across small, mid-level and large probabilities. In addition, this study manipulates empathy by making the target of the prediction a close-friend, someone that participants are more likely to empathize with. We replicate the pattern found in studies 1 and 2 whereby the direction of the mis-prediction depends on the level of probability and also replicate the Hsee & Weber results in mid-level probability. In further support of the notion that an empathy gap drives our results, we find that a manipulation of empathy eliminates self / other differences in risk tolerance.

We conclude with a discussion of our findings with respect to self-positivity in judgment of likelihood. Typically, people perceive good outcome as more likely and bad outcomes as less likely for themselves than for others (Weinstein, 1980; Taylor & Brown, 1988). Self-positivity concerns perceptions of the likelihood of an event, whereas our findings concern the weighting, the impact, of likelihood on decision making. Critically, for small likelihood negative outcomes (e.g., contracting AIDS), self-positivity and the phenomenon we examine work in opposite directions.

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The Effect of Primed and Framed Reference Points on Product Attribute Importance

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INTRODUCTION

Identifying product attributes that are important in judgment and choice is a key objective of consumer research. A wide variety of methods to identify important attributes has been proposed and examined (Van der Pligt et al. 2000). However, the convergent validity among these methods is low, and sometimes replications even yield inconsistent results (Jaccard, Brinberg, and Ackerman 1986). Low levels of validity and reliability can cause serious empirical and practical problems.

The main objective of this research is to gain a deeper understanding of the effect of consumers' reference points on product attribute importance. Building on the reference-dependent theory (Tversky and Kahneman 1991), we show that the importance of an attribute in judgment and choice is larger if the attribute levels in the product space represent a loss, relative to the consumer's reference point. Subsequently, we demonstrate how the effect of consumers' reference points on the importance of attributes in consumer judgment and choice can be strengthened by priming consumers' reference points and can be changed by framing their reference points. The results guide researchers how to improve the validity and reliability of attribute importance measurement and provide marketing managers with tools to influence the importance of attributes in consumer judgment and choice.

THE EFFECT OF REFERENCE POINTS

The importance of attributes in judgment and choice is reflected in the size of the difference in valuation of different attribute levels (cf., conjoint method) and depends on the differences in attribute levels in the product space examined (Tversky and Simonson 1993). The larger the difference in attribute levels, the more important the attribute becomes. Research on the importance of attributes in consumer judgment and choice generally ignores the use of reference points (as opposed to some research on the effect of reference points in consumer decision-making—e.g., Putler 1992). However, if consumers weigh losses more heavily than gains as is suggested by the reference-dependence theory, we should find that *the importance of an attribute is larger if the attribute levels in the product space represent a loss as opposed to a gain relative to consumers' reference point* (cf., Bell and Bucklin 1999).

Study 1 and Results

The first hypothesis was tested through a field experiment involving close to 400 consumers. The participants judge four apples (1=low preference, 11=high preference) with respect to their price (\$0.89 vs. \$1.49 per lbs) and taste (sweet vs. sour), using a full factorial design (four product profiles). In line with our hypothesis, the results show that the importance of attributes in consumer judgment depends on the consumers' reference point, and on whether the attribute levels in the product space represent gains or losses relative to that reference point. The importance of an attribute is larger when the attribute levels represent losses compared to the consumers' reference point than when they represent gains. This effect is found both for the price and the taste attribute.

THE EFFECT OF PRIMED AND FRAMED REFERENCE POINTS

Consumers' internal reference points are based on past personal experiences with the attribute. What remains unclear is what happens if this internal reference point is primed? The effects of priming on consumer information processing and judgment and choice are well documented (Yi 1990). We hypothesize that if *an attribute is primed and the attribute information becomes more salient in consumers' memory, the effect of the reference point on the importance of the attribute in the consumer judgment and choice increases*. The rationale for this hypothesis is that more salient reference points will result in a more intense loss or gain experience by consumers.

Next to studying the effect of priming consumers' reference points, we investigate the effect of framing consumers' reference points. The effects of framing on consumer judgment and choice are well-known (Tversky and Kahneman 1981). Most framing studies frame the outcome of a decision, an attribute of a product, or the goal of an action or behavior (Levin, Schneider, and Gaeth 1998). Contrary to most research, we frame consumers' reference point of an attribute. We frame reference points both as losses and gains and examine how these framed reference points subsequently affect the importance of attributes in consumer judgment. Building on our first hypothesis, we hypothesize that *the importance of an attribute with a reference point that is framed as a loss is larger than the importance of the same attribute with a reference point that is framed as a gain*.

Study 2 and Results

To examine the effect of priming and framing consumers' reference points, a controlled lab experiment, involving 193 US students at a large Midwestern university, was conducted. Participants are asked to judge four orange juice profiles, described based on two attributes: price (\$1.90 vs. \$3.50 per gallon) and vitamin content (20% vs. 90% of daily required value).

The participants in the priming condition were asked which attributes they consider when buying orange juice. If participants mentioned price and/or vitamin content, we considered the reference points related to the attributes to be primed. The results suggest that priming consumers' reference points may increase the impact of these reference points and loss aversion on the importance of attributes in consumer judgment by increasing the salience of the reference points and the related degree of experienced loss aversion.

The participants in the framing condition either read a cover story that framed the vitamin content as a loss or a gain by describing the popularity of orange juice with a specific vitamin content. Price was not framed. The results do suggest that framing attributes may alter the importance of attribute in consumer judgment. Attributes that are framed as a loss tend to become more important in consumer judgment.

DISCUSSION

Our findings may facilitate researchers to improve the validity and reliability of attribute importance measurement by explicitly accounting for this effect of reference points and loss aversion in attribute importance measurement. Understanding these effects of reference points also may provide marketers with tools to alter the importance of attributes in consumer judgment and choice.

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Naive Story Models and Mental Correlations: Why Correlation (A to B) Is Not Equal to Correlation (B to A)

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EXTENDED ABSTRACT

Judgments quality has been an issue of considerable interest in decision-making, if only because the quality of judgments places a ceiling on decision quality. Prior research has documented that human judgment tends to be quite poor (Meehl, 1954; Dawes, 1979) where individuals often appear very poorly calibrated to the data.

Across six studies, we demonstrate that individuals are not only poorly calibrated in general (i.e. make mistakes in detecting the correlation between two variables) but they are also internally inconsistent. Asking participants to make a series of judgments about two entities allows us to compute a correlation underlying those judgments that reflects the consistency of use of the model underlying those judgments. Specifically, we propose that providing participants with entity A (e.g., price) and asking them predict entity B (e.g., quality) results in a systematically different correlation from providing entity B (i.e., quality) and asking for predictions of entity A (i.e., price). In other words, we suggest that correlation (A to B) *is not equal to* correlation (B to A), a violation of basic normative reasoning.

These differences are explained utilizing the story model of Pennington and Hastie (1993). To assess any relationship, people bring to mind a biased sample of observations or examples and construct a causal story around these examples. The quality of the story facilitates or hinders the consistency in their judgments with strong stories resulting in consistency in judgments. Specifically, we show that stronger correlations result if there is a match in the direction or order of the story formed and the required judgment and weaker correlations result if there is a mismatch.

The six studies reported here examine the strength and pervasiveness of this effect and investigate the underlying causes. The first study demonstrate that $\text{corr}(\text{Height to Weight})=0.95$ but $\text{corr}(\text{Weight to height})=0.80$ only. Similarly, the second study shows $\text{corr}(\text{Power to safety of automobiles})=0.15$, but $\text{corr}(\text{Safety to Power})=-0.19$. The third study uses price-quality relationships and documents moderation by product type. Although $\text{corr}(\text{Quality to Price})$ is equally high for wines (0.89) and soaps (0.90), the $\text{corr}(\text{Price to Quality})$ is significantly lower for soaps (0.39) than for wines (0.57)

In the fourth and fifth study, we varied the causal direction of a story provided to participants and demonstrate reliable moderation of the consistency in judgments. When the judgment order matches the story order, correlations are significantly higher than when there is a mismatch. We test this conceptualization both in the social domain (Personality-Perfectionism relationship) and in the physical domain (Rainfall-Greenery relationship). The fourth study shows that if the given story is "Personality causes Perfectionism" then same judgment order (Personality to Perfectionism) results in significantly higher correlations (0.77) than the reverse (Perfectionism to Personality) judgment order (0.52). However, when the given story is that "Perfectionism causes Personality" then $\text{corr}(\text{Perfectionism to Personality})=0.83$ is significantly higher than $\text{corr}(\text{Personality to Perfectionism})=0.54$. Results for the fifth study replicate this in a physical domain.

The sixth study provides evidence that the issue of internal inconsistency is separate from one of calibration. Specifically, utilizing priming manipulations, we demonstrate that primes have

a significant impact on calibration, but only when the causal story is strong, thereby indicating the automatic nature of story generation and calibration. Specifically, it is only when one can construct a story that one bothers to calibrate the story (as evidenced by the influence of the primes).

Shifting Reference Points & Fleeting Pleasures

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Consumer choice is often described as a multi-phase process that includes pre-purchase anticipation, decision making, and post-purchase evaluation. Customers with positive anticipated feelings about a particular product are more likely to purchase and satisfied customers are more likely to purchase it again (Dabholkar, 1994). The classic customer satisfaction approach of expectancy disconfirmation posits satisfaction as the difference between pre-purchase expectations and post-purchase experiences (Erevelles & Leavitt, 1992). These pre-purchase expectations depend on reference points, such as a product's positive attributes (Boulding, Kalra, Staelin, & Zeithaml, 1993), product idealizations (Westbrook, 1987), price-based value expectations (Oliver & Swan, 1989), experienced-based norms (Cadotte, Woodruff, & Jenkins, 1987), or social considerations (Fournier & Mick, 1999). The challenge is knowing which reference points will be invoked (Iacobucci, Grayson, & Ostrom, 1994).

One way of analyzing how reference points interact is via Decision Affect Theory (Mellers, 2000). Decision affect theory is expressed as $P(w) = u(w) + d[u(w) - u(x)] * [1 - s(w)]$, where $P(w)$ is the pleasure of outcome w , $u(w)$ is the utility of outcome w , $d[u(w) - u(x)]$ is a disappointment function comparing what actually occurred and what might have occurred, and $[1 - s(w)]$ is the subjective probability that w would *not* occur. This form of decision affect theory can be extended to include background reference points. Suppose a decision maker has cumulative earnings, T . He plays a gamble and outcome w occurs. His total earnings are now $T + w$. We propose that the current earnings' utility $u(T + w)$ and a contrast between present and previous earnings are both salient. According to decision affect theory outcome pleasure depends on both immediate and background reference points. The following experiment explores how the relationship between immediate and background reference points.

METHOD

Participants

Seventy-five undergraduates at Ohio State University served as participants in the experiment.

Instructions and Procedure

Participants were told they would be paid whatever they earned in the experiment, the average earnings were approximately \$8, and there was a small chance they could win or lose as much as \$40. In the event that they lost money, they would be asked to work it off in the Decision Making laboratory at \$10/hour. The experiment included a few practice trials followed by 100 experimental trials and then four additional trials that adjusted participants' earnings to between \$6 and \$10.

Participants sat at a computer and chose between binary gambles with amounts on any trial ranging from \$4 wins to \$4 losses. After participants selected their gamble, the unchosen gamble disappeared, and remaining gamble played. Overall earnings, which were displayed on the computer screen, were updated accordingly. To control the cumulative earnings of the groups there was one common outcome in each gamble, which participants always received. Randomizing the results within and across gambles

downplayed the presence of a common outcome. Overall earnings were always under the control of the experimenter. The "high" group's earnings started at \$0 and gradually increased to \$24 before returning to \$0. The "low" group's earnings started at \$0 and gradually decreased to -\$24 before returning to \$0. In both cases, there were four additional non-experimental trials that brought their final earnings to approximately \$8. After each gamble the participants rated the pleasure or displeasure they felt with the outcome on a rating scale from 50 ("Extremely Elated") to -50 ("Extremely Disappointed").

RESULTS

We were especially interested in the emotional responses to the four outcomes of the left-hand gambles shown below, when presented in each path and only analyzed judgments of pleasure when those (dominate) gambles were selected.

T1: (\$1, 0.5; -\$4) vs (\$1, 0.2; -\$4)
T2: (-\$1, 0.5; \$4) vs (-\$1, 0.8; \$1)
T3: (-\$1, 0.5; -\$4) vs (-\$1, 0.2; -\$4)
T4: (\$1, 0.5; \$4) vs (\$1, 0.8; -\$4)

The average pleasure of \$1 wins and losses generally tracks cumulative earnings except when cumulative earnings returned to \$0. At that point, participants in the negative path were *much happier* than those in the positive path. An analysis of variance revealed a significant main effect of path ($F(1,11)=5.88$) and an interaction between path and cumulative earnings ($F(6,66)=2.84$). Background reference information about position and trend of cumulative earnings influence the pleasure of immediate and counterfactual outcomes. Additionally, outcomes feel better when "what might have been" is worse, not better, than what actually occurred ($F(1,11)=22.85$).

To compare the relative impact of background and foreground reference points on judged pleasure, we analyzed the individual responses of participants in the positive and negative paths. The effect of counterfactual outcomes on pleasure was similar in magnitude (though opposite in sign) to the effect of obtained outcomes. The immediate context (i.e. what happened and what could have happened) appears to dominate the background context (i.e. cumulative earnings and trend). Interestingly, The effect of counterfactual outcomes that have nothing to do with take-home pay is similar in magnitude to that of the actual outcome.

DISCUSSION

Judgments and evaluations typically involve comparisons of outcomes and experiences to reference points. We often have an abundance of reference points from which to choose. In the present study, we examine how background reference points influence pleasure in the face of immediate reference points. Both background and foreground reference points determine the pleasure of outcomes. Background effects of cumulative earnings and trend had less impact, relative to foreground effects. There is also some evidence that background effects of cumulative earnings and trend interact. Being on a winning streak feels much better after losing \$24 than after losing \$0.

When Decision Affect Theory is extended to incorporate cumulative earnings and trend, it predicts both background effects, and foreground effects, in particular, the enormous effect of the counterfactual outcome. The utility of the outcome and the counterfactual comparison function were similar across paths, but the psychological impact of trend depended on position. Our results suggest that pleasure is myopic; immediate effects have greater impact than background effects on the pleasure of outcomes.

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ROUNDTABLE

Expanding the Boundaries of Consumer Socialization Research

Terry Bristol, Arizona State University (West)

Tamara F. Mangleburg, Florida Atlantic University

The purpose of this roundtable discussion was to address potential new directions in consumer socialization research. Four discussion facilitators outlined gaps in current knowledge and suggested some interesting issues that may provide fruitful avenues for future investigation. Greg Rose led discussion on socialization differences in individualistic vs. collectivist cultures. Specifically, individualistic cultures foster independence, whereas collectivist cultures stress dependence. Within these societies, both authoritarian and neglecting parental styles are found, while authoritative and permissive parental styles are found primarily in individualistic cultures, and protective and indulgent styles are more prevalent in collectivist cultures. The more restrictive and dependent parental styles found in collectivist cultures limit children's consumption autonomy, whereas the parenting practices in individualistic cultures that stress independence lead to children's acquiring consumer skills and understanding earlier. There are, however, a number of issues that have received scant attention. First, the issue of social development, particularly in individualistic societies has not been thoroughly examined. Second, there is a need to examine diversity within the United States and its implications for consumer socialization. There is also a need to examine the potential for adaptiveness in parental styles. Do these styles change over time? If so, how and what implications would such changes hold for consumer socialization? Finally, the links between the personality of the child, parental styles, and consumer socialization outcomes have not been systematically examined. In particular, the role of birth order, child's temperament, and consistency of parental styles across siblings and across parents are interesting issues to address in the future.

The second discussion facilitator, Sandy Grossbart, identified socialization contexts that have not been thoroughly examined. These unique and unfamiliar contexts may offer new and interesting insights into understanding consumer socialization. Contexts that are new to consumers, such as the internet, moving to a new location, and life transitions and their attendant rituals provide unique needs as well as opportunities for consumers and thus for learning through socialization. Such contexts also highlight the overemphasis on children in studies of consumer socialization. Clearly, there are many life transitions that adults experience and in which unique socializing influences occur. Consumer socialization, rather than ending when one becomes an adult, is an ongoing process. A second issue identified was that there is a need to examine the goals of the individual in the socialization process. Traditionally research has focused on the acquisition of skills, knowledge and attitudes as outputs of the socialization process. A predominately cognitive, problem-solving perspective has dominated the consumer socialization literature. However, other goals, such as personal expression, social navigation, and connection/affiliation may also be important to consumers and, as result, addressed through the socialization process. Finally, there is a need to examine socialization within networks and by groups and what implications the interconnectedness of social relationships has for the socialization process. Socialization agents are aware that others are involved in the socialization process. Also, groups may socialize individuals into a way of life. The role of groups and social networks in the socialization process would seem to be a particularly fruitful avenue for future inquiry.

Kay Palan facilitated discussion on the need to examine the relationship between consumer socialization and consumer competence, noting that the possession of consumer skills does not necessarily lead to competence. Competence may be context-dependent, in that socialization that fosters competence in specific consumer settings may lead to vulnerabilities in other contexts. There is also a need to examine the interactive effect of and between different socialization agents. Much research has focused on parental socialization agents. Less is known about the effects of other socialization agents, such as institutions, the internet, and consumer communities and how these differing influences combine to affect the socialization process. The emphasis on parental socialization agents is consistent with the emphasis on children's consumer socialization that has characterized past research. However, there is a need to examine consumer socialization and the development of consumer competence over the life course. Indeed, the consumer socialization of adults has received very little attention. In addition, past research has focused on pre-purchase and purchase skills and competence, and yet policy makers and marketers are increasingly interested in the post-purchase behaviors that may be learned through socialization.

The final facilitator, Terry Bristol, focused the discussion on potential negative consequences of the socialization process. Past research has tended to examine the acquisition of positive consumer skills, attitudes, and behaviors. However, there are likely to be negative outcomes associated with specific types of socialization as well. For example, deception, overindulgence/lack of self-control, materialism, and similar maladaptive behaviors, attitudes, and values may be learned through the socialization process as well as more proconsumer skills. Identification of the processes associated with negative outcomes, as well as an understanding of the negative outcomes themselves, may be helpful in developing modifications of such socializing influences and/or effective interventions.

In summary, the roundtable discussion identified a number of potential directions for future research. First, there is a need to examine socialization in different contexts and consumer settings. More qualitative research methods would be especially helpful in this regard. Second, there is a need to look beyond the family and incorporate the effects of other socializing influences, including communities, networks, and institutions. The interactive effects of multiple socialization agents also needs to be addressed. Third, there is a need to move beyond the consumer socialization of children and to recognize more fully that consumer socialization is a life-long process; much work needs to be done on the consumer socialization of adults. Finally, more attention needs to be paid to understanding the outputs of the socialization process, including consumer competence as well as specific positive and negative outcomes of consumer socialization.

SPECIAL SESSION SUMMARY

Product Assortment and Variety-Seeking in Consumer Choice

Alexander Chernev, Northwestern University
Leigh McAllister, University of Texas at Austin

SESSION OVERVIEW

The importance of product assortment and variety-seeking in consumer choice has been underscored by numerous researchers in the field (Broniarczyk, Hoyer, and McAlister 1998; Chernev 2003; Kahn and Wansink 2004). Building on the extant literature, the research presented in this session examined several novel aspects of assortment and variety-seeking processes in choice. Specifically, the session addressed the following issues:

Research presented by Chernev examined an interesting paradox implied by the extant literature: When choosing among assortments, consumers opt for the variety offered by larger assortments; however, consumers often are less confident in choices made from larger rather than from smaller assortments. Building on prior findings, his research demonstrated that choice among assortments is a function of consumers' decision focus and, in particular, the degree to which the subsequent task of making a choice from the selected assortment is salient to consumers.

The work by Berger and Draganska examined how assortment size may influence the relationship between the consumer and the brand. In a series of three experiments they demonstrated the existence of a positive effect of assortment size on perceived brand quality. They further showed that this effect depends on the product type, such that the positive impact of assortment on brand perceptions is likely to be stronger in low-cost/utilitarian categories than in high-cost/hedonic categories.

Research presented by Raghunathan examined the conditions under which it is more advantageous to conceal than to reveal the corporate source of variant brands. In particular, he identified product differentiation as a key factor that is likely to moderate the impact of revealing the corporate source of variant brands. Specifically, he argued that companies may benefit from concealing the corporate source of variant brands in categories where products are perceived to be relatively undifferentiated; whereas, in categories where products are perceived to be differentiated, companies are more likely to benefit from revealing the corporate source of branded variants.

At the end of the session, Barbara Kahn led the discussion to integrate the findings of the individual papers into a broader framework for conceptualizing the psychological mechanisms underlying the impact of assortment on consumer choice. In doing so, she engaged the audience in a discussion aimed at facilitating a broader understanding of product assortment and variety-seeking and their implications for choice.

"Decision Focus and Consumer Choice Among Assortments"

Alexander Chernev, Northwestern University

The findings reported by prior decision research contain an implicit paradox: When choosing among assortments, consumers opt for the variety offered by larger assortments (Broniarczyk, Hoyer, and McAlister 1998); yet they are less confident in choices made from larger rather than smaller assortments (Chernev 2003; Iyengar and Lepper 2000). This preference inconsistency implies that consumers often cannot accurately predict their need for variety and tend to overrate the attractiveness of large assortments. In this context, this research argues that consumers' tendency to overestimate their future need for variety is moderated by their decision focus and, in particular, by the degree to which the

subsequent task of choosing an option from the selected assortment is salient to consumers.

Building on prior research, I propose that a consumer's choice among assortments can be viewed as a hierarchical decision process that comprises two different stages: selecting an assortment and subsequently selecting an option from that assortment (Kahn and Lehmann 1991; Kahn, Moore, and Glazer 1987). Because these two choices are often temporally separated, they tend to be considered in isolation; as a result, when making a choice, consumers attempt to maximize the utility of each decision independently. In this context, making salient the final product-choice task should increase the probability that consumers will view the assortment choice as a single two-stage decision (instead of two independent choices) and will be more likely to select the assortment that allows them to optimize their final selection.

The cornerstone proposition of this research is that varying the decision focus is likely to activate different decision goals. Thus, consumers who are focused only on the choice among assortments will be more likely to display a preference for larger assortments because of uncertainty about future preferences (Kreps 1979) and a desire to put off the effort of making tradeoffs into the future (Simonson 1990). In contrast, consumers who focus on the subsequent task of selecting an option from the chosen assortment will be less likely to display a preference for larger assortments because of the anticipated difficulty of making a choice from such assortments. Therefore, I predict that consumer choice among assortments is a function of the salience of the subsequent product-choice task. In particular, larger assortments will be less preferred when the salience of the subsequent product choice is high rather than when it is low.

I further propose that the influence of the decision focus on the choice among assortments is moderated by the relative attractiveness of options comprising these assortments. In particular, I argue that the increase in the relative share of the smaller assortment associated with the increased salience of the product-choice task will be greater when none of the options in the choice set dominate the others than when a dominant alternative is present. This prediction is based on the notion that the effect of the increased decision complexity associated with larger assortments will be mitigated by the presence of a dominant alternative because it provides consumers with a sufficient reason for choice.

These research propositions are supported by the data from two experiments. The first experiment empirically tests the prediction that the choice among assortments is a function of consumers' decision focus, whereby smaller assortments are more preferred when the salience of the subsequent product-choice task is high rather than when it is low. The experimental method entails varying respondents' decision focus when choosing among assortments. Respondents were offered a choice between a smaller (e.g., 6 options) and a larger (e.g., 36 options) assortment of different snacks (Chernev 2003; Kahn and Lehmann 1991). Decision focus was manipulated by using the need-for-justification paradigm (Simonson 1989) and varying the nature of the justification task. The data were consistent with the research propositions showing that larger assortments were less preferred when respondents were asked to justify their choice of an assortment than when they were asked to justify their choice of an option.

The second experiment tested the prediction that the impact of the decision focus on the choice among assortments is moderated by the relative attractiveness of the options in the set. The relative attractiveness of choice alternatives was manipulated by varying respondents' familiarity with the alternatives and by varying the dominance of the options on the primary attribute. These two manipulations correspond to the two types of decision contexts in which dominance can be observed: local context, associated with the impact of the alternatives in the available choice set, and background contrast, associated with the impact of alternatives that have been encountered in the past (Simonson and Tversky 1992). In particular, local dominance was varied by featuring one of the options as dominant on the most important attribute—a manipulation consistent with the prominence principle, stating that dominance on the most important attribute offers a compelling reason for choice (Tversky, Sattath, and Slovic 1988). In contrast, the background dominance manipulation varied respondents' familiarity with the options in the set—a proposition consistent with prior research documenting that familiar objects are more likely to be chosen than unfamiliar objects (Hawkins and Hoch 1992). The dependent variables were the respondents' choice among assortments and their assortment satisfaction. The data were consistent with the research propositions, indicating that the increase in the relative share of the smaller assortment associated with the increased salience of the product-choice task was greater when none of the options in the choice set dominate the others than when a dominant alternative is present.

“The Influence of Variety on Perceptions of Brand Quality”

Johan Berger, Stanford University

Michaela Draganska, Stanford University

Most of the extant research on assortment and variety-seeking has focused on how the size of the choice set influences the likelihood of purchase (Chernev 2003, Iyengar and Lepper 2000, Huffman and Kahn 1998). We build on the extant literature by examining how assortment size may influence the relationship between the consumer and the brand.

Increased variety may increase consumers' belief that a brand can serve their needs, but actual experience or frustration due to increased choice difficulty may cancel out or reverse these effects. Moreover, while it is likely that consumers learn heuristics about variety's influence on quality from the environment, lay theories about quality perceptions may exist in total disregard or even in opposition to actual information about the assortment sizes for high- and low-quality producers. The literature examining the influence of factors like price on quality judgments suggests that consumers use both intrinsic cues (such as quality-related product features) as well as extrinsic cues (price or brand name) to form opinions of product quality. Researchers have examined how factors such as price, advertising expense (Kirmani and Wright 1989) and brand and store name (Rao and Monroe 1988) influence perceptions of product quality and find that consumers often use extrinsic (and possibly non-diagnostic) information to form judgments regarding product quality.

In this context, we suggest that the amount of variety offered by a brand should influence the consumer's perception of that brand. We propose that increased variety will lead to more positive perceptions of the brand. However, it is also likely that this relationship will be moderated by the type of product category studied, such that variety has a positive influence on quality in low-cost (and more utilitarian) product domains, but a smaller or even reversed effect in high-cost (and more hedonic) domains. This may be due to the fact that while increased variety may signal quality in domains where quality is uncertain, when choosing between very

high-end hedonic products, offering too much variety may make the product seem less exclusive or decrease the feeling that the product was carefully handcrafted.

Experiment 1 uses two product categories (dish washing soap and conditioner) and a within-subjects design with two options that differed only in the amount of variety offered (3 vs. 9 options). The results indicate that variety influenced consumers' perceptions of brand quality, and the influence was in the positive direction, such that greater variety led to more positive perceptions of the brand. In experiment 2 we used the yogurt category and a 2 (type of brand: store vs. national) x 2 (variety: low vs. high) between-subjects design to examine the influence of variety and type of brand on perceived quality. While we again found support for the notion that the amount of variety offered can influence perceptions of brand quality, we also found that this influence is moderated by the type of brand, such that the benefit of increased variety is greater for store (as opposed to national) brands. Additionally, however, this interaction was not found in likelihood of purchase, and an investigation of respondent comments suggests that price may overwhelm all of these effects. While differences in variety led to differences in perceived quality, many respondents suggested that they would only purchase a brand of yogurt if it was one of the cheaper (or the cheapest) brands available.

These two experiments support the notion that variety may be used as a cue for brand quality, and have shown this effect to be positive, such that greater variety leads to the perception of greater quality. The direction of influence, however, may depend on the product category such that it is positive in low-cost/more-utilitarian categories, but reduced (or even reversed) in higher-cost/more-hedonic categories. Therefore, in experiment 3, we examine more high cost/hedonic domains such as wine and fine dishware using a within subjects design. The results suggest that the offered variety may not influence quality perceptions in low-cost utilitarian product categories. Examination of respondents' explanations of their ratings suggests that this non-effect may actually be due to two opposing forces, whereby some respondents thought that “focusing on less products makes each better” while others saw increased variety as a sign that others liked the brand and that the brand had more experience in the category.

“Strategic Issues in Concealing versus Revealing Corporate Source of Variant Brands”

Rajagopal Raghunathan, University of Texas at Austin

What are the conditions under which it is more advantageous to conceal vs. reveal the corporate source of variant brands? Extant literature on branding (Aaker and Keller 1990) suggests some potential reasons for following each strategy. Companies may wish to conceal the corporate source of variant brands when doing so carries the risk of: 1) diluting equity of the corporate brand and/or the variant brand, or 2) confusing the consumer. Revealing the corporate source of variant brands makes sense if doing so is likely to: 1) enhance the equity of either the corporate brand or the variant or both, or 2) generate economies of scale.

Building on prior research, we identify product differentiation as a key factor that is likely to moderate the impact of revealing the corporate source of variant brands. Specifically, we argue that: 1) in categories where products are perceived to be relatively undifferentiated, companies may benefit from concealing the corporate source of variant brands, and 2) in categories where products are perceived to be differentiated, companies may benefit from revealing the corporate source of branded variants. Our first prediction stems from the thesis that people are inherently variety-seeking (Loewenstein 1994). As a result, they may want try out a different brand within a product category every so often—Tide now, Cheer

next time, etc. To the extent that two brands are perceived to be more similar to each other when they share (vs. do not share) a corporate source, companies stand a better chance of taking advantage of the variety-seeking instinct by concealing the corporate source of their variant brands. This prediction, however, is only posited for product categories perceived to be relatively undifferentiated; in product categories perceived to be relatively differentiated, the number of variant brands a company offers is likely to serve as a signal of the company's "expertise" in that area. For instance, knowledge that Kellogg's has more than a dozen variant brands of cereal may lead a consumer to conclude that the company is proficient in the art of making cereals, leading, in turn, to more favorable impressions of the variant brands of that company. Therefore we propose that in undifferentiated product categories, it is advantageous to conceal the corporate source of variant brands, whereas in differentiated product categories, it is advantageous to reveal the corporate source of variant brands.

The above proposition was tested in a series of three experiments. Participants in experiment 1 were asked to provide reasons why some companies choose to conceal the corporate source of variant brands of detergent (such as Tide, Cheer, and Era) while other companies choose to reveal themselves as the corporate source of variant brands of cereal (e.g., Krispies, Raisin Bran, and Total K). Consistent with our predictions, a large proportion of the subjects (53%) felt that manufacturers may conceal the corporate source of variant brands to take advantage of consumer's desire to seek variety in the category of detergent. Likewise, a large proportion of subjects (40%) felt that manufacturers may want to signal expertise by revealing the corporate source of variant brands.

In experiment 2, participants were asked to: 1) choose one detergent brand from a set of six and, 2) choose one cereal brand from a set of six. Depending on condition, participants were led to believe that the six brands (named Brand A through Brand F) were manufactured by six different companies (6-company condition)—P&G, Lever Bros., Arm & Hammer, Clorox, Johnson & Johnson, and Hankel Group, respectively, in the case of detergent—or by two different companies (2-company condition)—P & G and Lever Bros. Those in the 2-company condition were led to believe that brands A-E were all manufactured by one company (P&G), and that the sixth was manufactured by a second (Lever Bros.). For cereal, the corresponding companies were Kellogg, Post, General Mills, Pillsbury, Quaker, and Nabisco in the 6-company condition, and Kellogg's and Post in the 2-company condition. The dependent variable of interest was the choice probability of "Brand F." Results revealed support for the research propositions: participants penalized a company for offering several undifferentiated products and rewarded it for offering several differentiated ones.

In experiment 3, we assessed whether the pattern of results obtained in experiment 2 could be reversed by manipulating the extent of perceived differentiation among the brands. The attribute levels of the detergent and cereal brands were manipulated to make them appear undifferentiated [differentiated]. The research propositions were supported in the undifferentiated condition of detergent and differentiated condition of cereal, respectively, thus underscoring the robustness of results obtained in experiments 1 and 2. Further, consistent with the idea that it is the lack of differentiation that consumers find objectionable when a company offers several brands, participants: 1) did not penalize a detergent company for offering several brands when the brands were perceived to differ in meaningful ways from one another, 2) penalized a cereal company for offering several undifferentiated brands.

Our findings suggest that, in undifferentiated product categories companies stand to gain from concealing the corporate source

of variant brands, unless they explicitly highlight real or perceived differences among them. In categories where products are perceived to be differentiated, companies benefit from revealing corporate source of variant brands.

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SPECIAL SESSION SUMMARY

Managing Memories for Emotions: Formation, Retrieval and Protection

Rebecca K. Ratner, University of North Carolina

Gal Zauberan, University of North Carolina

SESSION OVERVIEW

Memories for consumption experiences have important consequences for consumer decision-making. Although there has been a lot of research on consumer memory as well as emotions in consumer behavior, relatively little relevant research has focused on how memories for emotions are constructed and then influence the decision process. In this session, we address three components of this process: How are memories for emotions formed and stored in memory? What factors influence the retrieval of memories for emotional information? Do people strategically engage in decisions to protect previously-formed special memories? In this way, we seek to explore three related stages of consumer memory processes: memory-formation, memory-retrieval, and rather than reconstructive memory or memory change, we investigate strategic actions that people engage in to protect existing memories from being changed so that they can continue to derive pleasure from retrieving pleasurable memories.

The first paper, by John G. Lynch, Nader Tavassoli, and Stacy L. Wood, investigated the *memory-formation* process. The paper examines the extent to which affect unrelated to a key task (e.g., thinking about an unpleasant consumer service encounter) impacts memories of an unrelated and affectively-mixed consumption experience. The authors introduce a time lag of several days between experiences to examine the role of delay in memory formation. The second paper, by Jo Ann Sison and Mara Mather, investigates the *retrieval* of emotionally-laden images, focusing specifically on the implications of part-list cuing effects for emotional information. They find that prompting consumers to recall some positive (or negative) images from an initial set of images impaired their ability to recall the other items in the set of the same valence. The third paper in the session, by Gal Zauberan and Rebecca K. Ratner, investigates what people do to *protect memories* that have been previously formed. The data suggest that people seek to manage the memory process by taking steps not to overwrite existing memories in a way that would preclude them from deriving enjoyment later from retrieving (and thinking about) those very positively-valenced memories.

Collectively, the three papers in this special session provided new insights about the psychological mechanisms underlying consumers' memory for emotional experiences and emotionally-valenced information about a product, brand, or company. The set of papers led to an interesting debate about what types of memory-related mechanisms consumer research has neglected and should focus on in future research. The papers contribute to an emerging research area that is relevant to the diverse interests of many ACR members: consumer memory, cognitive processes, consumer emotions, consumer decision-making and intertemporal choice. We hope that the presentations and discussions sparked new thoughts within the audience about the underlying mechanisms of time preferences, choice over time, and the role of memory in these impacting consumer choices.

This session presented a diverse set of ideas. Kathryn Braun-LaTour, the session discussant, provided an overview of how the three papers inform and qualify the findings of previous research, as well as noting some of the ways in which the three papers offer diverging perspectives on the common theme of the session. The discussant then engaged the audience by inviting questions, comments and ideas for future research.

LONG ABSTRACTS

“The Delayed Effects of Affective States on Memory-Based Decisions and Judgments”

John G. Lynch, Nader Tavassoli, and Stacy L. Wood

This research looks at the role of emotion and mood on memory-based decisions. A very large literature has grown up in consumer research and psychology on the role of affective states on decision making. But the overwhelming majority of studies have examined stimulus-based decisions rather than memory-based decisions. However, in many situations judgments are delayed and based on information retrieved from memory (e.g., Alba, Hutchinson and Lynch 1991; Chattopadhyay and Alba 1988; Lynch and Srull 1982). In those situations, attitudes are based on a search for relevant information in memory (Feldman and Lynch 1988; Tourangeau and Rasinski 1988) or on a global attitude that is retrieved when this is accessible in memory (Allport 1935; Lingle and Ostrom 1979; Petty and Cacioppo 1981). We ask the question of how affect experienced at time 1 influences memory-based decisions at time 2.

Classic studies by Schwarz and Clore (1983) demonstrate that irrelevant affect can influence concurrent (but unrelated) evaluations. Such effects rely on nonconscious influences—when individuals explicitly assess their mood state, evaluations are not impacted by mood. In the Schwarz and Clore paradigm, participants asked on rainy days to assess their life satisfaction reported significantly lower scores than participants asked on sunny days, however asking participants about the weather prior to asking the life satisfaction question (thus, making its dampening/brightening influence salient) corrected the bias. More recently, Albarracín and Kumkale (2003) found that irrelevant mood influences evaluations only at a moderate degree of attention to affective states—individuals must pay enough attention to note a mood state, but not so much that they discount it as irrelevant. Clearly, such findings are of importance to marketers where feelings may be both accessible and diagnostic evaluative information (Pham 1998).

One of the key characteristics of previous research is that the mood is always present at the time the attitude object is evaluated. This has important implications in situations where environmental characteristics (e.g., free coffee at the car dealership, mood induced by an ad's programming context) may have a disproportionate impact on product or ad. Surprisingly, the Schwarz and Clore paradigm of irrelevant mood effects has not been explored for delayed judgments, when the irrelevant affect is no longer present in the environment. Are such effects ephemeral, linked to specific stimulus-based evaluations? Thus, our major theoretical question is whether irrelevant affect influences a delayed attitude, either as part of a stored attitude or as a peripheral influence that is retrieved for a memory-based evaluation.

We discuss results from two studies. These mirror Schwarz and Clore's experimental procedure with two important additions. First, we use a product evaluation framework. Second, we use two evaluative episodes (stimulus- and memory-based). In all conditions, we first show participants a short science program that is ambiguous in nature and has both good and bad features. Next, we manipulate mood by asking participants to write about a positive or negative customer service situation that they recently encountered. (We conducted a pretest of this mood manipulation to ensure that

the task can successfully induce both positive and negative mood.) This order (program, then mood manipulation) makes mood irrelevant for any subsequent evaluation of the science program. After the writing task, half the participants rate their mood state, making salient the role of the writing task in influencing mood. Crossed with this manipulation, half of the participants are asked to evaluate the science program. In other words, 25% of the participants rate both their mood and the program, 25% rate only their mood, 25% rate only the program, and 25% rate neither during the first evaluative episode. Two days later, all participants return to evaluate the science program during a second evaluative episode (for some participants this was the first time they evaluated the program and for some it was the second).

This experimental design allows us to investigate whether the effect of irrelevant affect is integrated with a global attitude in memory (for participants that evaluate the science program in both episodes) and whether irrelevant mood at exposure affects memory-based judgments (for those who only evaluate the program in episode two).

“Retrieval Inhibition in Emotional Picture Recall”

Jo Ann Sison and Mara Mather

One of the major issues in memory is the question of retrieval inhibition, that is, why the recent retrieval of information may interfere with the ability to recall other associated information also in storage. Retrieval inhibition as a result of partial-list cuing is usually demonstrated with semantically-associated word lists. The typical experimental paradigm uses a list composed of words from several semantic categories. A partial list of items from one of those categories is then presented, and the presentation of this partial list appears to inhibit the retrieval of the remaining items from that category. The goal of this study was to examine if cuing the retrieval of a partial list of emotionally-valenced pictures would produce a similar inhibition for the remaining, similarly-valenced pictures.

In this study, participants viewed 60 emotionally-valenced pictures (20 positive, 20 negative, and 20 neutral pictures) from the International Affective Picture System (Lang, Bradley, & Cuthbert, 1997). Participants were randomly assigned to one of two cue conditions in which they were cued to retrieve 10 pictures from a single valence type (positive or negative) by seeing a word phrase that corresponded to a picture (e.g., “puppies”). Participants were instructed to visualize the picture that matched each word phrase and then the actual picture was displayed. Participants in the control condition did a series of 10 word completion problems instead of the cue task. After a delay, all participants recalled the pictures initially viewed.

Not surprisingly, pictures were more likely to be recalled later if they were included in the cued retrieval session than if they were not. Of primary interest was whether providing cues of a valence type affects recall of the remaining items of that type relative to the control (no cue) condition. A 3 (condition: positive, negative, and no cue) X 3 (item type: positive, negative, and neutral) mixed-factor ANOVA with non-cued item recall as the dependent measure yielded a significant interaction for item type and condition, $F(4, 142)=23.38, p<.001$, which indicates that valence-specific retrieval inhibition was observed for participants cued with positive or negative pictures. For example, when cued to retrieve half of the positive pictures, participants recalled fewer of the remaining positive pictures relative to control participants who saw no cues. These positively cued participants had no decrement in recall of either negative or neutral picture items. Participants in the negative cue condition experienced a similar inhibition in recall of the remaining negative pictures, but recall for positive and neutral pictures was also unaffected.

In summary, retrieving some emotional pictures impairs retrieval of other similarly-valenced pictures. This finding has many interesting implications. For example, if an advertising campaign succeeds at getting consumers to retrieve some positive features of a product, they should, as expected, be more likely to later remember those positive features than if they had not seen the advertisements. But the advertisements may also have the unintended consequence of making consumers less likely to later remember other positive features of the product. Furthermore, our study suggests that among the non-retrieved product features, it will only be the positive ones that will be inhibited—and that the likelihood of recalled negative or neutral features will remain unchanged.

“Strategic Memory Protection in Choice over Time”

Gal Zauberman and Rebecca K. Ratner

Research on decision making over time has noted three distinct sources of utility (pleasure or pain) from an experience: utility from anticipation (or dread), utility as the experience unfolds, and utility from memory (e.g., Elster and Loewenstein, 1992). The current work examines the last component, utility from memory, and explores whether individuals’ desire to preserve special memories can influence which experiences they choose to repeat.

Research on autobiographical memories and nostalgia indicates that memories can be an important source of life satisfaction (Singer and Salovey, 1993). Our work investigates whether people seek to protect such memories. Our key hypothesis is that when people are making repeated decisions about what experiences to consume over time, they do not simply want to repeat experiences that were favorable in the past (contrary to a simple reinforcement model). We propose that they also consider the extent to which repeating parts of a particularly special experience will threaten to overwrite earlier special memories. Three studies provide support for this prediction.

In experiment 1, MBA students were asked either to describe a particularly special experience or a pleasant but not a particularly special experience. Participants then were asked to imagine that they had the opportunity to go back to the same place (i.e., where they had the experience) with a different person, and to rate how likely they were to go back and to explain why. People were less interested in returning to a place where they had a particularly special evening out than to a place that was pleasant but not particularly special. Content analyses of the open-ended data indicate that significantly more people used memory words (e.g., “memory” or “remember”) or described strategic memory protection when writing about a special experience compared to a pleasant experience. Those who mentioned strategic memory protection were significantly less interested in returning than those who did not mention the desire to protect special memories. Significantly more participants in the special-experience condition said that in no circumstances would they want to go back to the same place than in the pleasant-experience condition.

In experiment 2, we follow up on a finding in study 1 that participants wanted to go back to a special place only with the same person (i.e., so that the new experience would be as similar as possible to the original experience). Participants in Study 2 reported whether they would go back to a place where they had a special experience with either 1) the same person or 2) different person than the one they’d been with initially. They were also asked how favorable they think that the second experience would be compared to the first experience. Participants were more interested in returning with the same person than with a different person, even controlling for how favorable they think the experience will be. This is consistent with the idea that they are more willing to repeat an experience when they are less likely to have new experiences

very different from the original ones (i.e., which might interfere more with their memories).

Experiment 3 tests the hypothesis that people anticipate being more upset if they go back with the same person to the same place and have a bad experience than they would be if they have a bad experience with the same person in a different situation. Participants described a special experience and imagined that they had return to the same [different] place with the same [different] person, and that this experience was not as good due to bad weather. The predicted Person X Place interaction emerged: People expected disappointment to be greater if with the same person and the bad second experience is at the original special place than at a new place; for the different person, they don't anticipate different levels of disappointment at the same vs. different place.

We conclude that the desire to preserve special memories is an important component of choice over time that has been neglected in earlier research. Strategic memory protection does not, of course, apply to every decision, and is likely to come up only when considering unique and extremely positive experiences. Although these experiences are not common, they are very likely to be highly important to our long term life satisfaction and sense of self (Singer and Salovey, 1993).

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SPECIAL SESSION SUMMARY

Advances in the Investigation and Application of the Anchoring and Adjustment Heuristic

Leif D. Nelson, New York University

SESSION OVERVIEW

Sometimes the easiest way to evaluate an uncertain prospect is to think of a more certain version, and make some adjustments. This process, the anchoring and adjustment heuristic, was originally identified in the estimation of quantitative estimates (Tversky & Kahneman, 1974), but has been subsequently applied to a variety of complex inferential processes as disparate as egocentrism (Gilovich, Medvec, & Savitsky, 2000) and predictions of consumer opinions (Hoch, 1987). Meanwhile, the theory has been systematically updated to incorporate subtleties in the underlying process (Chapman & Johnson, 2002; Epley & Gilovich, 2001; Strack & Mussweiler, 1997), leaving the field with a multitude of findings claiming a process that has subsequently been reconsidered. What is the state of the field and how should we consider anchoring and adjustment in contemporary consumer research?

In this session, we contribute to the literature by examining the theoretical foundation of the phenomenon, clarifying the processes that underlie it, and offering new theoretical extensions and potential applications. Epley and Gilovich begin by isolating the phenomenological aspects of anchoring and adjustment from the processes guiding them. In a series of studies as diverse in manipulation as alcohol intoxication and financial incentive, they demonstrate that for self-generated anchors, effortful mental adjustments are in fact used in the computation of final estimates. None of these manipulations seem to impact experimenter generated primes. This is the strongest empirical evidence to date demonstrating this critical theoretical distinction. LeBoeuf and Shafir provide striking evidence for the foundation of the process, replicating biases in the new domain of time estimation consistent with existing theory. Their findings have obvious relevance to consumer planning, as they make systematic predictions about how a calendar versus unit focus can lead to dramatically different patterns in buying behavior. The final paper by Nelson and Simmons, starts with an anchoring and adjustment account of the prominence effect and ends by offering a fundamental reconsideration of insufficient adjustment. They argue that insufficient adjustments are the product of high confidence anchors, and that in a more typical consumer situation, adjustments may be sufficient.

Taken together, these papers make two obvious contributions to consumer research. First, by redefining our understanding of the underlying processes, researchers can reexamine some of the classic biases previously considered in terms of anchoring and adjustment. If we have a new understanding of the process shouldn't we therefore develop a new understanding of the effects it produces? Second, in redefining the core process we can make new predictions about consumer behavior. Since Tversky and Kahneman introduced the anchoring and adjustment heuristic it has been implicated in hundreds of behavioral findings. If we are now rethinking anchoring and adjustment, shouldn't we be able to make novel predictions about human behavior as well?

"Tales of Thinking While Nodding and Drinking: Resurrecting the Anchoring and Adjustment Heuristic"

Nicholas Epley, Harvard University

Thomas Gilovich, Cornell University

One potentially effective strategy for estimating unknown quantities is to start with information one *does* know and then serially adjust until an acceptable value is reached, using what

Tversky and Kahneman (1974) called the anchoring and adjustment heuristic. Research on this heuristic, however, has had an unusual history, one that has left a large gap in psychologists' understanding of this common source of inaccuracy in everyday judgment.

In Tversky and Kahneman's original formulation, the starting information, or anchor, tends to exert some drag on the subsequent process of adjustment, such that adjustments tend to be insufficient and final estimates are too close to the original anchor. In the paradigm Tversky and Kahneman pioneered to examine anchoring and adjustment, participants are first asked to make a comparative assessment (e.g., Is the population of Chicago more or less than 200,000?) followed by an absolute estimate (e.g., What is the actual population of Chicago?). Countless experiments using this paradigm have demonstrated that people's absolute estimates are biased by the value considered in the comparative assessment, even when the anchor value is randomly selected and clearly irrelevant to the absolute judgment. Anchoring and adjustment thus described both a process (adjusting from an incorrect value to a better estimate) and a phenomenon (final estimates assimilated toward the original anchor).

Research on anchoring *as a phenomenon* took off immediately and has yet to let up. Anchoring effects resulting from a consideration of irrelevant information have been demonstrated in many different contexts and domains (Chapman & Johnson, 2002). Research on anchoring and adjustment *as a process*, in contrast, has been more uncertain and uneven. Efforts to lay bare the process of adjustment through process tracing procedures yielded no evidence of adjustment in the standard anchoring paradigm. And manipulations such as forewarnings and financial incentives that ought to influence the amount of effortful adjustment have likewise had little or no effect on responses in that paradigm (Chapman & Johnson, 2002). Outside the standard anchoring paradigm, in contrast, various cognitive load manipulations have been shown to influence judgments in a manner consistent with an underlying process of effortful adjustment or "correction" from an initial assessment (e.g., Gilbert, 2002)

The reason for these uneven effects was only recently made clear by two related research programs. First, a comprehensive series of studies by Mussweiler and Strack has compellingly demonstrated that anchoring effects in the standard anchoring paradigm using "externally-provided anchors" are *not* the result of insufficient adjustment, but of the enhanced accessibility of anchor-consistent information (e.g., Strack & Mussweiler, 1997). The attempt to answer the comparative assessment within this paradigm leads people to evaluate whether the anchor value could be equal to the correct answer. Because people evaluate hypotheses by trying to confirm them, the comparative assessment generates information disproportionately consistent with the anchor value, thereby biasing the subsequent absolute judgment.

Second, studies conducted in our own lab, in contrast, have provided evidence of *true* insufficient adjustment outside the standard anchoring paradigm (Epley & Gilovich, 2001). In particular, this research suggests that people adjust from values they generate themselves as starting points or ballpark figures known to be incorrect but close to the target value—that is, from "self-generated" anchors. People estimate the date that Washington was elected President of the United States, for example, by serially

adjusting from 1776, the date the U.S. declared its independence. Or they estimate the freezing point of Vodka by adjusting (down) from 32°F (0°C), the freezing point of water.

Experimental Research

The experiments in this presentation are intended to provide further support for the distinction between experimenter-provided and self-generated anchors, demonstrate that these anchor values respond differently to situational manipulations, and that the anchoring biases produced by these two types of anchor values require different debiasing strategies for amelioration. In particular, because the process of serial adjustment from self-generated anchors requires attentional resources, adjustment should be diminished when participants are under some form of cognitive load. However, because the biased selection of anchor-consistent information is a paradigmatic example of an automatic psychological process, anchoring effects in response to experimenter-provided anchors should not be influenced by forms of attentional load. Three separate experiments found support for these predictions. Participants adjusted less from self-generated anchors when they were less able to expend attentional resources—either because they were under cognitive load, intoxicated by alcohol, or low in the Need for Cognition—than when they were not. Responses to experimenter-provided anchors, in contrast, were not influenced by these manipulations in any way.

Notice this difference between self-generated and experimenter-provided anchors also suggests very different strategies for reducing the pernicious anchoring biases produced by anchors. In particular, if serial adjustments from self-generated anchors require attentional resources, then anchoring effects resulting from self-generated anchors should be reduced by manipulations that increase the tendency to expend those resources. Indeed, two additional experiments we will discuss demonstrated that providing financial incentives for accuracy and forewarning about potential anchoring biases increased adjustment from self-generated anchors. Neither of these manipulations, however, influences responses to experimenter-provided anchors within the standard anchoring paradigm.

Conclusion

Anchoring effects are ubiquitous in human judgment. The surface similarities among the many empirical demonstrations of these effects can create the illusion that they are the product of a single psychological process (Epley, in press). The results of the present experiments indicate otherwise, demonstrating that anchoring effects are produced by at least two mechanisms. Those generated by participants themselves as values known to be incorrect but close to the right answer (i.e., “self-generated” anchors) activate a process of serial adjustment, whereas novel anchors provided by an experimenter do not. Much of the uneven progress in understanding the biases that result from anchoring effects can be attributed to the failure to recognize that not all anchoring effects are alike, and to an insistent search for a single explanatory mechanism. Only by recognizing the different mechanisms that underlie these anchoring effects can researchers and practitioners hope to predict the size and magnitude of different anchoring effects in everyday life.

“Anchoring on the Here and Now: Insufficient Adjustment in Time and Distance Estimates”

*Robyn A. LeBoeuf, University of Florida
Eldar Shafir, Princeton University*

Consumers often must estimate uncertain quantities. Years of research have shown that such judgments and estimates are often systematically and predictably biased. Some biases arise naturally

because of shortcuts or heuristics that consumers employ to simplify the estimation task; other biases can be induced by manipulations of the decision situation, choice description, or elicitation procedure (for a review, see Gilovich, Griffin, & Kahneman, 2002). This paper explores a particular type of bias that is especially likely to affect estimates of uncertain time and distance intervals. Notably, such estimates are called for when consumers plan the times and places of their purchases, and a better understanding of bias in such contexts may foster better prediction of consumer choices.

Consumers can think about a future event in terms of its date of occurrence or in terms of the amount of time until that event. These different viewpoints may prompt different senses of event proximity. At the end of February, for example, “March” may seem distant until one realizes that it is just 48 hours away. In the studies described below, we find that time estimates are indeed influenced by whether they are unit-based (e.g., number of days) or based on boundaries (e.g., final date). We then document a similar discrepancy with estimates of distance.

We first asked participants about multiple past and future events, which were divided into “private” and “calendar” events. Private events, like getting a haircut or buying one’s books for the semester, have no publicly known date; their occurrences are determined by the participant. In contrast, calendar events, like Christmas, have a publicly available date. Some participants were asked to estimate the number of days remaining until (or that had passed since) the events; others estimated the date of occurrence of the same events. (For purposes of analysis, we converted date estimates to the corresponding number of days.)

For future-private events (e.g., doing laundry, getting a haircut), the average day-format estimate was 66.6% of the corresponding date-format estimate, reliably lower than the 100% expected if question format had no effect, $p < .001$. Thus, estimating the number of days until future-private events yielded relative underestimation compared to directly estimating the corresponding dates. This effect was limited, however, to future-private events. Day-format estimates did not differ from date-format estimates for future-calendar, past-calendar, or past-private events (day-format was 99.2%, 96.4%, and 95.8% respectively, of date-format). Thus, consumers are affected by response-format manipulations only when the date of the event is not yet decided. When the date has been determined, consumers are quite accurate in converting from the known date to provide the number of days (when requested to do so). In contrast, when estimating the days until an uncertain future event, people seem not to first generate a date and then convert to the requested units. Instead, we suggest, people appear to anchor on the present and to adjust by the suggested units (e.g., “more than one day, more than two, more than three...”), but that adjustment is typically insufficient, yielding relative underestimation.

If insufficient unit-by-unit adjustment underlies the low day-format estimates, increasing response-unit size should increase overall adjustment. Indeed, for future-private events, day-format estimates averaged only 46.1% of estimates obtained when participants were asked to respond by giving the weeks and months remaining until the events. This supports the hypothesis that an increase in unit size generates greater overall adjustment from the anchor, which in these cases is presumed to be “the present.”

We replicated these effects with distances; some participants estimated various familiar campus distances in conventional units (e.g., miles), whereas others were asked to answer using unconventional units (e.g., number of footsteps). Unconventional-unit estimates were, on average, 62.5% of conventional-unit estimates and 61.9% of the actual distances (both ratios less than 100%, $ps < .01$). These effects of unit type were not found for commonly known distances, such as the length of a football field; for such distances,

participants presumably converted from the known length to the specified units.

For both time and distance, using particular units to estimate uncertain intervals seems to prompt different processes from when estimates are made in terms of calendar dates or natural distance units. In the latter cases, respondents may have readily available scripts or may use memory or spatial cues to inform them about interval size. In contrast, when small, simple units such as days or footsteps are required, consumers appear to anchor on “here” or “now” and to adjust, unit-by-unit, generating an answer that is often insufficiently distant. This work has implications for certain lines of memory research (Huttenlocher, Hedges, & Bradburn, 1990) as well as for research on the planning fallacy (Buehler, Griffin, & MacDonald, 1997). Furthermore, the findings are relevant to consumer planning more generally: Ranging from predictions about how long supplies will last to the scheduling of services and maintenance, consumers’ estimates are likely to differ depending on whether they think of time in terms of successive units, such as days, as opposed to eventual calendar dates. Similarly, estimates of distance appear highly malleable, suggesting that the perceived proximity of relevant locations will vary significantly, depending on how distance estimates are elicited. These findings add to the large body of research illustrating the impact of elicitation methods on estimation procedures.

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“Favored Favorites: Inequalities in Equivalent Outcomes”

Leif D. Nelson, New York University

Joseph P. Simmons, Princeton University

How do consumers make decisions between explicitly equivalent alternatives? Despite a normative account predicting that people will choose each of two equal alternatives approximately half the time, research has demonstrated a systematic selection bias (Tversky, Sattath, & Slovic, 1988). The question remains though, what process leads to systematic selections where random selections would be expected?

We argue that anchoring and adjustment processes (Tversky & Kahneman, 1974) may account for this effect. For example, when considering two competing products, people first identify the higher quality alternative (the anchor) and then adjust for the price difference equating the products. Because adjustment is often insufficient, even when a consumer’s self-generated price difference equates the options, the higher-quality option will still be selected. In the context of a more general dual process (Kahneman, 2003), the quick intuitive inferences of System 1 provides an imperfect anchor, and the more effortful System 2 corrects the initial inference to make it more accurate. Nevertheless, because System 2 often undercorrects, responses tend to be biased towards the intuitive estimate.

Why would a correction system systematically undercorrect? In the context of anchoring and adjustment, we argue that this is due to System 1 outputs that provide two signals. Consistent with other models, the first signal indicates the exact anchor value, but we posit an additional output communicating the felt confidence in System 1

judgments. We argue that people use confidence as an informational cue for System 2 adjustments, so that when confidence is high, smaller adjustments are made. In many purchasing decisions, where prominent dimensions determine quality differences, initial preferences are felt with high confidence, and as a result adjustments for price are comparatively small.

Initially we tested this hypothesis by looking at decisions in a market predicated on notionally equivalent outcomes: sports betting. In football, bookmakers take bets on games by first setting a point spread equating the favorite with the underdog, and offering equal odds (minus a commission) to people who bet on either team. We examined choices made by thousands of people in a national online football pool across the entire 2003 season. In line with our argument, we made two predictions: 1. People anchor on the subjective probability that the favorite will defeat the underdog, and (insufficiently) adjust for the magnitude of the point spread. As a result most people should bet on favorites. 2. An interaction between initial subjective probability and point spread should emerge, suggesting that people adjust more with lower judged probabilities than they do with higher probabilities. We found very strong support for both hypotheses, as in more than 90% of the games the majority chose the favorite against the point spread, but this effect was considerably reduced as people became less certain about which team would win the game.

We then ruled out a number of competing explanations. To show that the effect was not due to a lack of financial incentive, we conducted an experiment in which we gave money to knowledgeable football fans to bet on games, and showed that they chose more favorites, bet more money on those games, and felt more confident in their accuracy as a function of the number of favorites they picked. To rule out systematic disbelief in bookmaker point spreads, borrowing the matching procedure of Tversky et al. (1988) we asked participants to ideographically generate point spreads equating the two teams, and subsequently choose the winner. Across a number of studies we demonstrated that most people bet on favorites with a self-generated spread, did so when the teams were otherwise unknown (i.e., Team A vs. Team B), and with non-sporting probabilistic events (i.e., the presidential election). Perhaps most notably though, we showed that the effect reversed when there was low confidence about who would win the contest to begin with—a demonstration that adjustments could be not only sufficient, but in fact, enthusiastic.

If our model is correct, and System 1 feelings of uncertainty guide the engagement of System 2, then increasing System 1 uncertainty should lead to sufficient adjustments. We partly demonstrated that with the latter studies mentioned above, but we sought a manipulation of uncertainty that was not endogenous to the anchor itself. Borrowing a procedure from Epley and Norwick (2004), some participants read about an upcoming football game in a difficult to read font. This manipulation reduces fluency, and decreases feelings of certainty about the anchor information. As predicted, reading about the game in a bad font increased betting on underdogs relative to reading in a good font.

Perhaps these findings only extend to probabilistic events? Two additional studies investigated product decisions, and replicated the key findings in that domain as well. In the first of these studies participants were presented with lists of attributes describing two apartments. First people decided which apartment they preferred. This decision was either easy (one dominated the other—it was equal on every dimension but it had a better landlord) or difficult (one had a large space and a bad landlord, and the other had a small space and a good landlord). After choosing between the apartments, participants equated them on price, and then they were required to choose between the two apartments given the

prices they indicated. Participants were much more likely to select their preferred option when the initial decision was easy than when it was difficult. This effect was mediated by how confident they were in their initial decision.

A second study tested the generality of this finding. People made an easy choice between two MP3 players, matched them on price, and choose between their preferred option at the price they indicated or their unpreferred option at a price equal to 5% less than the equated price. Despite the strong consistency pressures here—based on their own prices the unpreferred option *dominates*—we still observed that the vast majority of people chose their preferred option.

Taken together, these studies offer a fundamental change in thinking about an old paradigm. We argue that “insufficient” adjustments may be epiphenomenal—the accidental byproduct of experimental situations that prompt the generation of high certainty anchors. Contemporary thinking about anchoring and adjustment needs to incorporate these factors when drawing on the anchoring and adjustment model to explain apparent biases in the perceptions, inferences, and preferences of consumers.

SPECIAL SESSION SUMMARY

Twenty Years of Consumer Culture Theory: Retrospect and Prospect

Eric J. Arnould, University of Nebraska
Craig Thompson, University of Wisconsin

SESSION OVERVIEW

This session aims to contribute to the disciplinary branding of an extensive body of consumer research that has over the years been variously characterized as “alternative,” “postpositivist,” “interpretivist,” and “postmodern.” In their introductory overview, Arnould and Thompson suggested that these epithets are more obscuring than clarifying and all feed into a misunderstanding of this research tradition by focusing on methodological differences. The argument motivating this session is that the defining characteristics of this research tradition are theoretically based and emanate from a collective project of systematically theorizing the socio-cultural, experiential, symbolic, and ideological aspects of consumption. Accordingly, this session introduces and develops a more appropriate and viable brand for this research tradition: Consumer Culture Theory (CCT).

The expansion of CCT coincides with growing concerns over the fragmentation of the field and the seeming lack of a common theoretical vernacular and set of driving problems and questions that bind consumer researchers together (Simonson et al 2001; Wright 2002). These concerns flow from a decidedly modernist construction of the scientific enterprise and the concomitant idea that a scientific field progresses by developing a definitive and unified system of knowledge around a common domain of interest (e.g., Hunt 1991). From this standpoint, diversity is a problem because it fosters differing camps, each pursuing their own particularistic questions, whose knowledge claims are not likely to coalesce into a unified theoretical system (Simonson et al 2001). Rather than an orderly unified field, consumer research threatens to become a tower of Babylon (Calder and Tybout 1987).

In contrast to this angst-inducing allegory, this session argues that the consumer research field is enhanced by the presence of multiple conversations. Consumer research is a vital and indeed maturing field of inquiry, not because it steadily advances toward a singular and unified body of theory, but because it can generate and sustain multiple theoretical conversations, each speaking to distinctive theoretical questions. To anthropomorphize, this polyvocal fluency makes the consumer research field a more interesting and creative conversationalist and enables it to form greater and more varied linkages to other branches of social science, government and public policy agencies, and the world of management. Accordingly, the papers in this session elaborate upon some of key domains of research interest that have been explored by CCT researchers and illustrate how these theoretical concerns systematically link studies addressing a diversity of consumption contexts. The papers also distill some of the major points of theoretical contribution that have been offered by CCT research and discuss some of its most promising future directions.

Arnould and Thompson (2005) discuss the motivating rationales and logic driving their CCT framework. They offer CCT as a means to integrate a nexus of theoretical perspectives and contextually nuanced studies that address the dynamic relationships between consumer actions, marketplace structures, cultural meanings, and myriad forms of ideological reproduction and consumer resistance. They note that CCT is not a unified, grand theory nor does it aspire to such nomothetic claims. While representing a plurality of distinct theoretical approaches and research goals, CCT

researchers nonetheless share a common theoretical orientation toward the study of cultural complexity that programmatically links their respective research efforts.

Rather than viewing culture as a fairly homogenous system of collectively shared meanings, ways of life and unifying values shared by a member of society (e.g., Americans share this kind of culture, Japanese share that kind of culture), CCT explores the heterogeneous distribution of meanings and the multiplicity of overlapping cultural groupings that exist within the broader socio-historic frame of globalization and market capitalism. This “distributed view of cultural meaning” (Hannerz 1992, p. 16) emphasizes the dynamics of fragmentation, plurality, fluidity, and the intermingling (or hybridization) of cultural traditions and ways of life (Featherstone 1991; Firat and Venkatesh 1995).

Arnould and Thompson then discuss four major domains of CCT research that have emerged to date (which are by no means intended as exhaustive or all-defining categories). The first research domain focuses on consumer identity projects and the co-constitutive, co-productive ways in which consumers forge cultural worlds through pursuit of shared consumption interests. The second research domain addresses the focuses on specific cultures created through marketplace interactions and the cultural resources offered by brands (Muniz and O’Guinn 2001; Muniz and Schau 2005) or leisure activities, such as skydiving (Celsi, Rose, and Leigh 1993). Studies of marketplace cultures explore the heterogeneous distribution of meanings and the multiplicity of overlapping cultural groupings that exist within the broader socio-historic frame of globalization and market capitalism. The third research domain focuses on the institutional and social structures that systematically influence consumption and reciprocally, the relationships between consumers’ experiences, belief systems and practices and these underlying institutional and social structures. The fourth domain concerns the promulgation of mass-mediated marketplace ideologies and consumers’ strategies for interpreting, using, and at times resisting these ideological interpellations.

Muniz and Schau’s study is situated within CCT research exploring consumer identity projects, marketplace cultures, and consumers’ interpretive strategies. They report on the socio-cultural dynamics that animate and anchor a grassroots brand community centered on the Apple Newton, a product that was abandoned by its corporate progenitor. These users continue to support a discontinued product by creating hardware solutions to keep the Newton running in a changing environment, writing software applications to allow the Newton to perform functions unforeseen at the time of discontinuation (wireless internet connectivity, MP3 players, synchronization with newer operating systems) and maintaining a community of users to perform customer service activities and support the users who are at times the victims of social ridicule and stigmatization. Supernatural, religious, and magical motifs are common in the stories members of the Newton community share as they interact in various community forums. These motifs (including the miraculous performance and survival of the brand, as well as the return of the brand creator) invest the brand with powerful meanings and perpetuate the brand and the community, its values and its beliefs. As such, this research also speaks to the CCT program on mass-mediated marketplace ideologies and consumers’ interpre-

tive strategies. Members of the Apple Newton brand community firmly believe that in their consumption and perpetuation of an abandoned technology they are challenging shortcomings in the market for computers and technology.

Muniz and Schau further argue that brand communities are most likely to form around those brands capable of producing transformative experiences in their consumers and that can sustain symbolic connections to ideals of magic and religion or the supernatural. They suggest that the most robust brand communities, which exist across a range of product categories, exhibit this quality.

Crocket and Wallendorf pick up the critical thread of CCT by exploring how resistance to marketplace ideologies can emerge for consumers who are not on the socio-economic margins—a position usually associated with a critical orientation toward the marketplace (Holt 2002)—and whose consumer identities are *not* oriented around a critical politics of consumption, as in the manner of devout eco-friendly consumers (e.g., Dobscha and Ozanne 2001). They show, however, that a particular and more subtle form of emergent consumer resistance can arise for consumers who are not seeking to escape the ideological imperatives of the capitalist marketplace (e.g., Kozinets 2002), and who are *not* motivated by a broader political or transforming or reforming capitalism (Murray and Ozanne 1991).

They develop this argument through an ethnography of a summer vacation destination sponsored by a large, mainstream Christian denomination, known as the Village. Their ethnographic research investigates the day-to-day consumption practices, as well as the emergence of ideological critiques of those practices, among a group of consumers who attend The Village. The Village typically attracts full nest families (though not exclusively) to an isolated rural setting, where they live a communal lifestyle, and attend daily workshops on topics that range widely (from Bible studies, workshops on global poverty, voluntary simplicity, etc.). Participants at The Village tend to stay on average either one week or two weeks. The setting features a wider range of consumer ideologies and critiques of consumer culture than has been typical of research on consumer resistance. Also, given the very minimal presence of marketing activity—and the relative physical isolation of the setting—for many consumers The Village constitutes their first prolonged separation from the normal routines of the commercial marketplace.

The discussant Richard Lutz, who in his tenure as editor of *Journal of Consumer Research*, contributed significantly to the emergence of the CCT tradition in the field, provided an historical retrospective on the CCT tradition. He discussed the disciplinary ferment that led to a more pluralistic conception of consumer research and some of the key articles that shaped the course of the development course of CCT.

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SPECIAL SESSION SUMMARY

Faulty Reasoning and Gambling Behavior

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SESSION OVERVIEW

According to the National Gambling Impact Study Commission, 86% of Americans report gambling in their lifetime and 68% report gambling in the last year (Seligman 2003). In other words, although gambling is an addiction for some, most gambling involves *normal* consumers who simply choose to engage in the activity even though it does not make sense rationally (i.e., the expected value is negative). The involvement of normal consumers in the patently “non-rational” act of gambling has led to the use of gambling as a fertile context, both for identification and for testing of such robust deviations from normative behaviors as preference reversals (Lichtenstein and Slovic 1973), the illusion of control (Langer 1975) and gambler’s fallacy (e.g., Tversky and Kahneman 1974).

This special session probed deeper into this body of knowledge in several significant ways. First, the session identified some—hitherto unidentified—factors that play a significant role in preference and choice among gambles. In the tradition of previous literature in the area (briefly mentioned above), the session noted deviations from normative behaviors across all three presentations, and also explored the psychological factors that underlie these deviations. The final presentation also assessed whether, and to what extent, the biases exhibited in a gambling context translate to analogous biases in other consumer contexts. In summary, the special session extended previous research in consumer gambling and decision making in both theoretically and substantively meaningful ways.

The first two presentations identified factors that motivate “normal” individuals to engage in gambling behavior. The first study investigated how ordinary consumers often find themselves stuck gambling past when they should. Raghunathan and ter Hofstede, argue that a crucial element contributing to this flaw is gambler’s faulty intuitions about the effect their “stopping” rules have on the expected values of their gambling sessions. On the basis of a survey conducted by the authors in Las Vegas, using real gamblers as respondents, the authors report that gamblers are prepared to stop a gambling session if they make a “Target” amount of money (which may be preset or evolve as the session progresses), or if they lose all their “budgeted” money. Unfortunately (for the gamblers), the Target amount is often set unrealistically high—on average, sixteen times the initial outlay (the amount of money they brought into the gambling session). Because the number of plays required to meet such unrealistically high Targets is generally quite large, most gamblers lose all their money in their quest for the elusive Target. Two controlled experiments, conducted subsequently using undergraduate subjects, focused on gamblers’ intuitions about whether and to what extent pre-specified Targets influence outcomes of gambles. Results from these experiments indicated that gamblers tend to underweight the detrimental effect of an unrealistically high target amount.

In the second presentation, Goodman and Irwin identified which factors lead individuals to attach importance to, what they term, “special random numbers” in a gambling task, such as a lottery. Previous research has shown that gamblers prefer numbers they choose themselves because they believe this choice helps them control the outcome. They identified other conditions under which people find numbers “special” (i.e., worthy of betting more on than other numbers) but that they do not choose. By manipulating task type and assigning participants a number by an endogenous system

outside one’s own control (as is done in numerology, astrology, and other paranormal systems), they find that people prefer some numbers that they do not control and that the mechanism underlying this preference is enjoyment with the task. The enjoyment associated with this “specialness” stems from the prevalence of certain systems (i.e., dates and names) in the fortune telling world. They replicated these findings using actual money and show that this prevalence-to-enjoyment link already exists in memory for prevalent systems and is activated and strengthened by priming similar prevalent systems, such as astrology.

While the first two presentations focused on departures from normative behaviors exhibited by “normal” people, the third, by Cole, Denburg, and Bechara, identified neurological explanations for biases by examining gambling behavior of subjects with brain lesions. Based on the finding that people with damaged prefrontal lobes are especially susceptible to gambling biases in the Iowa Gambling Task, they assess whether gamblers who make poor (vs. good) decisions have similarly impaired functioning in the prefrontal lobe, and whether this defect also causes them to behave in a non-rational fashion in other contexts. Consistent with their thesis, they find that compared to good gamblers, bad gamblers and older consumers are more likely to be enthusiastic about deceptively advertised products and services, such as mutual funds.

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“Faulty Reasoning Factors Underlying the Gambler’s Ruin”

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Frenkel ter Hofstede, University of Texas at Austin

Suppose a person has \$50 to gamble and is offered two types of gambling games (Game A and Game B) depicted in the boxes below. Rules of both games state that one *cannot quit* gambling until one has reached a pre-specified Target amount (or has lost the \$50), and that one *should quit* once the Target is achieved. Which game should one choose?

Game A	
\$ per bet:	\$5
P(winning) =	.48
P(losing) =	.52
Target =	\$100

Game B	
\$ per bet:	\$5
P(winning) =	.49
P(losing) =	.51
Target =	\$500

A risk-neutral decision-maker should choose Game A over Game B, as the former has higher expected value (-19.2 and -45.15, respectively). Results from a survey and an experiment, however, suggest that people generally tend to prefer Game B. This preference appears to be driven not by risk-seeking (which would provide a “rational” explanation for such choice), but rather, by a bias generated by a disproportionately heavy focus on the *probabilities* associated with winning vs. losing (which favors Game B). While it is true that probabilities of winning vs. losing can significantly affect the overall outcome of gambles (and should hence be considered in evaluating gambles), a more subtle factor, *viz.*, the *number of plays* required to reach the Target can also play an important role. Specifically, it can be shown that, for a sufficiently high Target, the odds that a gambler will reach a state of zero wealth is greater than that of reaching the Target—even if the probability of winning were greater than the probability of losing. Stated formally, all else being equal, the higher the Target, the greater the chance that the gambler will reach a state of zero wealth first (before reaching the Target) and hence, if the objective were to maximize expected value, the gambler may be better off choosing a gamble that is associated with lower probabilities of winning.

The harmful impact of an unreasonably high Target on the overall outcome of gambles (mediated by the number of plays required to reach the Target) was revealed in a survey conducted in a Las Vegas casino. On average, respondents indicated that they would quit playing if they reached a target amount equal to sixteen times their initial outlay. Because the number of plays required to meet such unrealistically high Targets is generally quite large, most gamblers lose all their money in their quest for the elusive Target, and can hence no longer play.

In an experiment, we asked participants to choose between two gambles, similar to the ones displayed on the previous page. Consistent with our predictions, participants’ preferences displayed faulty intuitions about the effect unrealistically high Targets have on the overall probability of attaining them. We assessed the size of the bias (difference between perceived and actual expected values) in a second experiment. Results revealed that the bias increases with increases in the Target amount, suggesting that gambles which use higher Targets as the stopping rule are actually more attractive than those that use a lower Target amount as the stopping rule.

Gamblers may not necessarily have a fixed Target amount in mind before they start gambling, but instead, construct and adapt their Target during the course of gambling. Interestingly, our experiment indicates that, regardless of whether the initial series of plays results in losses or in gains, gamblers decide to continue to play. Those on a losing streak justify their decision to continue by “expecting to win” (cf. gambler’s fallacy; e.g., Clotfelter and Cook 1993). Those on a winning streak continue to gamble because they “feel lucky” and hold unrealistically optimistic visions of the future (cf. Taylor and Brown 1988).

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“Faulty Reasoning about Randomness: Special Random Numbers”

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Julie R. Irwin, University of Texas at Austin

In many gambling situations, the decision maker picks a number or symbol in order to potentially win money via a random system. A purely mathematical view of random gambling systems would presuppose that, given the presumed goal of maximizing the probability of winning, there is no reason to prefer one number (such as those chosen for a lottery ticket or a number on a roulette wheel) over another because the expected value stays constant over all possible choices. Research has repeatedly shown, however, that even within a random system decision makers prefer numbers they pick themselves to randomly-chosen numbers (Langer 1975; Langer & Roth 1975; Wortman 1975). This preference is reflected in actual lotteries. A significant number (approximately 30%) of state lottery players expend the extra effort to choose their own numbers rather than have the computer pick the numbers for them (MUSL 2003).

Previous research (e.g., Langer 1975) on special random numbers has concentrated on numbers one chooses oneself. The “illusion of control” induced by choice appears to be quite robust, although some variables such as repeated gambles can moderate it (see Thompson, Armstrong and Thomas, 1998, for a review). But, we noticed, there are many uncontrollable systems (e.g., numerology, astrology) that also hold appeal for people and there is anecdotal evidence as well. The “Kabalarians,” for instance, will (for a fee) provide an in depth analysis of your name with the promise to free believers of “economic slavery” (www.kabalarians.com). Similarly, many books and websites promise to guide people’s lives through astrology.

We test the monetary appeal of a set of “Numerology Luck Codes” that are not controlled by participants but that vary on a number of other parameters. We test this by measuring the difference in willingness to bet (and/or willingness to pay for a bet) across random number systems, as is done in previous literature (e.g., Langer 1975). We show that (1) this difference obtains even when the illusion of control is not present, (2) this difference can be predicted by other factors, including enjoyment and the prevalence of the particular random number system in society, and (3) this difference increases when priming positive associations in consumers’ memories.

In our first two studies we find that numbers generated randomly by certain systems (e.g., dates and names via numerology) are preferred to gambles of equal expected values and equal (lack of) control. In mediation tests we show that the mechanism underlying this preference is enjoyment, not perceived control. In a third study we directly measure the prevalence of the more popular random number systems, and show that those for which people will bet more are also more prevalent in society. The fourth study uses real money and we prime a prevalent fortune system (i.e., astrology). We find that the prime increases the impact of enjoyment on the willingness to bet difference, suggesting that decision makers have positive associations in memory between some random systems and fortune-telling systems that are prevalent in society. The enjoyment, perhaps stemming from childhood memories, is primed by the random system, and because of this enjoyment the gamble becomes more enjoyable to play. Furthermore, this prevalence (not beliefs about luck, or individuality of the system) underlies preference for these random numbers. Our findings help expand the concept of special random numbers beyond the illusion of control, and help provide both theoretical and practical guidance to researchers attempting to understand, capitalize on, or prevent investment in special random numbers in the gambling environment.

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"Bad Gamblers: Using Negative Performance on the Iowa Gambling Task to Predict Future Consumer Mistakes"

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The Iowa Gambling Task is a task that resembles real-life decision making in the way it factors in reward, punishment, and unpredictability. The object of the game is to win money by picking from the best of four decks of playing cards. Each participant gradually acquires knowledge about which decks are "good" and which are "bad" as the player removes card after card from varied decks. Some cards lead to financial rewards; others lead to penalties. Normal gamblers begin choosing consistently from the "good" decks, and begin avoiding the "bad" decks even though they cannot consciously articulate the strategy they are using to deal with the situation. But those participants with impaired prefrontal lobes seem unable to distinguish between the "good" and the "bad" decks and lose the game because they continue to choose from decks that put them into increasingly greater levels of debt.

In our research, older and younger adults come to the Department of Neurology Laboratory to perform the gambling task. Based on the neurological aspects, we classify older and younger adults as good and bad gamblers and expose them to an advertising booklet containing a combination of deceptive and non-deceptive ads.

Half the consumers are exposed to a Mutual Fund ad that visually shows only the last 6 weeks of performance in an upward trajectory, half the consumers are exposed to the same ad that visually shows a 6-month performance history with more variability in performance. We then ask consumers a series of questions about the ads. About the Mutual Fund, we ask consumers to indicate the following: 1) what is that probability that they would invest in the Mutual Fund, 2) how much they would initially invest in the mutual fund, 3) the likelihood that the Mutual Fund will give an above average return during the next year. Finally, participants indicate how important the average rate of return is to them in deciding: a) whether to invest, b) the likelihood that there will be major fluctuation in the rate of return over the next few years, and c) the importance of this fluctuating return.

On all measures of responses, we find, as would be expected, that all consumers are less enthusiastic about the mutual fund when it is not advertised deceptively. Most importantly, we also find that the bad gamblers are more likely to be enthusiastic about the mutual fund and believe advertisers' claims when it is advertised deceptively compared to the good gamblers. Older adults are also susceptible to the deceptive advertisements, but only if they are also bad gamblers. The study suggests a fundamental decision making

process may be responsible for this behavior in bad gamblers and it can impact other financial and risk-based consumer decisions.

The Role of Brand-Elicited Affect in Brand Extension Evaluations

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EXTENDED ABSTRACT

Consumer's evaluations of brand extensions are often guided by their perception of how well the extensions "fit" the core brand category. This perception, in turn, depends on similarity of the extension to the core brand in terms of physical features, functions, prestige value, or the skills required to manufacture the products (Aaker and Keller 1990). Consumers who perceive a good fit between the extension and the core brand category are likely to consider the extension to be a member of the category, and consequently, evaluate the extension based on their previously formed judgment of the core brand. In any event, the assessment of fit requires a deliberative identification and comparison of specific characteristics of the extension with those of the core. However, this assessment may not always be made. For example, consumers may sometimes base their evaluations of a brand extension on their subjective affective reactions to the core brand name without considering any specific features that the extension might have. They may interpret these feelings as an indication of how much they are apt to like the extension and form an initial impression of it on the basis of these feelings alone. Once this impression is formed, it could later have a direct influence on extension evaluations that is independent of more deliberative categorization processes that might occur subsequently.

Not all brands are likely to stimulate consumers' affective reactions, however. These reactions may only occur if past experiences with the particular brand (or the type of product to which the brand pertains) have been affect eliciting. For instance, consumers typically consume soft drinks for pleasure, but may use bottled water for primarily utilitarian purposes. Therefore, brands of soft drink are more likely than brands of bottled water to become associated with affect, and consequently, to evoke spontaneous affective reactions when they are encountered later. When affect-eliciting brands introduce a new extension, the affect they elicit can influence consumers' evaluations of the extensions regardless of the extent to which they are similar to the core brands. On the other hand, for brands that do not elicit affect, consumers should judge their extensions base on the judgment-relevant criteria that they typically use to evaluate brand extensions.

We conducted three experiments to test our predictions and the underlying mechanism. In the first experiment, we asked participants to evaluate either an extension of an "affect-eliciting-brand" (a brand of cola) or an extension of a "non-affect-eliciting-brand" (a brand of bottled water). In both cases, the new extension was a pair of running shoes, which was regarded as highly dissimilar to both of the core brand categories (i.e., bottled water and cola). As such, if participants evaluate the extensions base on goodness of fit, their evaluations should be unfavorable in both cases. However, our data showed that this was not the case. More specifically, we found that when the core brand was likely to elicit affect, the affect participants were experiencing had an impact on their evaluations of brand extension, even though the extension was highly dissimilar to the core. However, when the brand name was unlikely to elicit affect, the affect that participants were experiencing had no impact on their evaluations.

These results are particularly noteworthy in light of the fact that the extension was very dissimilar to the parent brand and, therefore, the fit between the extension and the parent brand category was very low. These findings appear inconsistent with

those reported by Barone et al. (2000), which showed that although the affect participants were experiencing had an effect on evaluations of extensions that were moderately similar to the core brand, its effect on evaluations of either very similar or very dissimilar extensions was not evident. Note, however, that participants in Barone et al.'s (2000) studies were asked explicitly to judge the similarity of the extension to the core brand before they evaluated the extension. This procedure could predispose participants to consider the similarity of the extension to the core brand, and to engage in categorization processes that they might not otherwise perform. When participants are not explicitly asked to estimate the similarity of the extension to the core brand, they may base their judgments on purely affective criteria, and the contingencies identified by Barone et al. may be less apparent.

Our second and third experiments investigated these possibilities. These two experiments were similar to the first with three exceptions. First, we considered not only dissimilar brand extensions, but also similar and moderately similar ones. Second, we manipulated the order in which brand extensions were evaluated and similarity perception was judged. Finally, in order to generalize our findings, we used a different set of core brands and brand extensions as stimuli. Our findings showed that when participants made evaluations before judging similarity, the affect that participants were experiencing at the time they encountered the brand had an effect on their evaluations regardless of similarity, confirming the finding of our first experiment. When participants judged the core-extension similarity before judging the extensions, however, the evaluations were based on similarity in the manner assumed by Barone et al. (2000). That is, affect influenced perceptions of the similarity of moderately similar extensions but not dissimilar and similar ones, and, therefore, had an impact only in the former case. This result not only reconciles the apparent difference between the findings obtained in Experiment 1 and those reported earlier by Barone et al. (2000) but also have more general implications for the role of affect in brand extension evaluations. That is, participants may base their judgments of brand extensions on perceptions of similarity when they are explicitly asked to consider this criterion before making their judgments. Under such conditions, the impact of affect on extension evaluations is mediated by its impact on similarity perceptions. Consequently, it only influences evaluations when the similarity is somewhat ambiguous. When participants are not prompted to consider core-extension similarity as a basis for their evaluations, however, they are likely to base these evaluations on the affect they are experiencing independently of core-extension similarity. Under these conditions, brand-elicited affect has an influence on extensions regardless of the similarity of the extensions to the core brand.

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Understanding the Simultaneous Effects of Category Fit and Order of Entry on Consumer Perceptions of Brand Extensions

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EXTENDED ABSTRACT

In brand extension research, category fit of the brand extension with the parent brand has received significant attention, both independently and interdependently with other conditions of interest. What has yet to be studied in conjunction with category fit, however, is order of entry. Drawing on the depth of research concerning order of entry effects and pioneering advantage, the present study is designed to analyze the combined effects of brand extension order of entry and category fit with the parent brand on consumer response. In doing so, we attempt to explicate the conditions under which a pioneer is likely to maintain their pioneering advantage, and those conditions under which subsequent entrants are better positioned to gain favorable consumer evaluations and overcome the pioneer's first to market advantage. These findings will contribute not only to our understanding of consumer evaluations of brand extensions and the conditions surrounding the successful introduction of such extensions, but also to our understanding of the pioneering advantage and consumer preference formation.

It is typically believed that the first company to bring a product to market obtains an advantage in doing so. This so-called pioneering advantage is expected to be sustainable over time (Carpenter and Nakamoto 1989; Kardes et al. 1993; Robinson and Fornell 1985). However, subsequent research has called into question the very existence of a pioneering advantage (Golder and Tellis 1993), while additional research into the pioneering advantage has identified several boundary conditions for its existence (Bohlmann, Golder, and Mitra 2002; Carpenter and Nakamoto 1989; Muthukrishnan 1995; Muthukrishnan and Kardes 2001; Shankar et al. 1998; Zhang and Markman 1998). Thus, the interesting question is no longer whether there is an inherent advantage to getting to market first, but rather when such an advantage is sustainable and when it can be overcome.

In the eyes of consumers, brands are much more likely to introduce successful brand extensions if the category in which the extension is being introduced bears some similarity to the category or categories in which the parent brand traditionally operates (Aaker and Keller 1990; Boush and Loken 1991; Broniarczyk and Alba 1994; Herr et al. 1996; Park et al. 1991). While it may be possible for marketing communication efforts on the part of a brand to influence the perceived fit between a brand and an extension category (Bridges et al. 2000), the concept of category fit plays a large role in consumer evaluations of brand extensions, both empirically and theoretically.

Hypotheses

The above discussion has identified that there are conditions under which consumers ascribe an advantage to the brand that gets to market first, and there are other conditions where consumers may display a preference for brands that come to the party later. Similarly, there are conditions whereby consumers evaluate a brand extension favorably and other conditions where such favorable evaluations are much harder to come by. The above discussion has focused on the concept of category fit as one of these primary conditions. As such, the fit between the extension category and the

parent brand will be of focal interest in the present study, combined with a study of order of entry effects. The principle outcome for all of the following hypotheses is consumer evaluation of the brand extension.

In understanding how these two fit together, we expect to the theoretical concepts of assimilation and contrast to assist in explanation. A high fit pioneer will be assimilated into the parent brand category, and though will maintain a general preference amongst consumers, will be vulnerable to competitive offerings. A lower fit pioneer will induce a contrast effect whereby they are credited with the establishment of a new category with their moderately incongruent extension. A high fit brand that enters the market as a follower will not be assimilated, but rather will be contrasted with the lower fit pioneer, opening the door for positive consumer evaluations.

From this, we propose the following four hypotheses:

- H1: High fit brands will receive improved evaluations and higher shares of purchase intentions as a follower rather than a pioneer (Assimilation/Contrast)
- H2: High fit brands will achieve a considerable share of purchase intentions, regardless of order of entry (Category Fit).
- H3: Lower fit brands must be first to market to obtain favorable evaluations and reasonable shares of purchase intentions (Assimilation/Contrast, Order of Entry).
- H4: Pioneer brands that have a lower fit will receive larger shares of purchase intentions if the first follower is not a high fit brand (Assimilation/Contrast, Order of Entry).

Method

In the study, participants engaged in a three stage market simulation. In the first stage, participants were exposed to a pioneer brand offering a new brand extension in the coffee category. This pioneer brand exhibited a high fit with the extension category, a moderate fit, or a low fit with the category. In the second stage, the participants were exposed to a second brand entering the category with a brand extension of their own. In the third and final stage, a third brand enters the category, following the two previous brand entrants.

The experiment consisted of a 2 (order of entry) x 3 (category fit) mixed factorial design. A total of 369 undergraduate students participated as part of an introductory marketing course requirement. Instructions and stimuli were presented via computer. Participants proceeded through the three stages of the experiment on a self-paced basis. At the end of each stage, dependent measures representing evaluation and choice were collected.

Results

In support of *Hypothesis 1*, the choice results for the high fit brand as a pioneer are lower than when it enters the market 2nd or 3rd, i.e., the high fit brand performs better as a follower. In fact, the scenarios in which consumers showed the highest tendency to choose the high fit brand are when it was the 3rd entrant. In support of *Hypothesis 2*, the high fit brand also performs well regardless of

order of entry. *Hypothesis 3* states that brands with a low category fit are best served by entering the market as a pioneer, and the results show support for this hypothesis. In support of *Hypothesis 4*, the low fit brand is also able to hold its largest share of the market when followed by a moderate fit entrant.

The pattern of evaluation scores for the high fit brand is very interesting. When the high fit brand is the pioneer, its evaluation scores are on par with the other brands in their pioneer conditions. However, when the high fit brand enters the market as a follower, its evaluation scores increase considerably, and peak when it is the 3rd entrant. These results for the evaluation scores are consistent with those from the choice data described above—the high fit brand performs the best when it is the last to enter the market, outperforming the conditions where it enters 1st or 2nd.

Conclusions

Overall, high fit brands are preferred over low and moderate fit brands, regardless of order of entry. High fit brands are also imbued with the strongest pioneering advantage among the three levels of fit tested. In order for low fit brands to compete at all, they must be first to market. If a low fit brand waits to see how the market reacts to other brands entering the extension category, it holds little to no chance of gaining a foothold in the consumer's eye and wallet. However, a high fit brand actually benefits from waiting for a lower fit brand to enter the market first and establish the category. The contrast effect explains this interesting result that high fit brands are best served by waiting and allowing a lower fit brand to serve as the pioneer.

A high fit brand has a great deal of flexibility in deciding when to enter the extension category—the high fit brand performs well from a choice perspective whether it enters 1st, 2nd, or 3rd. However, from both a consumer evaluation and a choice perspective, the high fit brand performs the best when it enters the market 3rd. A follower strategy serves two purposes for the brand: 1) investment risk is reduced as the high fit brand can verify that a consumer market exists prior to making its own investment, and 2) consumers have a competitive brand to which the high fit brand can be compared, resulting in potentially higher evaluation ratings than the high fit brand extension would receive in isolation. On the other hand, a low fit brand has significantly less flexibility in their decision of when to enter the extension category. If the low fit brand waits for other competitors to pioneer the category and establish a market, it risks losing any opportunity to capture a reasonable share of the market.

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Formation of Price Expectation in Brand Extensions and Impact on Brand Extension Evaluation

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ABSTRACT

The current research examines the effect of several price-related variables on consumers' judgments of brand extensions. We find consumers' price expectations of a brand extension are affected by the *price of the parent brand* (i.e., a *brand-specific price factor*), the *relative price of the parent category* in relation to the extension category (i.e., a *category-specific price factor*), and the *heterogeneity of prices in the extension category*. We also find the impact of price expectation of the extension is stronger when they are confronted with the actual price of the extension than when they are not.

INTRODUCTION

Previous studies on brand extension have identified the cost and revenue benefits of brand extension primarily in terms of building and communicating strong brand positioning (Park, Jaworski and MacInnis 1986; Aaker 1991), enhancing brand awareness (Aaker 1991) and quality associations (Aaker and Keller 1990), and increasing the probability of trial by lessening product risk. However, few studies (except Taylor and Bearden 2002) have focused on the significance of *pricing* as it relates to brand extension strategies. Pricing issues should have substantial impact on a brand extension's actual marketplace performance given the critical role of price in consumers' estimations of a brand extension's value (e.g., Thaler 1985). Taylor and Bearden (2002) examined whether the actual price of the brand extension affected judgments of the brand extension's quality, perceived value, and purchase intentions when the parent and extension categories were similar vs. dissimilar. Although this study is notable in raising awareness of the potential role of the price on brand extension evaluation, a number of additional pricing variables beyond the actual price of the brand extension may affect these judgments even when similarity between the parent and extension categories is controlled. Moreover, these price related variables may affect judgments of the brand extension by affecting a critical variable not examined by Taylor and Bearden (2002)—*expectations of the brand extension's price*. However, the price of the parent brand may not directly transfer to consumers' expectations of a brand extension's price. *The inference formation mechanism* may be more complex for price than for other attributes of the parent brand.

The current research identifies and examines the effect of several price-related variables on consumers' price expectations and subsequently evaluations of a brand extension: (1) the *price of the parent brand* (i.e., a *brand-specific price factor*), (2) the *relative price of the parent category* in relation to the extension category (i.e., a *category-specific price factor*), and (3) the *distribution or heterogeneity of prices in the extension category* (i.e., a *contextual price factor*: the degree of variation in the price of brands in the extension category). In addition, we investigate (4) the impact of consumers' price expectation of a brand extension on brand extension evaluation when they are confronted with the actual price of the extension.

THEORETICAL CONSTRUCTS AND HYPOTHESES

Expected Price of the Brand Extension and its Drivers

A central premise of the current research is that consumers form an expectation of the brand extension's price. This price expectation is hypothesized as critical, as it is expected to affect consumers' perceptions of the extension's quality and its value. In general, past research outside of a brand extension context has shown that consumers do indeed form expectations of a brand's price. Moreover, price expectations serve as reference prices. A reference price is defined as a price which consumers use as a standard of comparison when evaluating the price of a product (Winer 1988). Considerable research has found that consumers do indeed develop a reference or expected price for a product and then use this price to evaluate the same product at a later point in time or a different product at the same point in time (e.g., Breisch, Krishnamurthi, Mazumdar and Raj 1997).

Since consumers often form reference prices (Winer 1988) and brand extensions are new products that are based on existing brand names, it is reasonable that consumers use generalized price knowledge to form an expectation of the brand extension's price. If so, it is important to understand *how consumers form this price expectation* and *what marketing relevant variables drive that expectation*. Briesch et al. (1997) suggest there are many sources of a brand's reference price, and that consumers' knowledge, purchase experience, and contextual factors can all drive its derivation. Since the brand extension is new, however, no price history or past price can be accessed from memory. As such, price expectations should be based on other aspects of price knowledge including those identified below.

The Price of the Parent Brand. In a brand extension context, the parent brand name (Chanel) is a salient information clue to consumers. If activated, price knowledge linked to this brand in memory may also be activated and used as a *frame of reference for considering the brand extension's price*. This effect is consistent with prior work that suggests that the parent brand name provide important cues about the character of the brand extension—cues that likely affect their judgment of it (Aaker and Keller 1990; Keller and Aaker 1992; Broniarczyk and Alba 1994). Thus, consumers' knowledge of (or memory for) the *parent brand's price* may serve as a frame of reference that affects expectations of the brand extension's price. Specifically, consumers should expect that the brand extension's price is high (low) when the price of the parent brand is similarly high (low) in that category.

Price of the Parent Category (in Relation to the Extension Category). We hypothesize that consumers may also use knowledge of the *price of the parent category* as a frame of reference for evaluating the price of the brand extension. Consider, for example, that a parent (e.g., a maker of dress suits) decides to extend its name to a lower priced product category (e.g., handbags). From a referent price perspective, this company would be pursuing a "*downward price extension*" because the price associated with the extension

product category (handbags) is lower than the price of the parent product category (dress suits). Now, consider a parent that plans to extend its name to the same extension category (handbags) but has a different and lower priced parent product (e.g., wallets). From a referent price perspective, this company would be pursuing an “upward price extension”, as the price of the extension product category (hand bags) is higher than the price of the parent category (wallets).

If consumers do use the price of the parent category to estimate the price of the brand extension, they may estimate the price of the *brand extension* to be higher (a) when its *parent category* is higher in price (designer suits) in relation to the extension category (handbags) than (b) when it is lower in price (wallets) in relation to the same extension category. This effect is consistent with the anchoring and adjustment heuristic (Tversky and Kahneman 1974). According to that heuristic, an individual anchors on the most readily available information and insufficiently adjusts up or down from that anchor in evaluating subsequently received information. With a downward (upward) price extension, consumers may anchor on the comparatively higher (lower) priced parent category and use its price as an anchor in estimating the price of the brand extension. Since adjustments tend to be insufficient, consumers may not adjust price estimates sufficiently to arrive at price that might be expected in absence of such framing. Thus, we expect that:

H1: Consumers expect the brand extension will be higher priced (a) when the *parent brand* price is high vs. low and (b) when the *parent category* is higher priced than the brand extension category versus when it is lower priced than the brand extension category (a downward vs. an upward price extension).

Consumers have been found to have price-quality schemas (e.g., Lichtenstein and Burton 1989), and sometimes use price as an indicator of product quality (e.g., Olson 1977). This linkage of price with quality is particularly likely in contexts where consumers have limited knowledge of and experience with the product, as would be the case with brand extensions. Since the brand extension is in essence a new product, schematic and inferential knowledge (as opposed to experience-based knowledge) likely affects their perceptions of the brand. As such, we anticipate that when consumers expect that a brand extension’s price is high, they infer that its quality is similarly high. Since favorable quality judgments affect brand evaluations, expectations of the brand extension’s price should affect evaluations of the brand extension as well. Therefore, we suggest the following hypothesis:

H2: Consumers expect the brand extension will be more favorably evaluated (a) when the *parent brand* price is high vs. low and (b) when the *parent category* is higher priced than the brand extension category versus when it is lower priced than the brand extension category (a downward vs. an upward price extension).

In addition to the main effects of the parent brand and parent category price information on consumers’ price expectations of the brand extension, we also expect an interaction effect between the two price information. Specifically, an upward price extension for a high priced parent may yield a conflict between the ‘premium price’ association of the parent brand and the relatively ‘low price’ of the parent category. When there is such a mismatch between the parent category and brand price information, confidence regarding the expectation of the brand extension’s price declines, making

consumers less clear about what the price would actually be. Accordingly, the transfer of the premium price image of the parent brand to the price expectations of the extension may be hindered by the parent category price knowledge. However, a downward price extension creates consistency and consequently a synergy between the parent brand and parent category price associations. As such, the transfer of the ‘premium price’ image of the parent brand may be further strengthened by the relatively ‘high price’ information of the parent category. Hypothesis 3 thus proposes that:

H3: The effect of the parent brand price on the price expectations of the brand extension will be greater for a downward than an upward price extension.

Variation of Prices in the Extension Category. We also expect that the effects hypothesized in H1 above are moderated by consumers’ knowledge of the extent to which *prices of brands in the extension category vary*. Prices in the extension category may be widely varying, as is the case with cars, or relatively narrow in variation, as is the case with cigarettes. Variation along a given attribute (e.g., price) often affects the diagnosticity of that information (Ross and Creyer 1992). Diagnosticity in turn affects the extent to which this information is utilized in making judgments or choices (Slovic and Lichtenstein 1971; Feldman and Lynch 1988). Little or no variation in the price of brands in the extension category renders the price of other brands in the extension category highly diagnostic of the brand extension’s price (e.g., Harley Davidson cigarettes). Consumers can simply infer the brand extension’s price based on the prices of existing brands in the extension category. Given the diagnosticity of this information, consumers should have little to gain by considering other information, such as the price of the parent brand or category (e.g., motorcycles). In contrast, when brands in the extension category show wide variation, the price information of these brands is no longer useful in gaining insight into the price of the brand extension (e.g., Harley Davidson cars). Consumers must therefore rely on other factors, such as the relative price of the parent category or price of the parent brand, to infer price (Ross and Creyer 1992). Thus, whether consumers rely on the price of the parent category (and/or the parent brand) to derive expectations about the brand extension’s price likely depends on whether price variation in the extension category is wide or narrow. Hence, we hypothesize:

H4: Consumers will be more likely to rely on (a) the price of the *parent brand* and (b) the price of the *parent category* to infer the price of the brand extension (the effects proposed in H1) when brands in the extension category show wide vs. narrow variation in price.

The Impact of Actual Price on the Effects of Price Expectation

When consumers learn the extension’s actual price (through information search), they may compare the *expected price* to its *actual price*. Price expectation becomes more important as consumers form some judgment of the product’s value in light of any discrepancy between the expected and actual price (Mayhew and Winer 1992; Kalyanaram and Little 1994). Such “transaction value” judgments (Thaler 1985) should make consumer evaluations even better or worse.

Transaction value is conceptualized by Thaler (1985) as the difference between the expected price and the actual price. In other words, when an actual price is given, consumers’ total value perception of a product gets adjusted due to the transaction value, i.e., increases when the actual price is lower than the expected price

or decreases when the actual price is greater than the expected price.

To illustrate the impact of actual price on consumers' judgments of the brand extension, consider the following example. First, assume that the expected price of a brand extension is \$70.00 in a downward extension condition and \$50.00 in an upward extension condition. Accordingly, when the actual price (or transaction value) is not considered, the difference in consumers' perceived value between the downward and the upward extensions is \$20 ($=\$70 - \50 ; difference in acquisition values). Now assume that the actual price of the brand extension is given at \$40.00. Since the actual price is given, transaction values occur in both upward and downward extension conditions as follows:

Reflecting Thaler's conceptualization (1985), the brand extension's transaction value is (expected price-actual price) or:

- (1) $70-40=\$30.00$ in the downward price extension condition, and
- (2) $50-40=\$10.00$ in the upward price extension condition.

As we can see in the above example, the transaction value in the downward extension condition (i.e., \$30) is greater than that in the upward extensions condition (\$10) because of the different expected prices (or acquisition values). Consequently, the total perceived value of the extension product in the downward extension condition would increase more than that in the upward extension condition.

This effect is expected regardless of the actual price of the brand extension. If the actual price of the product is \$80.00, then the transaction value of the brand extension would be $-\$10.00$ ($=70-80$) in the downward price extension condition and $-\$30.00$ ($50-80$) in the upward price extension condition. Accordingly, the total perceived value of the extension product in the downward extension condition would decrease less than that in the upward extension condition.

Therefore, we expect that the effect of price expectation (and the factors that are proposed to influence consumers' price expectation) on brand extension evaluation will be magnified when the actual price of the extension is provided versus when it is not.

- H5: The effect of the expected price of the brand extension on consumers' evaluations of the brand extension will be greater when the actual price of the extension is given than when it is not.

METHODOLOGY

Design

The study uses a $2 \times 2 \times 2$ between subjects design manipulating (a) *price of the parent brand* (high versus low) (b) *price of the parent category* relative to the extension category (upward versus downward category price extension), and (c) *variation in the price of brands in the extension category* (wide versus narrow).

Pretests

We conducted three pretests designed to develop the stimulus materials and experimental manipulations. Pretest 1 was designed to identify parent and extension product categories that would allow us to manipulate the experimental factors and control for confounding factors. Several criteria were deemed necessary in selecting these categories: (1) we needed *parent product categories* that were equally familiar to subjects to avoid confounding familiarity with price of the parent category, (2) to control for the effects of similarity, we needed to identify parent and extension product

categories perceived as equally similar, (3) to manipulate the upward vs. downward price extension, we needed parent product categories that were either high or low in price level (but not in technology level, etc. to rule out potential confounding effects) compared to the extension product category, and (4) we needed an *extension product category* that was relatively *unfamiliar* so as to credibly manipulate variation in price of brands in the extension category (wide vs. narrow) *without using two different extension product categories*.

Based on an informal interview with a group of students ($n=5$) and a small sample survey ($n=25$), we selected car navigation systems as the extension product category, and notebook computers and cellular phones as the parent categories. The former is higher priced than car navigation systems and hence represents a downward price extension. The latter is lower priced than car navigation systems and hence represents an upward price extension.

Pretest 2 was designed to identify appropriate brand names for the parent product categories selected in pretest 1. To avoid confounding effects of quality or other associations with established brand names, we used hypothetical brands (Keller and Aaker 1992). Fifteen students used 7-point scales to indicate how appropriate several candidate names (e.g., *Accurus, Logica, Monarch, Netech*) were to each parent product category as well as the extension product category (1=not at all appropriate, 7=very appropriate). As a result of that test, Monarch was chosen as the parent brand name.

Information about the price range of brands in the extension product category was provided to respondents in Pretest 3 to manipulate consumers' knowledge of the price variation in the extension product category. In the wide variation case, brands of car navigation systems were said to vary in price from \$300 to \$750. In the narrow variation case, they were said to vary from \$475 to \$625. Both narrow and wide price variations had an average price of \$525. To determine whether subjects perceived the narrow and wide price ranges as different, 20 undergraduate students were randomly assigned to one of the two variation conditions and asked to indicate the degree of perceived variation in price and the result confirmed our anticipation.

Subjects, Procedures and Measures

One hundred ninety one business school students were randomly assigned to the eight experimental conditions. Cell sizes ranged from 21-26. Subjects were first given an information sheet about the Monarch parent brand (notebook computer vs. cell phone), its price (high vs. low) and its brand extension context (wide vs. narrow variation in prices among brands). Subjects were then asked to respond to a set of questions that assessed their familiarity with, ownership of, and perceived relevance of the parent and extension categories. They then responded to a set of questions regarding the expected price of the brand extension, their evaluations of it and their perceptions of its quality.

Subjects were asked an open-ended question to indicate their expected prices for the proposed extension. Three 7-point scales were used to indicate the perceived quality of the brand extension. The items were averaged to form a single index of perceived quality ($\alpha=.91$). Three questions used a 7-point format to assess subjects' evaluations of the brand extension. The items were also averaged to form a composite measure ($\alpha=.89$). To control for order effects, two versions of the questionnaire were developed—one with brand evaluations preceding the expected price and perceived quality measures, the other with brand evaluations following these measures.

Subjects were also asked to rate their reliance on a list of information sources described to them in the given scenarios about

the Monarch brand such as the long tradition of Monarch notebook computers, the price of "Monarch" notebook computers compared to other brands, Monarch's orientation toward quality and innovation, its notebook computers' performance record, and the customer satisfaction and quality ratings of Monarch notebook computers (e.g., in the downward price extension situations) when responding to the price expectation questions. These questions were asked to determine whether subjects indeed relied on price of the parent in arriving at their expectations of the brand extension's price.

After several intervening questions, subjects were given information about the *actual price* of the brand extension (a "Monarch" car navigation system priced at \$490 in both upward and downward extension situations). Then, several questions about liking, favorability, and purchase intention were asked to assess subjects' evaluations of the brand extension. These questions were designed to test H5. The items were again averaged to form a composite measure of brand extension evaluation ($\alpha=.91$).

Finally, subjects answered several manipulation check questions regarding price of the parent brand, price of the parent category relative to the extension category, and perceived variation in the price of brands in the extension category. Subjects were also asked about the perceived similarity between the parent and the extension categories, perceived technology level of the parent category, the extent to which the brand name fit between the parent and extension categories, product relevance to them, and ownership of the parent and the extension products. Subjects were subsequently debriefed and thanked.

RESULTS

The manipulation check results indicate successful induction of the treatment conditions. To test H1-H4 we conducted a 2x2x2 ANOVA. The univariate ANOVA results are presented in Table 1. Before carrying out the analysis, the effect of question order (i.e., price expectation measure first versus evaluation measure first) was examined. There were no effects for presentation order, nor did presentation order interact with any other condition. Hence the results are pooled across the two presentation orders.

Price Extension Direction:

Regarding H1, the results reported in Table 1 show a significant main effect of parent brand price ($F=18.29$; $p=0.001$) and parent category price ($F=16.75$; $p=0.001$) on price expectation of the brand extension. Consumers expected a higher price for the brand extension when the parent brand was high priced ($\bar{x}=622.80$) than when it was low priced ($\bar{x}=506.86$). Consumers also had higher price expectations of the brand extension when a downward ($\bar{x}=621.15$) vs. an upward price extension ($\bar{x}=509.90$) was used. Thus, H1 is supported. It appears that the price of the parent category plays a role similar to the price of the parent brand.

As suggested in H2, the results reported in Table 1 show a significant main effect of parent brand price ($F=26.78$; $p=0.001$) and parent category price ($F=15.70$; $p=0.001$) on brand extension evaluation. Thus, H2 is supported.

Consistent with H3, the effect of the parent brand price on consumers' expectations of the brand extension's price was greater in the downward vs. the upward price extension condition ($F=3.49$; $p=0.05$). Specifically, in the downward price extension situation, the expected price of the extension for the high-priced parent brand ($\bar{x}=705.40$) is much higher than that for the low-priced parent brand ($\bar{x}=536.89$; $t=3.22$, $p=0.00$). In the upward price extension situation, however, the expected price of the extension for the high-priced

parent brand ($\bar{x}=543.57$) is not that higher than that for the low-priced parent brand ($\bar{x}=475.52$; $t=1.59$, $p=0.06$).

Extension Product Category Price Variation:

H4 states that the effect of price of the *parent brand* and *parent category* on price expectations of the brand extension will be greater when brands in the extension category show wide versus narrow variation in price. This proposed interaction was supported for price of the parent brand ($F=4.12$; $p=0.01$), but not for the price of the parent category ($F=0.89$; $p=ns$). Thus, H4 was supported only for the price of the parent brand, not the price of the parent category.

Impact of Actual Price on the Price Expectation Effects:

To test H5, first we ran two regression analyses, one using evaluations *before* subjects were given the actual price and the other using evaluations *after* they were given the actual price as dependent measures. Expected price served as the independent variable in both analyses. The beta of the after-equation ($b=.77$; $\text{std. dev.}=.105$; $t=7.30$) was significantly greater than that of the before-equation ($b=.48$; $\text{std. dev.}=.095$; $t=5.09$; $t=28.16$; $p=0.00$). The improvement in model fit for the before-equation ($R\text{-square}=.12$) vs. the after-equation ($R\text{-sq.}=.22$) also supports the greater influence of price expectation on brand extension evaluation when actual price is present. That is, the impact of the expected price on subjects' evaluations of the brand extensions after learning the brand extension's actual price was significantly greater than that before learning the brand extension's actual price.

Since the impact of expected price becomes greater when actual price is given, we also expected the factors that influence consumers' price expectation of the extension (i.e., parent category price and parent brand price) to have a greater impact on evaluations of the brand extension when the actual price of an extension is present than when it is not. To examine this, we conducted 2x2 ANOVA on before-actual-price evaluation and after-actual-price evaluation measures with parent category price and parent brand price as independent variables. The results show that the main effects of parent category price and parent brand price both increase considerably when an actual price is provided: effect size (η^2)=.193 versus .062 for parent category price, and .223 versus .113 for parent brand price (see Table 2). These findings further support H5.

DISCUSSION

The results of our study generally support H1-H5. First, our results suggest that in addition to the *price of the parent brand*, the *price of the parent category* also plays a critical role on consumers' expectations of a brand extension's price and their evaluations of the brand extension. Specifically, consumers have higher price expectations and more favorable evaluations regarding a brand extension when the parent category is high (vs. low) priced in relation to the brand extension and when the parent brand is a high priced vs. a low priced brand within the parent category. This finding suggests a different process factor of price expectations for brand extensions as opposed to any new product.

Second, the parent category price moderates the effects of the parent brand price. When the parent category price information is consistent with the parent brand price association (i.e., with downward price extensions), the effect of the parent brand price is strengthened. However, when there is a conflict between the two (i.e., with an upward price extensions), the effect of the parent brand's price is reduced. This interaction effect between the parent brand and the parent category price factors also suggests that it may

TABLE 1
ANOVA Results

<i>Independent Variables</i>	<i>Dependent Variables</i>	<i>MS</i>	<i>F</i>	<i>p</i>
A. Parent Category Price (Upward vs. Downward Price Extension)	Expected Price	609.27	16.75	.001
	Extension Evaluation	19.03	15.70	.001
B. Parent Brand Price (High vs. Low)	Expected Price	665,272.42	18.29	.001
	Extension Evaluation	32.45	26.78	.001
C. Extension Product Category Variation (Wide vs. Narrow)	Expected Price	3414.08	.09	NS
	Extension Evaluation	.07	.06	NS
A x B	Expected Price	126,851.33	3.49	.05
	Extension Evaluation	.17	.14	NS
A x C	Expected Price	32,435.78	.89	NS
	Extension Evaluation	1.04	.86	NS
B x C	Expected Price	149,927.50	4.12	.01
	Extension Evaluation	5.56	4.59	.01
A x B x C	Expected Price	11,374.16	.31	NS
	Extension Evaluation	.01	.00	NS

TABLE 2
ANOVA Results for Extension Evaluation Before and After Actual Price

Extension Evaluation before Actual Price

<i>Independent Variables</i>	<i>MS</i>	<i>F</i>	<i>p</i>	Eta-squared
A. Parent Category Price (Upward vs. Downward)	15.62	12.44	.001	.062
B. Parent Brand Price (High vs. Low)	29.83	23.77	.000	.113
A x B	.08	.07	.80	.000

Extension Evaluation after Actual Price

<i>Independent Variables</i>	<i>MS</i>	<i>F</i>	<i>p</i>	Eta-squared
A. Parent Category Price (Upward vs. Downward)	57.62	44.42	.000	.193
B. Parent Brand Price (High vs. Low)	69.36	53.47	.000	.223
A x B	2.67	2.06	.15	.011

not be likely, for example, for a very low-price car maker to benefit from extending its brand to wallets.

Third, price variation in the extension category moderates consumers' expectation of a brand extension's price. The effects of the parent category and parent brand price on consumers' price expectations are greater when *brands in the extension product category show wide vs. narrow variation in price*. While price of the *parent category* exerts a consistent effect on consumers' evaluations of the brand extension, the price of the *parent brand* is diagnostic of the brand extension's price only when products in the extension category show wide vs. narrow variation.

Finally, the results show that the effect of the expected price of the brand extension on consumers' extension evaluations is greater when the *actual price of the extension is given* than when it is not. A well-known finding in the pricing literature is that consumers judge the price of a product as favorable or unfavorable *in comparison with a reference point* (Thaler 1985; Tversky and Kahneman 1981; Kahneman and Tversky 1979). Marketers may do well to suggest a higher reference price (given its linkages to quality and the evaluations of the brand extension as shown here), but have the actual price lower than expected. Such a strategy may further heighten consumers' evaluations of the brand extension.

Our study provides several strategic tools for increasing consumers' price expectation of the extension. But, several potential confounding effects need to be considered in the present research. For example, although we have focused on the price variation in the extension category, the parent category (notebook computers and cellular phones in this study) price heterogeneity may also have an impact on consumers' price expectation of a brand extension. The use of a fictitious brand in our experiment might also have affected respondents' frame of mind and subsequently the results.

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Towards a Conceptual Model of Consumer Confusion

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ABSTRACT

As consumers are provided with ever-increasing amounts of information from more products sold through more channels and promoted in more ways, the notion of marketplace confusion is becoming increasingly important. From the extant literature, we propose and define three types of confusion resulting from brand similarity, information load, and misleading or ambiguous information. This latter type can be regarded as an 'altered knowledge state' in which a revision of understanding occurs. We argue that confusion should be conceptualized as a state variable and that existing confusion measures have focused solely on the behavioral and cognitive outcomes of confusion, ignoring the role of affect which is also a part of confusion. The paper is the first to discuss the consequences of confusion and elaborate on consumer confusion-reducing strategies. It concludes with some research implications of the new conceptualization.

INTRODUCTION

As consumers are provided with ever-increasing amounts of information from more products sold through more channels and promoted in more ways, the idea of confusion is becoming increasingly important and has been reported as a problem in many markets, e.g., telecommunications (e.g., Turnbull, Leek, and Ying 2000), life, health and travel insurance (Roberts 1995), and veal products (West et al. 2002). Here, we make further observations regarding the extant literature in this area. First, the lack of a generally-accepted definition has contributed to very different conceptualizations of consumer confusion. Second, the existence and potential significance of an affective dimension of confusion has been neglected in previous confusion studies and definitions. Third, almost all conceptual and empirical work examining consumer confusion has disregarded how consumers cope with confusion and the idea that they employ confusion reduction strategies. The paper begins by reviewing the extant definitions of consumer confusion and relevant literature before proposing and defining three types of confusion. We then move on to provide a conceptual model of consumer confusion which examines antecedents, potential moderators and mediators, coping strategies and consequences of consumer confusion.

DEFINING CONSUMER CONFUSION

The extant literatures suggest there are three somewhat distinct antecedents of consumer confusion and have not separated confusion as a separate construct from its antecedents. Table 1 gives an overview over existing definitions which show that consumer confusion can be related to too similar, too many or unclear stimuli. The definitions view confusion as a conscious state of mind that can occur either in the pre- or the post-purchase situation and have not only a cognitive dimension, but also a behavioral one. We now review and discuss each type of confusion and its antecedents.

According to Diamond (1981, p. 52), brand similarity confusion occurs when an imitator, "(...) so resembles the mark in appearance, sound, or meaning that a prospective purchaser is likely to be confused or misled". From our perspective, brand similarity does not necessarily cause confusion unless the consumers' are aware of the two brands (e.g., Johnnie Walker and 'Johnnie

Hawker' whisky). Similarity in advertisements and commercial messages can also cause this type of confusion (e.g., Kent and Allen 1994; Poesz and Verhallen 1989). We define brand similarity confusion as: '*a lack of understanding and potential alteration of a consumer's choice or an incorrect brand evaluation caused by the perceived physical similarity of products or services*'.

Another logical basis for confusion creation is information overload. This stems from the idea that brand proliferation causes 'confusion' because of the 'bounded-rationality' of individuals in relation to the volume and diversity of the information generated by a large number of brands (Simon 1962; Miller 1956). Clearly, information overload is not only caused by a proliferation of brands, but also by an increase in the amount of 'decision-relevant' information on the product in the environment surrounding the purchase of a given number of goods. The greater the number of characteristics considered, the more difficult the choice will be (or the more 'thinking cost' incurred; Shugan 1980). We define overload confusion as: '*a lack of understanding caused by the consumer being confronted with an overly information rich environment that cannot be processed in the time available to fully understand, and be confident in, the purchase environment*'.

Some authors refer to consumer confusion from product complexity (e.g., Cohen 1999; Cahill 1995), ambiguous information and advertisements or false product claims (e.g., Chryssochoidis 2000; Kangun and Polonsky 1995; Jacoby and Hoyer 1989), non-transparent pricing (e.g., Berry and Yadav 1996) and poor product manuals (e.g., Glasse 1992), all of which directly cause problems of understanding and are related to the concept of cognitive unclarity (see Cox 1967). This is similar to the notion of miscomprehension which Jacoby and Hoyer (1989, p. 435) define as the situation in which "the receiver of the communication extracts meanings neither contained in nor logically derived from the communication and/or rejects meanings contained in or logically derived from the communication". Jacoby and Hoyer (1989) go on to identify confused miscomprehension, which involves the consumer extracting two or more logically incompatible meanings, then realizing it but still not knowing which of the meanings is correct. The important distinction we make is that ambiguity confusion is caused by information that is at variance with that already known by the individual, e.g., positively or negatively framed product information that is inconsistent with a consumer's beliefs about that product (e.g., Grewal et al. 1994; Maheswaran and Meyers-Levy 1990). For example, increasing instances of confusion occur in the health or 'slimming' food market not because there may be too many similar varieties or too much information to absorb, but because 'credible' sources such as television programs undermine the consumer's confidence in the accuracy of the producer's/retailer's claims. From this discussion, we define ambiguity confusion as being: '*a lack of understanding during which consumers are forced to re-evaluate and revise current beliefs or assumptions about products or the purchasing environment*'.

The vast majority of previous research has viewed confusion predominantly as either behavioral or cognitive, with no suggestion that confusion includes an affective component (see Table, 1). We add to this by conceptualizing the state of confusion as having three consequences, i.e., cognitive, affective or behavioral, which we

suggest are positively correlated, irrespective of the antecedents confusion experienced. Apart from some of the cognitive and behavioral consequences already mentioned, we propose confused consumers are likely to experience unpleasant emotions which may include; frustration, irritation, anxiety, or even anger.

Figure 1 shows the proposed conceptual model which we will be discussing. Research on consumer confusion has mainly focused on identifying causes and effects of confusion paying little attention to its moderators and mediators. In addition to the three antecedents of confusion, moderators, mediators, confusion reduction strategies and consequences are depicted (see Figure 1). Mediator variables, such as mood, can change while influencing the relationship between two variables, while moderator variables (e.g., gender) can affect the relationship, but do not change themselves.

Confusion Moderator Variables

Within any exchange process, it is either the stimulus itself, created by the marketer, which is inherently confusing or is it some inability on the consumer's part to process marketing stimuli. *Individual characteristics* exert a moderating influence because they are often linked to the consumer's ability to rationalize and process stimuli. *Age* may reduce confusion through an experience framework or may increase confusion as processing competence decreases with the ageing process. *Gender* differences may also be related to the experience framework since females tend to have more experience in different product classes than men. Females are also reported to perceive more advertisement clutter and miscomprehension (e.g., Elliott and Speck 1998). Turnbull et al. (2000) found that more females were ambiguity confused than males in the mobile phone market, suggesting that product category interrelates with gender.

In cognitive psychology, tolerance for ambiguity is concerned with the degree to which people can restrain their need for a perfect, clear view of the environment (e.g., Goldstein and Blackman 1977; Feather 1969). Individuals with low tolerance for ambiguity may prematurely close their information processing activities, and are rigidly impervious to new information. The way tolerance is discussed in the literature suggests that consumers go through a stage of ambiguity if they intend to clarify the choice environment and make a more considered purchase. Ambiguity confusion then occurs when the error band, and uncertainty within the information, exceeds the error and uncertainty tolerance of the consumer.

Pinson's (1978) work on *cognitive styles* distinguished between sharpeners and levelers, which are similar to Cox's (1967) clarifiers and simplifiers. Foxman et al. (1992) found sharpeners commit fewer errors than levelers when distinguishing between similar stimuli. Such consumers use more discriminant criteria and are less likely to be *deceived* when buying an imitator instead of an original brand.

Based on Kolb's (1976) exploratory work, Sproles and Kendall (1990) examined the relationship between *learning style* and decision-making styles and identified three learning styles which could be particularly overload confusion inducing; namely, (1) the passive, accepting learning characteristic, (2) the concrete, fact-orientated characteristic, and (3) the non-adaptive, struggling learning characteristic. Indeed, in addition to a confused by over-choice factor, Sproles and Kendall (1986) identified several decision-making factors which have links with confusion, namely: Perfectionism, Novelty-Fashion Consciousness, and Price-Value Consciousness. We now discuss and explain some of these relationships.

The *perfectionistic* consumer usually tries to buy products of superior quality (Sproles 1985). This can involve a great deal of

thorough and systematic search for alternatives and comparisons because few products meet their demanding criteria. This thoroughness is also likely to enhance an individual's ability to distinguish between similar stimuli. Hence, we argue that a perfectionistic approach to shopping might be an effective shield against confusion caused by similarity and overload antecedents.

Novelty-fashion seekers may be particularly prone to overload and ambiguity confusion antecedents because: they tend to obtain more information from the mass media and outside their social system (Midgley and Dowling 1978); fashion is ever changing and contradictory (Mead 1993); of the uncertainty surrounding the longevity of such trends and the ambiguity of defining what is fashionable; they cannot be certain whether their products or styles will ever become widely accepted (Winakor et al. 1980).

Economic/price-value conscious consumers want the best value for money, tend to have clear purchasing criteria and their approach to shopping is systematic, thorough and efficient (Darden and Reynolds 1971). This makes them less likely to experience similarity, overload or ambiguity confusion antecedents.

Field independent individuals impose organization upon visual stimuli and are able to locate a sought-after component. The ability to better organize stimuli makes field independent consumers less likely to experience confusions from overload and ambiguity antecedents.

Equivalence range refers to the extent to which individuals generalize about stimuli presented to them (Foxman et al. 1992; Gardner, Jackson and Messick 1960). An individual with broad equivalence (or low conceptual differentiation) considers stimuli to be the same, even when they are only marginally similar. Thus, broad equivalence consumers are more likely to become confused from similarity antecedents.

Shopping environment relates to the store layout, variety of products on offer, arrangement of the merchandise, music, colors, lighting, etc. It might be expected that constant product moving, combined with poor signage, will increase ambiguity antecedents of confusion. Overload antecedents are likely to be exacerbated when too many products are placed on the shelves. Also, when look-alike brands are placed side-by-side to the original brand, consumers are more likely to detect that they are different brands and similarity antecedents of confusion are less likely.

Confusion Mediator Variables

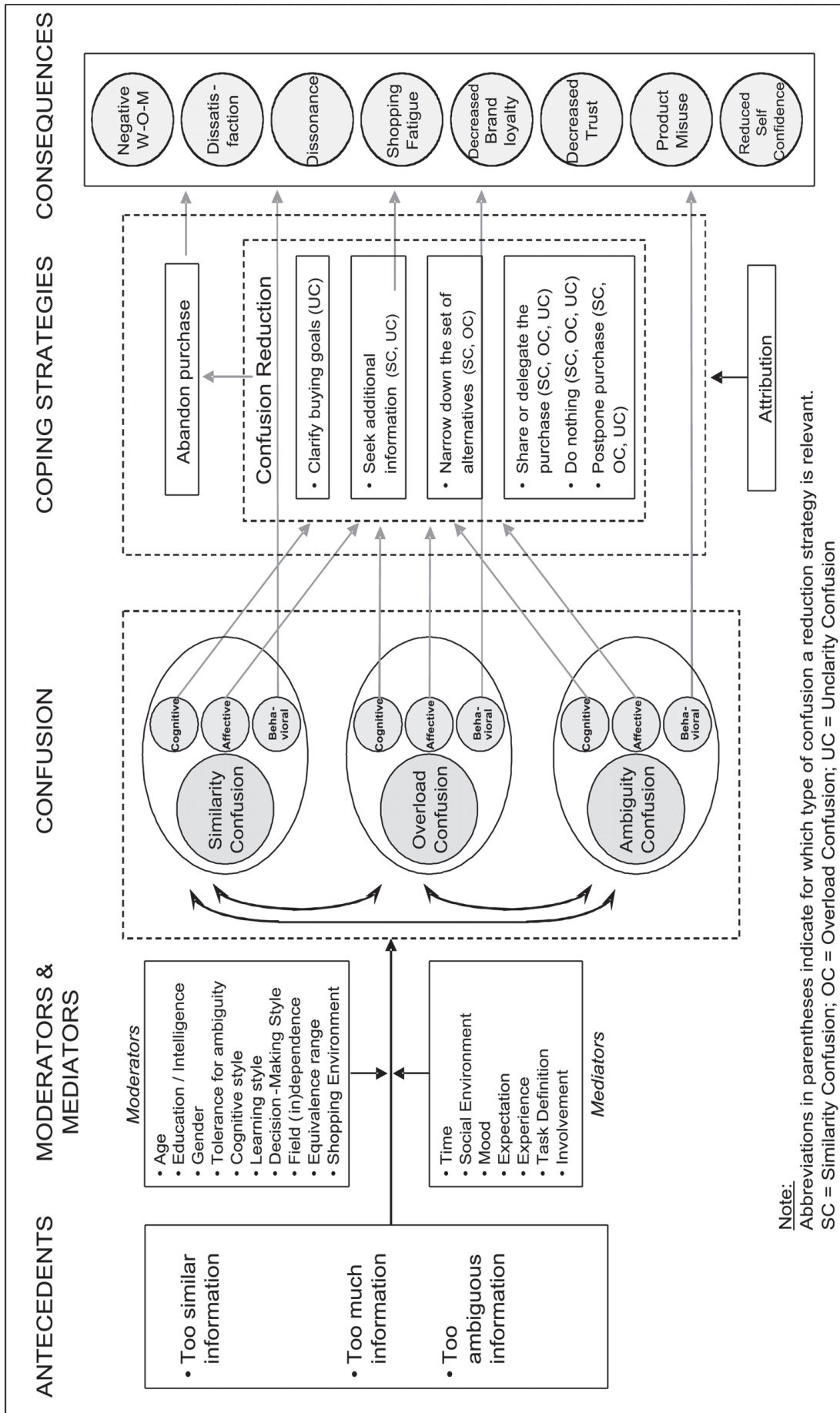
Situational variables, such as shopping under *time constraints*, can lead to rushed decision-making, shortened information-processing and inference-making time which is expected to increase confusion caused by similar stimuli (Balabanis and Craven 1997; Foxman et al. 1990). *Time* constraints should increase overload confusion antecedents because of decreased processing time, but it might also reduce overload confusion in certain circumstances because, knowing the time constraints, consumers might seek to acquire and process less information (Walsh 1999). Confusion from ambiguity antecedents can be expected to be negatively correlated with the amount of available shopping time because it allows more time to clarify what the information actually means.

The *social environment* refers to the presence of others and their interactions with the consumer. For example, others' opinions could add too much information and create confusion or could be in conflict with existing beliefs and create confusion. Expectations of a situation can also influence how much confusion is generated. For example, if consumers expect a situation to be confusing, they may be more resistant to confusion causing stimuli or more prepared to deal with it by using coping strategies which might reduce their incidence of becoming confused.

TABLE 1
Definitions of Consumer Confusion and their Classification

Author(s)	Definition	Quasi-Definition	cognitive/ knowledge	affective/ emotional	conative/ behavioral	conscious	non- conscious
Jacoby, Speller and Kohn (1974, p. 66)		" (...) feelings of confusion, of not having obtained the best buy, and feeling that another brand was better."		+		+	
Miaoulis and D' Amato (1978, p. 49)	" We take the position here that " confusion" is in effect stimulus generalization."		+				+
Diamond (1981, p. 52)	" (...) so resembles the mark in appearance, sound, or meaning that a prospective purchaser is likely to be confused or misled."		+				
Sproles and Kendall (1986, p. 274)		" [consumers] perceive many brands and stores from which to choose and have difficulty making choices. Furthermore, they experience information overload."	+				
Loken et al. (1986, p. 196)		" (...) physical similarities between products may result in the misattribution of source of origin or identity by the consumer."	+				
Poiesz and Verhallen (1989, p. 233)	" Brand confusion is a phenomenon that occurs at the individual level (...) and is predominantly non-conscious in nature."		+			+	
Foxman et al. (1990, p. 172)		" (...) consumers who are misled clearly are confused."	+				+
Foxman et al. (1992, p. 125)	" (...) consists of one or more errors in inferential processing that lead a consumer to unknowingly form inaccurate beliefs about the attributes or performance of a less-known brand based on a more familiar brand' s attributes or performance."		+				+
Kapferer (1995, p. 101)	" (...) arises from an incorrect attribution of distinctive markings."		+				
Kohli and Thakor (1997, p. 213)		" (...) confusion, when respondents may pick confusingly similar names, instead of the target names."		+			+
Huffman and Kahn (1998, p. 492; 493)		" the huge number of potential options (...) may be confusing" and " The confusion a consumer experiences with a wide assortment of options, however, is due to the perceived complexity, not necessarily to the actual complexity or variety."	+				
Jacoby and Morrin (1998, p. 97)		" If someone other than the owner were to use a trademark, there would be the possibility that such use (by the second or junior user) could cause consumers to be confused regarding who actually makes the product."	+				
Mitchell and Papavassiliou (1999, p. 327)	" Confusion (...) is a state of mind which affects information processing and decision making. The consumer may therefore be aware or unaware of confusion."		+			+	
Walsh (1999, p. 24)	" Confusion is: an uncomfortable state of mind that primarily arises in the pre-purchase phase and which negatively affects consumers' information processing and decision-making abilities and can lead to consumers making sub-optimal decisions."		+				
Turnbull et al. (2000, p. 145)	" (...) consumer confusion is defined as consumer failure to develop a correct interpretation of various facets of a product/service, during the information processing procedure."		+				+

FIGURE 1 Conceptual Model for Antecedents, Moderators, Mediators, Coping Strategies and Consequences of Confusion



Note:

Abbreviations in parentheses indicate for which type of confusion a reduction strategy is relevant.

SC = Similarity Confusion; OC = Overload Confusion; UC = Unclearly Confusion

Experience can work for or against the consumer with respect to confusion. Although Foxman et al. (1990) suggest that new triers and occasional buyers may be especially vulnerable to confusion, Brengman et al. (2001) found no statistical differences in the proclivity to similarity antecedents of confusion between light and heavy product category users. Experienced consumers are less likely to thoroughly compare the products they buy regularly and are less likely to be overloaded than inexperienced ones. This is partly because although they consider a greater number of information dimensions, heavy users look at fewer brand alternatives (Jacoby 1977), and partly because the knowledge that stems from experience facilitates information processing. Also, firmer product beliefs, accrued from experience, make consumers selectively perceptive and reduce consumers' scope of search (Neisser 1976). As consumers gain brand experience their knowledge base expands, choice alternatives and evaluative attributes become fewer and they should become less susceptible to all three types of confusion.

Foxman et al. (1992) suggest that the *task definition* can influence the propensity to become confused because it is related to the importance of a purchase. For example, consumers can be scrupulous and attentive when buying a gift and thus be less likely to be confused from similarity antecedents (Balabanis and Craven 1997).

With a *low-involvement* purchase, confusion from information overload is less likely to occur because less information search and processing takes place. Confusion from ambiguous market stimuli should be positively correlated with quicker decision making because the consumer is less likely to thoroughly examine ambiguous product information. In *high-involvement* contexts, the decision maker will put greater effort into making choices by adopting decision styles that involve more deliberation and evaluation and this may help to avoid confusion (Foxman et al. 1992). However, greater effort is only likely to reduce the incidence of confusion if two conditions hold, namely, 1) that the information is available and comprehensible, and 2) that the consumer has the processing ability to analyze the information. If either of these two conditions is not met, consumers could easily become more confused as they increase the purchase evaluation effort.

Consequences of Confusion

We suggest that *attribution* theory serves to determine some of the consequences of confusion. The more consumers attribute their confusion to external company sources, the greater will be the effect on company-related consequences. Although no study has systematically investigated the outcomes of consumer confusion, it has been associated with several unfavorable consequences, such as, negative word-of-mouth (Turnbull et al. 2000), dissatisfaction (Zaichkowsky 1995; Foxman et al. 1990), cognitive dissonance (Mitchell and Papavassiliou 1999), decision postponement (e.g., Jacoby and Morrin 1998; Huffman and Kahn 1998), shopping fatigue (Mitchell and Papavassiliou 1997), reactance (Settle and Aleck 1988), decreased loyalty and trust and confusing other consumers (Foxman et al. 1992; 1990). We propose that there are two temporally-distinct consequence categories. The first relates to the immediate effects of confusion. The second relates to actions aimed to cope with, reduce or eliminate confusion.

Overload-confused consumers are likely to interrupt decision making in order to take measures that allow them to deal with the information load by separating important from less important information, narrowing the choice set or reducing the number of attributes on which the decision is based (e.g., Iyengar and Lepper 2000). The situations in which no decision postponement takes

place are when a consumer unknowingly acts because of subconscious confusion, e.g., buying an imitator brand believing it is the original.

When choice rather than abandonment is the result of confusion, the same possible negative consequences for all three types of confusion on choice can be: a) a known alteration in brand choice caused by a lack of understanding, b) the same choice, but made with undue amounts of uncertainty, misunderstanding, frustration and dissonance, c) the same choice, but poor or non-maximal product utilization caused by inadequate understanding, d) the same choice, but an inability to inform others about the product or misinform them which may create problems for others, e) the same or different choice depending on the outcome of a delay designed to clarify the choice by using confusion reduction strategies. Finally, there is a tendency in the literature to regard confusion as akin to (a reverse) 'hygiene' factor in the consumer decision-making; its presence causes dissatisfaction, but its absence does not motivate consumers to purchase and does not necessarily lead to satisfaction. This is likely because the experience of confusion can be rather unpleasant, the eventual *outcome or consequences* flowing from it can be negative. The 'hygiene' analogy gives a negative view of confusion, which we contend for the most part to be correct. However, it is conceivable that confusion will have positive consequences. For example, if a consumer employs confusion reduction strategies and successfully copes with his/her confusion, it could lead to decreased pre-purchasing dissonance or increased satisfaction. In the following section we offer further specific insights into the potential impact of confusion from all three types of antecedents on consumers' behavior.

Confusion from Similarity Antecedents and Related Outcomes

Stimulus similarity is likely to lead to a *delay or abandonment of decision making* because when consumers are aware that there is at least a possibility that they are about to buy a brand they did not intend to, they are likely to take more time to find out whether the (two or more) alternatives are actually the same. Consumers may also abandon a purchase altogether ('no-choice option') because they want to avoid making difficult trade-offs (e.g., Dhar 1997). Other studies have reported similar findings that consumers are more likely to select a no-choice option when both alternatives are attractive (e.g., Luce 1998). The relevance of confusion from similarity antecedents to social interaction is because consumers sometimes feel ashamed of being unable to differentiate between brands. Consumers who are duped are not always likely to share their negative experience which they see as their own fault.

We expect consumers' inability to differentiate between stimuli (i.e., perceived stimulus similarity) to cause dissatisfaction directed towards one manufacturer that clearly imitates the other. This is partly because of the time and effort needed to assess the authenticity of the alternatives and these opportunity costs yield no utility (Foxman et al. 1990). What is worst still for the original manufacturer, is if the consumer does not realize that he/she has bought an imitator brand and attributes any resultant dissatisfaction to the original brand.

Brand loyalty is also likely to be affected by confusion caused by similar stimuli (Mitchell and Papavassiliou 1999) because confused consumers, who perceive stimulus similarity and have trouble distinguishing products and manufacturers, will find it difficult to reward a manufacturer with their trust. In this context, Zaichkowsky and Simpson (1996) argue that perceived brand similarity can change consumers' attitudes about the uniqueness of the national brand. Consumers' trust is likely to reduce because they will not know which the 'right' alternative is and which manufacturer to trust (Lau and Lee 1999).

Confusion from Information Overload and Related Outcomes

Overload-confused consumers are likely to *interrupt decision making* in order to take measures that allow them to deal with the information load by separating important from less important information, narrowing the choice set or reducing the number of attributes on which the decision is based. Since stimulus overload can be attributed to a lack of (processing) time, delaying the purchase decision can be interpreted as an attempt to gain more processing time. However, expending a greater effort to arrive at a decision without gaining a perceivable utility can lead to consumer dissatisfaction (Turnbull et al. 2000). Perceived overload, caused by too many stimuli, can cause stress on part of the consumer and dissatisfaction.

As brand loyalty reflects habitual purchasing and requires less decision making, information seeking and brand evaluation, the prospect of having to do less information processing and comparison is likely to be appreciated by those consumers who are prone to stimulus overload confusion. Therefore, loyalty can be viewed as a strategic (conscious or non-conscious) reaction to overload. Moreover, Chernev (2003) found that when consumers select a product from a large assortment it often leads to weaker preferences.

Irrespective of cognitive abilities, consumers tend to feel better prepared for purchase decisions with a greater amount of information (Jacoby, Speller, and Berning 1974; Jacoby, Speller, and Kohn 1974). Since consumers tend to prefer larger stores, with a greater assortment, to smaller stores with a small assortment (Hoyer and MacInnis 1997), the over-abundance of products and information which today's consumers encounter is unlikely to decrease trust *per se*.

Confusion from Ambiguous Stimuli and Related Outcomes

Consumers who are confused by unclear stimuli, or who suffer from partial miscomprehension (i.e., who extract more than one logically independent meaning), are likely to try to find information that will help them clarify their choice environment, e.g., by trying to establish which information is more credible. This will inevitably involve suspending the decision-making process. When consumers compare two or more complex products and experience confusion from ambiguous information, it could lead to choice deferral because the consumer tries to cope with what is seen as a non-comparable alternative (Dhar 1997). However, ambiguity-confused consumers are unlikely to engage in negative word-of-mouth if they attribute their inability to fully use and understand a product to themselves and not the product manufacturer.

Similar to stimulus overload, ambiguity is likely to cause consumers to seek ways to make satisfactory decisions on a more permanent basis and becoming brand loyal equates to making fewer comparisons, which means consumers are confronted with less ambiguous or unclear stimuli. Trust can help to reduce the perceived complexity in the environment (Hillmann 1994) because products that have once been positively evaluated do not need to be assessed again. From an attribution viewpoint, it is also conceivable that consumers do not blame manufacturers and retailers for their perceived ambiguity, but blame themselves, which is unlikely to entail a withdrawal of trust.

Confusion Reduction/Coping Strategies

When confusion is experienced by consumers, the same context may (or will) cause different degrees of confusion depending on the individual's prior skill or competence in information processing and with respect to the confusion 'strategies' adopted to cope. An important prerequisite for the use of confusion reduction strategies (CRS) is that the consumer is aware of the confusion involved in the decision. Confusion reduction has not been studied

before and this section identifies some strategies which consumers might use.

In our view, CRS are, in the main, concerned with clarifying a choice, reducing ambiguity and increasing understanding relating to a purchase decision. We propose that the confused consumer develops strategies which can be categorized into four generic approaches, namely; (1) clarify the buying goals, (2) seek additional information, (3) narrow down the set of alternatives, (4) share/delegate the purchase decision. The 'seeking additional information' category mostly consists of strategies which clarify the choice environment, but can also involve simplifying strategies. The reduction of confusion caused by similarity and ambiguity critically depends on the content of the information received, since additional information which is conflicting will not reduce similarity antecedents and can exacerbate ambiguity. Confused consumers can often involve other people (i.e., spouse, family member and friend) in the purchasing decision by asking a person to accompany them whilst shopping to help them comprehend the choice environment. Alternatively, they may delegate the task completely.

CONCLUSION AND FURTHER RESEARCH

This paper stimulates a number of research questions driven by the proposed model. For example, how is confusion affected by the decision context, e.g., by the degree of involvement and how is it affected by purchaser characteristics such as; age, gender and cognitive style? The role of atmospherics and the overall physical store environment and its relationship with consumer confusion would appear complicated and requires further exploration. Indeed, basic research parameters of confusion need to be established such as identifying and measuring; antecedents of confusion; moderators and mediators of confusion; reduction strategies and outcomes of confusion. One outcome which requires further research might be shopping fatigue. Consumers who experience confusion regularly across different products categories are likely to become more frustrated with and tired of shopping. To the extent that much of the information processing and assessment of error and uncertainty are done without our conscious awareness, we can agree somewhat with Foxman et al.'s (1992) assertion that confusion is concerned with errors of which the consumer is unaware (at least partially), because sub-conscious processing of information is a basic condition driven by our mental limitations vis-à-vis a complex environment. This presents a major challenge for the measurement process.

In order to examine some of these ideas, we need to measure each type of consumer confusion which depends significantly on the development of a comprehensive confusion scale (e.g., Foxman et al. 1992). Thus far, no comprehensive scale exists, although some existing scales may capture elements of the overload confusion concept, e.g., Reilly's (1982) 'Role Overload of the Wife', Childers, Houston and Heckler's (1985) 'Style of Processing Scale' and Sproles and Kendall's (1986) confusion factor in their 'Consumer Styles Inventory'. There is therefore a need to devise a completely new scale to measure the degree of confusion caused by similarity and ambiguity.

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Brand Commitment and Size of the Consideration Set

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EXTENDED ABSTRACT

This research focuses on the effects of brand commitment on consumers' consideration sets. In particular, we investigate the differences between high and low commitment consumers on the size of their consideration set, and the possible reasons for the differences in size. We test three competing hypothesis to identify which explains the data best.

Multiple brands exist in most product categories but consumers rarely consider all the available brands when making a purchase decision. Consumers limit the number of brands they would consider purchasing to a smaller, manageable number. This smaller set of brands is called a consideration set (Kardes 2001).

While discussing consideration sets, researchers have speculated that the size of the consideration set depends on the commitment (or brand loyalty) that consumers have toward the brand. Specifically, high commitment consumers are expected to have a smaller set size than low commitment consumers. We tested this hypothesis in the first study by having subjects recall all the brands they would consider purchasing if they were in the market to buy the product category. As expected, high brand commitment consumers were found to have a smaller consideration set size compared to less committed consumers.

We next turn our attention to understanding the process by which committed consumers were restricting the number of brands in the consideration set. A review of the past literature suggests that the consideration set size is affected by memory factors (e.g. inhibition effects) or through one's attitude toward the brand.

It is known that memory plays an important role in determining the size of one's consideration set when it is elicited by a recall measure (e.g., Lynch and Srull 1982; Nedungadi 1990). If a brand does not come to one's mind, it cannot be part of the consideration set in a memory-based task. On the other hand, even when a brand is recalled, it has been shown that this activation of the brand name in memory can inhibit the recall of other brands (e.g., Alba and Chattopadhyay 1985). In the first study, subjects with higher levels of brand commitment listed fewer brands than subjects with lower levels of commitment. This effect may be explained in terms of an inhibition effect. Since the preferred brand is more accessible for high commitment consumers, it is possible that this creates an inhibitory effect on the recall of other brands (Fazio 1995). For low commitment subjects the preferred brand is not likely to be as strongly accessible, thereby limiting the inhibition effect.

We utilized a stimulus-based task to test the inhibition explanation. We propose that if the difference persists in this task, inhibition effects can be ruled out as an explanation for the set size difference. The results revealed that the set size difference between the high and low brand commitment consumers continued to exist, indicating that the set size difference was not attributable to inhibition effects.

We now turn to the attitude explanation. Brands that are evaluated positively are more likely to be included in the consideration set compared to those that are not evaluated positively. Thus, a high commitment individual may limit the size of the consideration set in one of two ways. First, because of the attachment to the preferred brand, the attitude toward the brand may be polarized (Petty and Krosnick 1995). Therefore, for other brands to be considered as viable alternatives, those evaluations have to match

that of the preferred brand. Several brands may fail to reach this high threshold level, and thus may not be included in the consideration set.

A second approach may be to evaluate other brands less positively. In this case, the evaluation of the brands in the marketplace are altered or biased to be less favorable. Therefore, given the same brand, high commitment subjects may rate it less positively than low commitment subjects, thereby restricting the potential candidates for inclusion in the consideration set. This issue is investigated in study three.

We test these two alternative explanations by identifying and comparing the evaluations that high and low commitment subjects had for the lowest ranked brand *within* the consideration set (WCS) and the highest ranked brand *outside* the consideration set (OCS). If high commitment subjects have a higher threshold of acceptance into their consideration set than low commitment subjects, the evaluation of WCS brand for high commitment subjects should be significantly greater than the evaluation of WCS brand for low commitment subjects, while there should be no difference in the evaluations of the OCS brand between high and low commitment subjects. On the other hand, if high commitment subjects have smaller consideration sets because of lower evaluations of competing brands, we would expect to see a less favorable OCS brand attitude for the high compared to the low commitment subjects and find a non-significant difference in the attitude between high and low commitment subjects for the WCS brand. The findings from this study support the explanation that high commitment subjects have smaller consideration set because of lower evaluations of competing brands.

To summarize, we find that brand commitment affects the number of brands consumers include in their consideration set. Of the three potential explanations for the difference in the consideration set size—inhibition, raising the threshold, and lowering the ratings of competing brands, we find that high commitment consumers seem to be restricting the set size by holding biased ratings of the competing brands.

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Mirror, Mirror, On the Web: A Lexical-Semantic Analysis of Brand Positioning

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EXTENDED ABSTRACT

The World Wide Web (WWW) provides a vast amount of information on products and services. This includes both information put out by the organizations marketing the products as well as the general public's comments and observations pertaining to those products. While marketers in the pre-Internet era had considerable influence on the information made available to their audiences, today they have much less control over what is disseminated about their products on the WWW (Ward and Ostrom 2003). This democratization of information dispersal over the Internet is exacerbated by the widespread availability and use of Internet search engines that give equal weight to official product sites and those created by consumers either in support of or opposition to the product or brand. While companies routinely scour the chat rooms and "review" sites to understand emerging patterns and to examine the reactions of individuals to products, there have been few attempts in the marketing literature to mine the wealth of data available across the entire web to draw meaningful conclusions on how products are perceived online. However, the combination of potent search engines that constantly update their databases with new web pages and the ready willingness of a variety of people to post information online offers a powerful opportunity for marketers to gain an understanding of how information about their brands are structured in this unique environment. It is possibly the lack of research on how to manage this morass of disjointed information that has led to a greater focus on the threat rather than the opportunity afforded by information dissemination on the web.

Our goal with this manuscript is to take some first steps towards examining the vast amount of information stored in online search engine databases to uncover information useful to marketers. We believe that the sheer volume of information stored in these databases makes it an information resource that cannot be ignored. However, given the indiscriminate way in which search engines add web-based information to their databases, creative approaches are needed to glean useful information from this data. We draw upon research in lexical text analysis and brand positioning to propose some critical indices that can be used by marketers to glimpse the structural schema of their brands in the online world by examining links between brand names and key adjectives in these massive online databases. We propose some techniques and measures for drawing on data stored in search engines and present one "real" application of these techniques to create a perceptual map of a variety of competitive brands in a single product category.

With the increasing availability of text-based electronic resources, an increasing number of researchers are focusing on evaluating the content of large text-based corpora to get a greater insight into the *meaning* in the text. For example, typing the name of a brand or travel destination into a search engine will likely provide thousands of hits with no overall evaluation of the content of these sites. The searcher does not gain any information on whether these thousands of sites have positive, negative, or neutral things to say about the brand or travel destination (Turney 2002). So, how does one go about assigning meaning to a collection of text, especially as it relates to a neutral target, such as a brand name? Today, the study of lexical semantics—word meaning—draws on research from a variety of disciplines including computational linguistics, natural language processing, and statistics. Building on the research in lexical-semantic analysis and the use of word associations to identify semantic orientations, we developed a

model to create positioning maps based on an analysis of web pages containing brand-related information and adjectives that define brand positions in the off-line world. We used custom-coded applets that built upon the application program interfaces (APIs) provided by Google to analyze the data in all 4+ billion web pages in their search engine database. We assume an *association* between a brand and an adjective if the search engine returns a "hit" when we query the search engine for both the brand and the adjective. While the adjectives are bound to be associated with multiple brands, if the adjectives truly associate with the brand, we would expect to see *relative differences* in the extent of association between each brand and the adjectives.

We show that by examining associations between brands and carefully selected adjectives, we can go beyond merely counting text content to uncovering the *meaning* of the content. The content reveals relationships that can guide marketing decision making. In the context of brand positioning, we verify that the data does, in fact, represent meaningful relationships between brands. This study achieves the critical objective of validating the usefulness of the search engine database for marketing analysis. It offers an exciting view of the future analytical potential of this freely available data set. We can further build on the theories in natural language processing and computational linguistics to understand the structure of brand perceptions in an online environment. Because the web provides a permanent record of brand-related communications and is dominated by user-generated content, it can be used by marketers to get a deep understanding of consumer relationships with brands.

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Schematic Processing of Brand Information: The Impact of Causally Central Attributes on the Responses to Brands

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ABSTRACT

A product category schema (PCS) may contain complex causal relationships among component attributes. Given this, the present study identifies *causally central attributes* (CCAs), i.e., attributes that tend to cause other attributes, and *causally peripheral attributes* (CPAs), i.e., attributes that tend to be caused by other attributes. Results from an experimental study suggest that consumers have more positive responses (i.e., attitudes and purchase intention) to a brand when the brand is positively associated with CCAs as compared to CPAs, primarily because CCAs facilitate consumers' inferences of a brand's missing attributes more than CPAs.

INTRODUCTION

Typically, consumers have limited information on a particular brand. For instance, an advertisement generally provides consumers with information on only a few attributes of a brand. Still, numerous studies have found that consumers may infer other attributes of a brand from the given information (Broniarczyk and Alba 1994; Chernev and Carpenter 2001; Dick, Chakravarti and Biehal 1990; Ford and Smith 1987; Huber and McCann 1982; Kivetz and Simonson 2000; Ross and Creyer 1992). In other words, consumers may "go beyond the information given" (Bruner 1950). Before making any inferences, however, consumers first need to represent or encode a brand into their knowledge. For instance, when seeing a particular brand (e.g., Cheerios), consumers may first identify it as a certain product category (e.g., a cereal) and then apply their general knowledge about the category, namely *product category schema* (PCS), to process specific information on the brand. Consequently, consumers' responses to a brand (e.g., attitudes, purchase intention, etc.) can be affected by how they initially represent the brand (Moreau, Markman and Lehmann 2001).

To date, researchers have applied PCS to explain various aspects of consumer behavior, such as processing of schema-congruent or schema-incongruent messages (Areni and Cox 1994), framing (Kirmani and Wright 1989), recall of ad messages (Hunt, Bonfield, and Kernan 1986), brand positioning (Sujan and Bettman 1989), pioneering advantage (Niedrich and Swain 2003) and evaluations of sales people (Sujan, Bettman and Sujan 1986). Although different in their specific findings, these studies share the basic tenet: a PCS consists of key attributes and their interrelationships.

Yet, past studies have focused on the identification of component attributes, while ignoring the "structure" of these attributes. Given the critical role of a PCS, such a lack of findings on the structure of these attributes significantly limits our understanding of how a PCS affects consumers' responses to a brand. As an attempt to improve our knowledge in this regard, the present study proposes that a PCS can be characterized as forming "causal relationships" among component attributes. Moreover, assuming the causal structure of a PCS, the present study identifies attributes that tend to cause other attributes (*causally central attributes*: CCAs) and attributes that tend to be caused by other attributes (*causally peripheral attributes*: CPAs). Finally, based on studies of causal inference, it is proposed that consumers have more positive attitudes and greater purchase intention towards a brand when the brand is associated with CCAs as compared to CPAs.

SCHEMA: A CAUSAL STRUCTURE OF KNOWLEDGE

Concerning the structure of a schema, past studies have often suggested that people develop a schema based on *correlations* or *covariations* among component attributes. For instance, Rosch and Mervis (1975) argue that attributes do not randomly spread across objects. Instead, attributes tend to appear in clusters. For example, objects with leaves tend not to have legs and fur, whereas objects with legs often have fur. People's knowledge about objects, therefore, should reflect correlational relationships among attributes. Consistently, Medin, Alton, Edelson and Freko (1982) found that people were sensitive to correlations among attributes and based their subsequent cognitive processing, such as category judgment, on the correlations. Accordingly, in describing his theory of knowledge representation, Rumelhart (1980) conceives a schema as embodying expectations of what attributes co-occur.

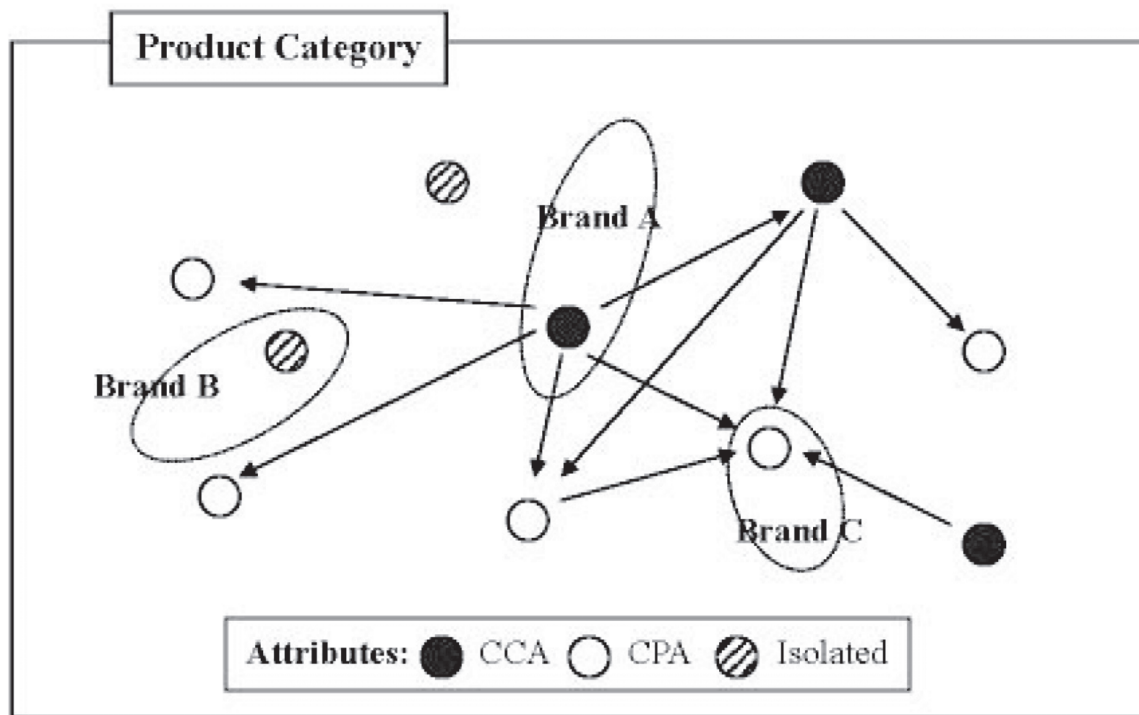
This correlational view, however, has received numerous criticisms. Primarily, it has been argued that people not only have difficulty remembering correlated attributes (Day and Bellezza 1983) but often fail to notice correlations, if any, among attributes (Crocker 1981). Rather, people have a tendency to judge relationships among attributes based on their prior beliefs or expectations about how the attributes are interrelated (Chapman and Chapman 1967). Studies in cognitive psychology have identified such beliefs as naïve theories about causal relationships among attributes, such as "A enables B," "A allows B" or "A determines B" (Murphy and Medin 1985). For instance, Murphy and Medin (1985) found that when categorizing medical symptoms of equivalent correlations (e.g., dizziness, earaches, high blood pressure, etc.), people tended to categorize symptoms into the same group to the extent to which they could develop causal links among the symptoms. Similarly, in the context of consumer behavior, Broniarczyk and Alba (1994) found that consumers inferred a missing attribute of a 35-mm camera (repair record) from the information on an attribute they believed to have a causal link to the missing attribute (warranty). This tendency was observed even if they learned that the missing attribute was strongly correlated to another attribute (shutter speed).

In sum, the above discussion suggests that a schema can contain people's beliefs about causal relationships among component attributes and, therefore, form a complex causal structure.

Causal Status of Attributes

Given this causal structure of a schema, it can also be that certain attributes tend to cause other attributes, whereas certain attributes tend to be caused by other attributes. Of course, still other attributes can be isolated without making any causal relationships with other attributes (Ahn and Kim 2001; Ahn, Kim, Lassaline and Dennis 2000). Moreover, according to Ahn and Kim (2001), such a difference in the "causal status" of attributes is prevalent even among the attributes that are equivalently important in representing an object. Specifically, they found that for a particular disease (anorexia nervosa), people indicated several symptoms as important in representing the disease, such as 1) disturbed experience of body shape or denial of the problem (disturbance/denial), 2) fear of being fat even when underweight (fear), 3) refusal to maintain body weight at or above minimal levels (refusal), and 4) absence of the

FIGURE 1
PCS and Brand Associations



menstrual period for more than 3 cycles (absence). Still, when asked to indicate their causal beliefs among symptoms including the important ones, “disturbance/denial” was found to play the most causally central role in structuring the overall relationships.

What does this imply to marketers? For a product category, consumers may consider certain attributes important, thus developing a PCS in terms of these attributes. Moreover, consumers may perceive causal relationships among the attributes such that performance of the product on one attribute affects its performance on other attribute(s). As a positioning strategy, however, marketers often associate their brand with a specific attribute(s) (e.g., Volvo with safety, Hyundai with warranty, etc). Given the difference in the causal status of attributes, this may suggest that a brand can be strongly associated with CCAs, CPAs or isolated attributes (Figure 1).

CAUSAL INFERENCE AND CONSUMERS’ RESPONSES TO A BRAND

As mentioned earlier, consumers generally have limited information on a particular brand. Still, consumers may go beyond the information given, presumably referring to the causal structure of a PCS. In other words, when seeing a brand associated with CCAs, consumers may infer other attributes that can be the effect of CCAs. In contrast, when seeing a brand associated with CPAs, they may infer other attributes that can be the cause of CPAs. Also, consumers’ inferences may be substantially limited for a brand associated with isolated attributes because these attributes make no causal relationships with other attributes and, therefore, provide no clues for making inferences.

Past studies, however, suggest that even for the brands associated with CCAs or CPAs, consumers’ inferences may differ in their likelihood and extent. First, people generally find it easier

to make inferences from causes to effects rather than from effects to causes (Braine 1990; Rips 1994; Tversky and Kahneman 1982). Typically, for an effect (e.g., good score on a test), there may exist several alternative causes (e.g., intelligence of the examinee, easiness of the test, effective teaching of the instructor, or even a luck). Without additional information, therefore, people are less likely to attribute the effect to any single cause, which should inhibit their inferences. Moreover, according to the *discounting principle* (McBride 1998; Oppenheimer 2004), once an effect is attributed to a particular cause (e.g., luck in this case), people tend to discount the possibility that other causes might produce the effect. Consequently, even if people make inferences from effects to causes, their inferences should be limited in the extent. On the other hand, for a cause (e.g., effective teaching of an instructor), people may consider several effects as likely at the same time (e.g., good score on a test, high evaluation of the class, satisfaction of the students, etc.). In other words, contrary to the *discounting principle*, a cause need not be limited to a specific effect. Compared to making inferences from effects to causes, therefore, people’s inferences should be facilitated when people make them from causes to effects.

In the context of consumer behavior, this may imply that consumers make more inferences of other attributes and with greater confidence when they see a brand associated with CCAs as compared to CPAs, primarily because consumers make inferences from causes to effects in this case. Consequently, when the associated attributes are positive, consumers are more likely to favor a brand associated with CCAs as compared to CPAs, because consumers make more inferences of other positive attributes of the brand. Similarly, Maheswaran and Sternthal (1990) found that (expert) consumers had more positive attitudes toward a brand when they obtained information on specific attributes of the brand rather than only on relevant benefits. In other words, the information on

specific attributes of a brand led consumers to elaborate on various benefits they might get from the brand and, therefore, positively evaluate the brand. Such elaboration, however, was limited when consumers were provided with the information only on benefits.

Based on the above discussion, the present study hypothesizes the following.

H1a: Consumers' attitudes toward a brand are affected by their inference of the brand's other missing attributes when the brand is positively associated with CCAs as compared to CPAs.

H1b: Consumers have more positive attitudes toward a brand when the brand is positively associated with CCAs as compared to CPAs.

H2a: Consumers' purchase intention of a brand is affected by their inference of the brand's other missing attributes when the brand is positively associated with CCAs as compared to CPAs.

H2b: Consumers have a greater intention to purchase a brand when the brand is positively associated with CCAs as compared to CPAs.

METHODOLOGY

To test the proposed hypotheses, two pretests and one experiment were conducted using student subjects. The pretests were intended to develop a PCS and to identify CCAs and CPAs from the PCS. An automobile was selected as the target product category. It was believed that an automobile consisted of many important attributes, thus containing complex causal relationships among the attributes. Moreover, given the participants' familiarity with the product category, their causal beliefs about the attributes were less likely to be affected by personal factors. In the main experiment, participants read information about a hypothetical automobile brand's performance on either CCAs or CPAs. Subsequently, they made inferences about the brand's performance on other missing attributes. Finally, they provided their attitudes toward and purchase intention of the brand.

Pretests

In Pretest 1, 26 college students were asked to list all attributes they would consider important when purchasing an automobile. It should be noted, however, that an automobile includes many subcategories, such as sedan, sports car, economy car, etc. Moreover, for each subcategory, consumers may consider different attributes as important. Given this, attributes in the present study were obtained only for a specific type of an automobile: a sedan priced between \$15,000 and \$25,000. Based on the frequency of each listed attribute, the following 10 attributes were identified as important and, therefore, comprising the PCS of an automobile: 1) design, 2) safety, 3) gas mileage, 4) durability, 5) comfort, 6) capacity, 7) handling, 8) stereo quality, 9) warranty and 10) horsepower.

In Pretest 2, another group of 80 college students were first measured on their perceived importance of the 10 attributes using a single-item scale anchored at "least important (1)" and "most important (7)." Afterward, they were asked to indicate their causal beliefs about each pair of the 10 attributes. Specifically, they selected which of the four causal directions best described their causal beliefs about the paired attributes. These causal directions were: 1) attribute A causes attribute B; 2) attribute B causes attribute A; 3) attribute A and attribute B cause each other; 4)

attribute A and attribute B do not cause each other. Subsequently, for each attribute, it was counted how many other attributes, on average, the participants believed to be the *cause* and *effect* of the attribute. From this measure, attributes that tended to be the cause of other attributes were identified as CCAs, i.e., design, durability, horsepower and capacity. In contrast, attributes were identified as CPAs when the attributes tended to be the effect of other attributes, i.e., safety, comfort, gas mileage, handling, warranty and stereo quality (Table 1).

Main Test

For the main test, an experiment was conducted with 170 college students. Participants were randomly assigned to one of two conditions. First, they were asked to measure the importance of the 10 attributes. Then, they read the information on a hypothetical automobile brand (a sedan priced between \$15,000 and \$25,000) concerning its performance on two attributes, either CCAs or CPAs. Specifically, using a similar rating system to *Consumer Reports*, each automobile was rated for each of the two attributes using a seven-point scale anchored at "worst in the market (1)" and "best in the market (7)." Both automobiles were positively rated (6 out of 7) for the two attributes. Additionally, Table 1 indicates that the attributes varied in importance. To control confounding due to this, therefore, "design" and "durability" were selected as the target CCAs, whereas "safety" and "comfort" were selected as the target CPAs. These were chosen because they were the four most important attributes.

After reading the information, participants were asked to infer the brand's performance on the other eight missing attributes. In other words, for each of the eight missing attributes, they measured how "uncertain (1)" or "certain (7)" they were that the brand would perform positively. Subsequently, they indicated their attitudes toward and purchase intention of the brand. Attitudes were measured using a six-item, seven-point semantic differential scale: "bad/good," "unappealing/appealing," "unpleasant/pleasant," "unattractive/attractive," "boring/interesting" and "dislike/like" (Bruner, 1998). On the other hand, purchase intention was measured using a four-item, seven-point semantic differential scale: "unlikely/likely," "improbable/probable," "uncertain/certain" and "definitely not/definitely" (Bearden, Lichtenstein and Teel 1984). Finally, their subjective knowledge of an automobile was measured using a two-item, seven-point scale: "one of the least knowledgeable/one of the most knowledgeable" and "not at all familiar/completely familiar" (Brucks 1985).

RESULTS

Manipulation Check

For each automobile, mean importance of the two given attributes was computed. An ANOVA showed that the two brands did not differ in this measure ($M_{CCA}=6.19$ vs. $M_{CPA}=6.15$; $F(1, 168)=.105$, $p=ns$). In other words, the two brands were associated with the attributes of equivalent importance. Therefore, the manipulation was successful.

Hypothesis Testing

The measures of attitudes and purchase intention were reliable with $\alpha=.87$ and $\alpha=.89$, respectively. The measure of subjective knowledge was also reliable with $\alpha=.85$. In order to test H1b and H2b, an ANCOVA was conducted for participants' attitudes toward and purchase intention of the two brands, including their subjective knowledge as a covariate. As hypothesized, participants had more positive attitudes toward the brand associated with CCAs ($M_{CCA}=5.16$) as compared to the brand associated with CPAs

TABLE 1
Mean Causes/Effects and Importance of the Attributes

Attributes	Causes	Effects	Importance
design*	5.94	2.09	6.18
durability*	3.65	3.55	6.42
capacity	3.91	1.95	4.65
horsepower	3.20	2.14	4.51
safety*	2.74	3.89	6.34
comfort*	1.45	3.96	5.98
warranty	1.77	2.92	5.65
gas mileage	1.57	2.92	5.63
handling	3.24	3.30	5.63
stereo quality	0.99	1.74	4.86

* Four most important attributes

TABLE 2
Attitudes toward and Purchase Intention of the Brands

	Attitudes	Purchase Intention
Brand w/CCA	5.16 (.79)	4.67 (.93)
Brand w/CPA	4.76 (1.03)	4.05 (1.08)

* Standard deviation in parentheses

($M_{CPA}=4.76$): $F_{(1,167)}=7.79$, $p<.006$. Their subjective knowledge was found to have no impact: $F_{(1,167)}=2.60$, $p=ns$. Therefore, H1b was supported. Also, participants had greater purchase intention of the brand associated with CCAs ($M_{CCA}=4.47$) as compared to the brand associated with CPAs ($M_{CPA}=4.05$): $F_{(1,167)}=7.14$, $p<.008$. Again, their subjective knowledge was found to have no impact: $F_{(1,167)}=.01$, $p=ns$. Therefore, H2b was also supported (Table 2).

In order to test H1a and H2a, two multiple regressions were conducted for each brand. Each multiple regression included the importance measures of the two given attributes and the eight missing attributes as independent variables, whereas attitudes and purchase intention were the dependent variables. The importance measure of each missing attribute was weighted by participants' inference of the brand's performance on the attribute. For the brand associated with CCAs, the analysis revealed that two missing attributes significantly influenced participants' attitudes toward the brand: "comfort" ($\beta=.35$; $t=2.48$, $p<.05$) and "handling" ($\beta=.22$; $t=1.70$, $p<.09$). In contrast, for the brand associated with CPAs, none of the 10 attributes significantly influenced participants' attitudes toward the brand. Therefore, H1a was supported. However, the result was not clear as to purchase intention. For the brand associated with CCAs, a missing attribute, "handling" ($\beta=.36$; $t=2.86$, $p<.01$), was found to significantly influence participants' purchase intention of the brand. Similarly, for the brand associated with CPAs, a missing attribute, "design" ($\beta=.25$; $t=2.01$, $p<.05$), significantly influenced participants' purchase intention of the brand. No clear distinction could be made from this finding concerning the extent to which participants' inferences of missing attributes affected their purchase intention of the two brands.

Therefore, H2a was not supported. Interestingly, though, none of the given attributes were found to influence participants' attitudes toward and purchase intention of the two brands. Implications of these findings will be discussed in the next section.

DISCUSSION

The present study viewed a PCS as consumers' knowledge about a product category that contained causal relationships among component attributes. Given this, it was expected that certain attributes would tend to cause other attributes, whereas other attributes would tend to be caused by other attributes. This expectation was evidenced in the present study from the PCS of an automobile (Table 1). Moreover, the present study found that even the attributes of equivalent importance differed in their causal status. In other words, two of the four most important attributes of an automobile, i.e., "design" and "durability," tended to cause other attributes, whereas the other two most important attributes, i.e., "safety" and "comfort," tended to be caused by other attributes. Consequently, it was speculated that causal status and importance reflected two different aspects of a product attribute.

As for the proposed hypotheses, the present study found that consumers' responses to a brand (i.e., attitudes and purchase intention) could be affected by their inferences of the brand's missing attributes. In other words, consumers had more positive attitudes toward and purchase intention of a brand when the brand was associated with CCAs as compared to CPAs even if the attributes were equivalently important. As discussed earlier, this finding may imply that CCAs versus CPAs facilitate consumers' inferences in terms of likelihood and extent. The regression analyses

reported above at least partially support the implication. That is, participants indeed translated their inferences of the missing attributes to their attitudes toward and purchase intention of the brands with a greater tendency for the brand associated with CCAs as compared to CPAs.

More interestingly, the regression analyses showed that participants based their responses to the brands solely on their inferences of the missing attributes rather than the given attributes. This may suggest a critical aspect of making inferences such that when making inferences, consumers shift their attention from the given information to their inference and, therefore, rely more on the inferred attributes when responding to a brand. Yet, this result can be attributed to the design of the present study. Specifically, the present study "asked" participants to make inferences of other missing attributes, thus making participants more sensitive to their inferences. Obviously, a future study with an improved design is required for a clear understanding.

CONCLUSION

As discussed earlier, consumers' inferences of a brand's missing attributes can be affected by their initial representation of the brand. As a type of representation, the present study examined the nature of a PCS and its impact on consumers' responses to a brand. Other than a PCS, numerous researchers have also referred to the associative network as an alternative way of representing a brand (see Keller (1998) for a detailed review). Similar to a PCS, the associative network represents a brand as a network of nodes or relevant concepts that are interrelated with different strength. When seeing a particular brand, therefore, consumers first recall a concept(s) that is most strongly related to the brand. Then, this initial activation spreads out to other strongly related concepts.

Contrary to a PCS, however, the associative network is episodic in nature. In other words, consumers develop the associative network of a particular brand through their individual experiences of the brand, which may not necessarily be congruent with their causal beliefs. Consequently, within the associative network, consumers may adopt quite a different strategy for making inferences. Moreover, given the episodic nature of the associative network, consumers are more likely to represent a brand with the associative network rather than a PCS as they become more familiar with the brand. An interesting future study might be, therefore, to investigate the mechanism under which consumers shift their representation of a brand from a PCS to the associative network as well as their strategy for making inferences.

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Exploring Factors Influencing Logo Effectiveness: An Experimental Inquiry

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EXTENDED ABSTRACT

Corporate logos are important assets to companies. Identifying and understanding various factors that influence consumer perceptions of logos is one key aspect in creating trademarks and in building corporate identity. The current exploratory research investigates several factors that may influence the effectiveness of logo design.

Traditional research in logo design, particularly the study by Henderson and Cote (1998), has identified numerous factors (e.g., repetition, naturalness, and elaborateness) that influence consumers' responses to logos in terms of positive affect, familiar meaning, correct and false recognition. However, their research is not without limitations (e.g., methodological issues).

In this study, drawing upon the past research, we begin the process of exploring several factors that influence consumer responses to logos through more controlled experimental designs. Particularly, we manipulated two logo design characteristics: logo representative/abstract and angular/rounded. In addition, one individual difference factor, visual arts orientation, was included in the study. Based on literature, we hypothesized that respondents will prefer more representative and curved logos. In addition, the individual difference factor would moderate their effect on evaluations. Finally, to increase the generalizability of the results, we selected two logo stimuli, building and vase, and treated them as a within-subjects factor. Our dependent variables included attitude toward the logo, attitude toward the ad, attitude toward the firm, and the perception of firms' modernness.

The results revealed some interesting findings. First, we found that product category moderated the effects of roundness on evaluations. Specifically, respondents preferred an angular logo for the building but a round logo for the vase. This effect was not only found in attitude toward the logo but also in attitude toward the firm. We proposed a match-up explanation to account for this finding. That is, when a logo matches the typical form of an object that is stored in consumers' mind (schema), their evaluation tends to be more positive. This match-up explanation merits further investigation.

Second, the individual difference factor, visual arts orientation, also moderated the effects of logo representativeness and roundness on evaluations. Specifically, high visual-orientation individuals liked an ad with an angular building logo more than an ad with a round logo only in the realistic condition. In contrast, in the abstract condition, low visual-orientation individuals liked an ad with an angular building logo slightly more than an ad with a round logo. For the building, high visual-orientation individuals perceived the firm as more modern than low visual-orientation ones. However, for the vase, there was an interaction of representativeness and visual orientation. Specifically, individuals with low visual orientation viewed the company as more modern when the logo was abstract than when it was realistic. In contrast, realism had no effect on the company's modern perception for high visual-oriented individuals.

Our research has the potential to make both theoretical and practical contributions to the investigation of logos. From a theoretical perspective, we identified several important factors including logo characteristics (representativeness and roundness), individual difference factor (visual arts orientation), and product cat-

egory. A second contribution is that we manipulated realism and roundness in a more controlled environment, which excluded other possible confounding factors revealed in survey research studies (Henderson and Cote 1998).

From a practical perspective, our research provides useful guidelines for logo designers and marketers. First, marketers should employ design cues (e.g., angular/rounded) that match up with the typical shape in consumers' minds. Second, marketers may use different logo designs (e.g., abstract/real) to target to different consumer groups (e.g., high- or low-visual-orientation).

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The Timely and the Timeless: Syntagmatic and Paradigmatic Sign Relations in Advertising Montage

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EXTENDED ABSTRACT

A decade ago, Scott (1994) offered a sharp critique of past research on visual persuasion in advertising. She argued that a precondition for an adequate understanding of visual persuasion—as it is actually practiced by sophisticated advertisers—is the development of a visual rhetoric, a theoretical framework within which ad forms could be defined and classified and linked to psychological responses. McQuarrie and Mick (1999, 2002) subsequently called upon persuasion researchers to balance their traditional focus on the “human system” (the mind and mental processes that cognize an ad) with a proportional emphasis on the “ad system” (the systematically related set of variables that may be manipulated to create alternative ad executions). In short, Scott and McQuarrie and Mick have highlighted the fact that researchers who focus on visual persuasion tend to know a lot about response processes but very little about ad stimuli. Lacking a theoretical framework that can be used to define the set of manipulable stimulus variables and the range of variation within each variable, they have been unable to produce batteries of sophisticated, realistic ads that could be used to test the interacting effects of the major dimensions of an ad execution.

This paper responds to the call to identify important ad system dimensions and metrics for measuring the range of variation on the dimensions that are identified. It responds, in particular, to one of Scott’s (1994) specific suggestions: that “the sequence of processing as a function of visual layout . . . be investigated for the impact of order of the message on consumer response” (p. 269). To facilitate study of the sequencing effects of layout, the paper proposes a taxonomy of shot sequencing options, then, drawing upon Tulving’s work, proposes possible human system effects of the variables that have been defined.

Semiotics, the general science of signs, is the theoretical foundation of the paper. The main argument is that well established insights in one branch of semiotics—linguistics or, more specifically, syntactics—can be fruitfully generalized from the analysis of words to the analysis of images. Fundamental to this analysis is the semiotic distinction between syntagmatic (linear) and paradigmatic (categorical) sign relations (Saussure, 1959). In linguistics, the unit of syntactic analysis is the individual word. In audiovisual genres, the obvious unit of syntactic analysis is the individual shot, the discrete icons created by camera cuts (Lotman, 1981). Shots may be related to each other either syntagmatically (by forming a linear sequence that represents a sequence of actions) or paradigmatically (by being exemplars of a shared semantic class). Drawing upon the work of Metz (1974), Genette (1980), and Korac (1988), the article develops metrics that may be used to describe, economically, various alternative syntagmatic and paradigmatic ad executions. A syntagmatic montage may emerge from the editing process as a chronological execution of the sequence of images or as one or another type of anachronous executions involving flashforwards and flashbacks. A paradigmatic execution emerges from the editing process as a series of shots that fit into one or several semantic categories.

Work by psychologists on alternative memory systems is pregnant with implications for the human system effects of syntagmatic and paradigmatic montage. In Tulving’s (1983) formulation, episodic memory stores specific, often detailed recollec-

tions of event sequences. These memories are personal, unique, and inevitably linked to a space/time context. In contrast, semantic memory is the categorical memory that stores organized, abstract knowledge about the world. Its content is concepts abstracted from particular times and places. This distinction tracks almost perfectly with the distinction between syntagmatic and paradigmatic sign relations. Thus, the relationship between an episodic memory and its referent is closely analogous to the relationship between a syntagmatic ad execution and the action it depicts. Likewise, the relationship between a semantic memory and its referent class is closely analogous to the relationship between a paradigmatic concept and the individual shots in a paradigmatic ad execution.

Tulving notes that information stored in the episodic system is more easily forgotten than is the information in the semantic system. Since advertisers are very interested in knowing how long the effects of an ad might be expected to endure, this difference is likely to be of interest to them. On the other hand, episodic memory may be the exclusive province of affect. So affective appeals may be more effective if the ad montage has a syntagmatic structure. In other words, formal properties of a properly defined ad system may have predictable effects on responses in the human system.

Since the human system responses are comparatively well understood, the major challenge in research on the contemporary practice of visual persuasion may be to describe the ad system adequately by defining a manageable set of variables that reflect the variation in complex advertising images. For the set of variables to be manageable, the ad-system analysis must be nomothetic. It must contain an integrated and tightly specified set of dimensions. Fortunately, semiotic analysis can provide both the nomothetic specificity and integration and the broad and deep scope that is required to facilitate a theoretically grounded social scientific investigation of artistically sophisticated visual persuasion. One important component of that nomothetic description of the image may be the distinction between syntagmatic and paradigmatic icon sequences and the technical notation proposed in this study for describing alternative ways of structuring the same iconic information in an ad.

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Pharmaceutical Packaging Color and Drug Expectancy

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ABSTRACT

Pharmaceutical markets are expanding considerably due to the aging population, higher development costs and also direct-to-consumer advertising which entails more demands from consumers and prescriptions from physicians. Pharmaceutical packaging as a visual communication tool is promised to a mounting importance, because of growing blister packaging, safety standards upgrading, expansion of OTC drugs and developing television advertising. This study examines the impact of packaging color on consumers' expectancies towards the drug and seeks determining if prototypical color codes exist for drug categories. Results show a significant influence of color and darkness on perceived drug potency. Gender differences are discussed.

"You take the blue pill and the story ends. You wake in your bed and believe whatever you want to believe. You take the red pill and you stay in Wonderland and I show you how deep the rabbit-hole goes²."

These words, pronounced by the character *Morpheus* in the "Matrix" movie, illustrate the evocative power or potency of a pill color. During the last three decades, a dozen studies have dealt with the evaluation of a drug's expectancy or potency according to its intrinsic color. But quite a few have addressed the subject of prescription drug package color effects on consumers' judgments and attitudes. The subject is not superfluous because direct-to-consumer (DTC) advertising now represents an important means of promotion for pharmaceutical companies, knowing that the color and form of a packaging or a medicine are the only visual aspects or hints presented in print or on television (see for instance Nexium®, "the purple pill" from AstraZeneca). Moreover, mail order (direct sales) distribution which now represents the second retail distribution channel behind drugstores (independent and chain outlets combined) relies heavily on the visuals of drugs promoted on-line. We propose, in this paper, first to give some key facts about the pharmaceutical industry and state why drug packaging is assuming a growing role in product promotion. Then we shall review the few previous studies pertaining to the effects of drug color. Due to space limitations, color psychology and its applications to other fields of consumer research (print advertising, retail atmospherics) will not be reviewed in this paper. Finally, we shall present a laboratory experiment studying attitudes towards prescription drugs, according to the dominant color of a drug package. The results of this experiment will be discussed and expanded.

THE PHARMACEUTICAL US MARKET

In 2003, about 466.3 billion dollars were spent worldwide on medications (IMS Health, 2004). This figure includes ethical (prescription-only medicine; POM), semi-ethical and OTC drug sales. Nearly half of this sum (49%) was spent in the USA, 25% in Europe and 11% in Japan. During the same year, the 291 million US residents spent 203 billion dollars on prescription drugs alone (+11.2% vs. 2002), representing 3.22 billion scripts (+2.4%; NACDS, 2004). These figures have more than tripled within ten years (IMS Health; NACDS Economics Department). This 2003 global spend-

ing corresponds to an average of 698 dollars per capita in the USA. Demographic (aging of population), social (Medicare reform), economic (increasing R&D costs, high levels of domestic prices) and marketing factors (growing share of mail-order channel and increasing direct promotion investments) explain this rapid evolution to some extent. Another cause of this escalation is imputed to direct-to-consumer advertising (Findlay, 2000; Kaiser Family Foundation [KFF], 2003), which is forbidden in Europe (Cozens, 2002). In this general context, several reasons explain why packages (for both prescription and OTC drugs) and especially printed color on them are becoming a major issue in pharmaceutical marketing and justify the present study:

Growing direct-to-consumer advertising (DTCA): in 2003, \$3.23 billion were spent on DTC advertising (Lawrence and Zaugg, 2004). Since the FDA authorized less stringent regulations about communication in 1997 (Sumpradit, Ascione, and Bagozzi, 2004), television has become the major medium for drug communication (66% of DTCA in 2003 vs. 13% in 1994). Most observers recognize that DTCA works: "every additional \$1 the industry spent on DTC advertising in 2000 yielded an additional \$4.20 in sales" (KFF, 2003) and that it influences physicians' prescriptions (Mintzes, 2003). The drug appearance or package on TV (i.e. packshot) then becomes the main visual and the principal means of differentiation between suppliers.

Drug samples to consumers: sampling is already considered as an efficient promotion tool (Joseph and Mantrala, 2003) but DTC sampling is about to develop; the packaging could have a greater impact than standard compulsory information notices.

Packaging standards: although 80% of solid medicines in US are conditioned in bottles (less than 15% in Europe), experts forecast a fast growth for blister packaging (Pilchik, 2000). While the issue is not prevalent today in the US for prescription drugs, it could soon become, as total world demand for blister packs should exceed that of bottles in 2007 (Packaging Digest, 2004). A blister is composed of a thermoformed plastic with a sealing foil. This latter packaging implies a secondary cardboard package, displaying a larger printable surface.

Changes of drug status: a substantial number of drugs, previously prescribed by physicians, became free-access OTC medicines. Now some studies report that nearly 3 OTC purchasing decisions out of 4 are made in-store. Packaging has naturally a role to play.

New FDA regulations on OTC drugs: in March 1999 new regulations (effective April 2002) urged manufacturers "to standardize their presentation of such information as active ingredients, directions, uses, warnings, and other data. [...] The information must be boxed and cannot include logos, graphics, or bar codes." (Canale, 2001). Measures against tampering are also being upgraded. All these dispositions entail a need for larger packaging.

Weapon of massive differentiation: knowing that the color or the form of a medicine *per se* cannot be automatically patented or constitute a trademark (for instance, see INTA, 1996; Steele, 2002), a specific packaging may convey and reinforce brand equity (especially for OTC drugs on drugstores' shelves).

Economic worries: more and more counterfeiting and smuggling cases (low-priced export drugs which are reintroduced into the US) are reported. Losses for the pharmaceutical industry appear significant. For instance, GlaxoSmithKline felt compelled to change

¹Both authors equally contributed to this work.

²"Matrix", written by Andy & Larry Wachowski.

the color of its Combivir® tablets (from white to red; Murray-West, 2003) aimed at developing countries. Special printing techniques (bright stocking, nude labeling) are encouraged for limiting illegal practices.

Health issues: experts recognize that the colorful presentation of a medicine (compound or package) may improve compliance (adherence to treatment) and reduce the risks of confusion (Carter, Taylor, and Levenson, 2003; Elwyn, Edwards and Britten, 2003) and medication errors (Hethcock, 1978) which are counted yearly by the thousands.

Order mail growth: Web-based drug selling activities display the highest growth rates (+21.7% between 2001 and 2002) in the sector. Drug and package visuals are paramount in this medium.

THEORETICAL FRAMEWORK AND HYPOTHESES

Since the very first days of medicine, the power of a drug appearance and its attached expectancy has played a significant role on therapeutic success. The placebo effect (“*I will please*” in Latin) has been recognized since Socrates (Moerman and Jonas, 2002). The very belief in the physician and/or the treatment contributes to the cure. Among the manifest signs constructing this belief, the drug appearance (color and form) and its packaging, may have some influence in efficacy of treatment (Buckalew and Coffield, 1982a). In the same way, the very brand name of a drug will have differential therapeutic effects according to its consonance (Klink, 2002) or its notoriety (Branthwaite and Cooper, 1981).

Previous studies pertaining to prescription drugs and color

Surprisingly, to our knowledge, no specific study addressed the *packaging color* for pharmaceutical products as a predictor of drug expectancies. On the other hand, a few studies have been conducted on the influence of *pill color* on attitudes towards medication or treatment. We reviewed eight studies, conducted between 1970 and 1991, to which we added two extra studies found and reviewed by de Craen *et alii* (1996). Most reviewed studies employed either patients or students with limited sample sizes. Results are sometimes divergent or weakly significant. It nevertheless appears that color does influence perception of medicine potency or expectancies towards it.

A first group of studies addressed the relationships between color and form of medicine and their perceived potency and efficacy. Schapira *et al.* (1970) showed that anxiety was reduced with green pills and depression with yellow tablets. Cattaneo, Lucchelli and Filippucci (1970), along with Lucchelli, Cattaneo and Zattoni (1978) demonstrated that blue pills induced quicker and longer sleep than orange pills. Similar reports were given by Blackwell, Bloomfield and Buncher (1972), indicating sedative effects of blue capsules. Huskisson (1974) showed that a red placebo is as efficient as a real analgesic drug. Sallis and Buckalew (1984) demonstrated that the perceived potency of a drug decreased in function of the following pill color order: red, black, orange, yellow, green, blue and white.

A second group of studies dealt with the relationships between drug colors and perceived therapeutic classes. Jacobs and Nordan (1972) showed that red and yellow placebo pills were classified as stimulants, while a blue placebo was classified as a depressant or a tranquilizer. In two successive studies, Buckalew and Coffield (1982a; 1982b) demonstrated that some ethnic and cultural factors could alter general color classifications of medicines. Significant differences between African American and European American samples were also noted for pill size-strength relationships. Finally, Buckalew and Ross (1991) revealed that only a few colors pre-

sented some obvious link with therapeutic classes: beige and orange for skin treatment and red for heart condition.

A comprehensive review of literature on the placebo effect of color was also conducted by de Craen *et alii* (1996) that covered about three decades. The main conclusions of these authors were that “*the colour of drug seems to influence its effectiveness, but consistent trends are not apparent*”. They concluded by writing that further research “*contributing to a better understanding of the effect of the colour of drugs*” was warranted. Some authors explain the color placebo effect by the physiological effects of color (e.g. Jacobs and Hustmyer, 1974) while others merely associate it with idiosyncratic color preferences (Schindel, 1962) or learned cultural symbolism (Adams and Osgood, 1973).

Hypotheses

Given the absence of previous works on packaging color and perceived drug expectancy and potency, we shall set forth our hypotheses by relying on previous studies exploring relations between these perceptions and the drug color. We therefore hypothesize:

- H1: a “warm-colored” (red or yellow) packaging will be perceived as containing a more potent drug than “cool-colored” (blue or green) ones. This would impact various expectancies related to a given medicine. Indeed, some authors like Berlyne (1960) or Jacob and Hustmyer (1974) have stressed the arousing nature of long visible wavelengths.
- H2: a dark packaging will be assessed as containing a more potent drug than a light one. This would impact various expectancies related to a given medicine. As early as the 1950’s, authors underlined the potency effect of dark or saturated colors (Osgood, Suci and Tannenbaum, 1957).
- H3a: “warm color” packaging will be more often associated with stimulant therapeutic classes. Recurrent studies indeed showed associations between red and stimulant qualities or drugs (Jacobs and Nordan, 1972).
- H3b: conversely, “cool color” packaging will be more often associated with sedative/soothing therapeutic classes (Lucchelli, Cattaneo and Zattoni, 1978).

METHOD

The main objective was to assess the impact of a drug packaging color on related perceptions and expectancies. A pilot study revealed that general beliefs about prescription drugs as a whole were likely to moderate perceptions and attitudes toward a specific packaging. A specific measurement instrument for these beliefs was consequently warranted. Horne, Weinman and Hankins (1999) have constructed a specific scale, the ‘Beliefs about Medicines Questionnaire’ (BMQ) that was primarily intended for patients with heavy chronic pathologies (psychoses, renal dialyses and heart conditions), while Perrien *et al.* (1998) used a general involvement scale for an analgesic. Therefore, a more general index targeting consumers (ICOMED) was created in another study and used in the present one. This experiment consisted in exposing 150 European participants to a prescription drug packaging bearing a specific color and asking them to make several judgments about the drug’s perceived qualities.

Independent variables

Independent variables comprise packaging color (hue and brightness), the pre-test mood, gender and general beliefs towards medicines.

FIGURE 1
Packaging used in experiment (brown condition)



Stimuli selection

Packaging form and appearance. In Europe, most solid medicines (pills, tablets, etc.) are packaged in blisters and boxes rather than in bottles (about 85% against 20% in the US; Pilchik, 2000). This blister, composed of PVC and foil, is usually kept by the consumer in its box. This form of packaging is now increasing significantly in the US (+16% annually vs. 6% for bottles). Also, for reasons of ecological validity and for the sake of practicality, an actual drug cardboard packaging was tested, i.e. a rectangular box (Cf. Figure 1), with a fictitious brand name.

The packaging of an actual generic analgesic drug was used for this experiment. Once scanned, the box image was altered in several ways: the original brand name was erased and replaced by a fictitious but credible name (cf. infra); the “paracetamol” mention was erased because of its popular notoriety; the background colors—except for the white or gray parts—were modified and switched to a condition color.

Choice of color conditions. In this experiment, 7 conditions were applied: 6 hues and an achromatic color (medium gray). The colors displayed on a LCD computer screen are showed in Table 1, along with their RGB and HSL (hue, saturation and lightness/brightness) references. Absolute lightness levels are also indicated. The RGB reference displays the phosphors’ intensity values (between 0 and 255) for the three primary colors red, green and blue. The second HSL norm specifies hues in degrees (0° to 360°) on the chromatic wheel while saturation and lightness are expressed in percentages.

A given color can be defined by its three dimensions hue, brightness and saturation (Mounts and Melara, 1995). The authors opted here for “natural” colors, i.e. hues that are often seen on actual pharmaceutical packages. Thus, a strict control for color saturation levels was not implemented and only hue and lightness levels were taken into account for results.

Choice of the drug brand name. So as to assess strictly the chromatic effect of a pharmaceutical packaging, an unknown drug brand name was warranted to avoid any familiarity effect (Kent and Allen, 1994). For additional reasons of intellectual property and trademark protection, we decided to use a fictitious but credible brand name (see Perrien *et alii*, 1998). A preliminary approach, resorting to an expert group (physicians, pharmacists and nurses), a documentary research³ and a quantitative survey among students have allowed determining that drug brand names were often perceived or imagined with rare consonants in the native language and with diphthongs which evoke a foreign country or intrinsic qualities. For example, at least 66 drug brand names start with the letter Z. This latter seems to communicate and connote a concept of efficacy (Erlich, 1995; Klink, 2003). These statements led the authors to invent the brand name “Zolgan” which recapitulated the various characteristics evoked *supra*. Verification on official Web sites helped to ensure the inexistence of such a brand name. We shall

observe however that this fictitious brand appears realistic to the extent that a consultation at the Drugs@FDA⁴ site allowed detecting 211 brand names (plus 264 generic appellations) which contained the syllable “Zol” and 42 brand names (plus 5 generic names) which contained the syllable “Gan”. Eventually, the modified packaging comprised the fictitious brand name (see Figure 1), an upper-right pictogram symbolizing a capsule, a central hexagon, the active molecule “dextropropoxyphène”, the mention “20 capsules” and the corporate name of the manufacturer (Irex, a subsidiary of Synthelabo). The height of package was diagonally halved, the left part remaining untouched (white) and the right part showing the experimental hue.

Mood before test. Mood of participants was assessed before exposure to stimuli by the *Self-Assessment Manikin* (SAM) scale, comprising pleasure, arousal and dominance 9-point sub-scales (Morris, 1995).

Attitudes and beliefs towards prescription drugs. A specific scale—developed and validated in a European context (submitted paper)—was used in this study. The *ICOMED* index (for Index of CONfidence toward MEDicines) is composed of two opposed 7-item sub-scales: the first one measures the individual’s defiance (distrust) level towards prescription drugs and the second subscale measures the individual’s reliance (trust) level towards prescription drugs. Each item consists in a 7-point scale.

Dependant variables

Two main variables, likely to be influenced by color, mood and general drug attitude, were measured in this experiment: the expectancies towards the displayed drug packaging and its possible attribution to a specific therapeutic class (resultant mood is also a dependent variable).

Drug expectancies. Ten items were successively proposed, displayed as 7-point semantic differential scales (Osgood, Suci and Tannenbaum, 1957). Half of the scales were score-inverted. These items comprised: medicine power (gravity of condition), drug activity duration, required precautions of use, rapidity of action, perceived dearness (price), therapeutic efficacy, potential side effects, prescription drug (as opposed to OTC), type of treatment (symptomatic or curative) and brand identity (“genericness”).

Attribution to therapeutic classes. Referring to previous studies about drug expectancies according to the color of pill or capsule (see *supra*), we tried to confirm some relationships between specific hues and ailments or therapeutic classes. Eight major categories were proposed to participants: heart/blood pressure (cardiac),

³MedScape Drug Info: http://www.medscape.com/druginfo/DMOZ:http://dmz.org/Health/Pharmacy/Drugs_and_Medications/

⁴<http://www.accessdata.fda.gov/scripts/cder/drugsatfda/index.cfm>

TABLE 1
Color references for experimental conditions

Condition color	L*	HSL References			RGB References		
		H (°)	S (%)	L (%)	R	G	B
Red	107	4	84	94	240	53	38
Yellow	212	54	100	100	255	229	0
Green	168	116	76	93	70	238	57
Blue	87	228	81	91	44	81	232
Orange	148	28	100	100	255	121	0
Brown	84	25	67	47	120	74	40
Gray (neutral)	150	-	0	59	150	150	150

*Lightness is measured by the screen luminous intensity, varying from 0 (black) to 255 (white).

TABLE 2
ICOMED scores for sample

Gender	Defiance Score (1)	Reliance Score (2)	ICOMED Index (2-1)
Males	3.68	4.63	.95
Females	4.21	4.58	.38
Mean	3.95	4.61	.65
F	10.667	.077	4.118
p	.001	.078	.044

digestion/liver (heartburn etc.), inflammation/fever (antipyretics), pain/migraine (analgesics), respiratory system, depression/anxiety (psychotropic/stimulant), insomnia (hypnotics/sleep pill) and skin. Participants could make only one choice.

Measures and procedures

Experimental sessions took place with small groups composed of 2 to 4 individuals (totaling 150 participants; 53.7% female; X=19.96 years), to whom a flat 17" LCD screen was displayed at a distance of about 1.2 meters. To avoid any discrepancy in color display, the same screen was used for all groups. A 6-page booklet was given to each participant. In a first stage, subjects self-evaluated their current mood with the *Self-Assessment Manikin* (SAM) iconic scale, composed of three 9-point scales. The experimenter then explained: "a pharmaceutical company wants to market a new drug within a few months. Several packaging layouts have already been selected. You are going to assess one. Look at the screen displaying the packaging while answering the following items regarding this medicine". The packaging image was then displayed on-screen (only one color per condition). While looking at the packaging, participants evaluated it and rated the associated drug expectancies. Participants would afterwards assign the package to one possible therapeutic class among eight. A second mood evaluation was accomplished with the SAM iconic scale before subjects expressed their beliefs towards drugs in general (ICOMED index). As a conclusion, Ishihara chromatic plates were displayed to control for individuals' color vision. Demographics were finally recorded.

RESULTS

Manipulation check

Mood. Participants' mood significantly changed after exposure to stimulus and questionnaire items. Further covariance analyses did not show any specific effect of mood and its dimensions on drug attitudes and judgments. Pleasure: before 6.18, after 5.81 (p<.000); Activation: before 5.35, after 4.85 (p<.000) and dominance: before 5.72, after 5.83 (p<.000).

ICOMED index. The participants' general attitude towards medicines was assessed by the ICOMED index. Reliability for the defiance scale showed an alpha of .68; alpha for the reliance scale reached .73. The overall mean score for participants was .65, knowing that the index may vary from -6 (high defiance towards drugs) to +6 (high trust towards drugs). A significant gender difference for the defiance scale [F (1, 149)=10.67; p<.001] and the global index [F (1, 149)=4.12; p<.044] is noted (see Table 2). Female participants trusted drugs less than male participants did.

Relations between expectancy items. Partial correlations have been calculated (i.e. controlling for color) so as to assess the strength and direction of putative links between the 10 expectancy items. Thus, we notice that a drug construed as designed for a benign illness will also be associated with brief action (r=.47; p=.000; two-tailed), low risk (r=.60; p=.000), low price (r=.52; p=.000), limited efficacy (r=.39; p=.000), limited side effects (r=.58; p=.000), OTC status (r=.40; p=.000) and symptomatic treatment (r=.50; p=.000). Correlations with rapidity (vs. delayed) of action (r=.10) and "genericness" (r=.11) are not significant

TABLE 3
Mean potency score by color condition

Package color	Perceived potency
Brown	38,33
Red	36,80
Gray (neutral)	35,63
Blue	33,78
Orange	32,50
Yellow	31,18
Green	31,18
Mean potency score	34,17

($p > .16$). A further factor analysis showed that 8 items out of 10 loaded on the same factor. The rapidity of action and brand identity (“genericness”) were considered as different constructs. The remaining 8 items indicated an eigenvalue of 3.975, explaining 49.7% of variance, with all loadings above .5. The aggregation of these 8 items constituted a “drug potency” index, which showed a good reliability with a Cronbach alpha of .8507.

Color effects on dependent variables

Six hues were used in the experiment, along with a neutral condition (medium grey). Another independent variable was constituted *post hoc* in a dual way: the stimulus brightness. Two categories were constituted after agreement between experts: light (yellow, green, orange and grey) and dark (red, blue and brown). This choice was validated by a metric measure of color brightness which was taken with the help of PhotoShop® 7.0 imaging software. The respective effects of hue and brightness were analyzed for the three main dependent variables: drug expectancies (10 items), the drug potency (8 aggregated items) and the attribution to a specific therapeutic class.

Drug expectancies. An analysis of variance showed a main effect of color hues on some drug expectancies. Main effects of hues were significant on three expectancies: “medicine power” [gravity of illness; $F(6, 149) = 2.635$; $p = .019$], “required caution” [$F(6, 149) = 2.558$; $p = .022$] and “drug dearness” [drug price; $F(6, 149) = 3.210$; $p = .005$]. Red, brown and grey packages are perceived as designed for serious illnesses vs. yellow or green packaging. Brown, red and orange packages require some precaution of use, compared to blue, green and yellow. Brown- and red-packaged drugs are perceived as more costly than orange or yellow boxes.

As far as package brightness is concerned (light vs. dark hues), significant effects were detected for the following expectancies: “drug delayed action” [$F(1, 149) = 4.05$; $p = .046$], “drug dearness” [$F(1, 149) = 9.49$; $p = .002$], “side effects severity” [$F(1, 149) = 3.8$; $p = .05$] and “drug curative value” [$F(1, 149) = 5.65$; $p = .019$]. Dark-hued packages (red, blue and brown conditions) are considered as acting more rapidly, more expensive, more susceptible of side effects and more curative than light-hued packages (yellow, green, orange and grey conditions). H2 is validated.

When effects of color screen brightness (metric values) on drug expectancies were assessed by linear regressions, it appeared that absolute screen color lightness (varying from a minimum of 0–black–to a maximum of 255–white; see Table 1) impacted significantly drug power ($\beta = -.171$; $p = .037$), drug action duration ($\beta = -.175$; $p = .033$), activity delay ($\beta = +.172$; $p = .036$), drug

dearness ($\beta = -.23$; $p = .005$) and curative value ($\beta = -.163$; $p = .047$).

Perceived drug potency (8-item summated score). The packaging color hue had an impact on the global perception of the drug we called potency [$F(6, 149) = 2.35$; $p = .034$]. Brown and red packages entail greater potency scores compared to green or yellow hues (see Table 3). H1 is validated.

When experimental hues were rearranged in two brightness categories, a significant positive effect of brightness on perceived potency was also apparent [$F(1, 149) = 7.27$; $p = .008$]. Brightness absolute levels were also employed as a metric variable. A linear regression shows a significant relationship between brightness and perceived drug potency ($R^2 = .052$; $\beta = -.228$; $p = .005$).

Therapeutic class attribution. Participants had been given no particular indication regarding the precise nature of the proposed drug. Eight therapeutic classes were proposed, knowing that only one could be chosen. Overall, the most often chosen classes were analgesics, drugs for heart condition, antidepressants and hepatic drugs. Chi-square tests did not reveal any specific relationship between hues and therapeutic applications. Red is mostly attributed to the heart condition drug (32%) and analgesics (20%). Yellow is attributed mostly to heart (23%) or dermatologic (23%) drugs. Green is related to analgesic (25%) and hepatic (21%) medicines. The blue package is affected to an analgesic drug (26%), while the brown one is related to a heart condition drug (33%). The neutral package (gray) is partly attributed to an analgesic drug (25%). Regarding the attribution of light or dark packages, one association appears significant: dark vs. light packages are related to heart condition drugs ($z = 2.794$; $p = .005$). Another relation approaches significance: light packages are more related to antipyretics ($z = 1.83$; $p = .06$). Although non-significant, results show trends compatible with H3a and H3b.

DISCUSSION

Given the scarcity of empirical research on pharmaceutical packaging and its growing importance in global drug companies’ communication, and given the known visual impact of color, an exploratory approach on drug packaging color seemed warranted and justified.

Indeed, previous works about design were mainly conceptual papers pertaining to *product* design as a whole (Bloch, 1995), dealing with product form rather than packaging color *per se* (e.g. Underwood, Klein and Burke, 2001). Other authors addressed the subject of which design attributes (e.g. prototypicality, unity) influence consumers’ cognitive and affective responses (Veryzer

and Hutchinson, 1998). Specific studies on packaging color are rare (Gordon, Finlay and Watts, 1994; Garber and Hyatt, 2003) and thus warranted, even limited to an occidental context.

The main objective of this study was to assess the presumed effect of the color of a drug packaging on subjective evaluations pertaining to that drug. The present results indicate that packaging color does have an effect—in a European context—on some expectancy items related to a given drug (strength, safety measures and price) and especially on the “potency” construct (which is composed of the 8 specific items abovementioned) which presents a good reliability ($\alpha=.85$). Color warmth also seems to imply drug potency, as being comparable to a color arousing quality (Berlyne, 1960; Jacobs and Hustmyer, 1974).

The brown and red hues appear to signify and connote gravity in a supposed treatment, with a high potency score (respectively 38.3 and 36.8) as opposed to green and yellow hues which are more associated to trivial or limited effects (both 31.2 for potency score). Similarly, dark tones generally induce more potent considerations: the darker the package, the more potent the drug; this seems compatible with previous findings on color perceptions and meanings (Osgood, Suci and Tannenbaum, 1957; p 299-302) and color effects on emotions (Valdez and Mehrabian, 1994). This lightness effect is corroborated by results of regressions on metric lightness values of employed package colors. Although not always reaching significance levels, some trends regarding therapeutic class attribution by color are similar—even partly—to those obtained previously (Buckalew and Coffield, 1982a; Schapira et al., 1970). Thus, reddish hues (brown and red) are found to be associated with heart condition drugs, while yellow is related to skin medicines (Buckalew and Ross, 1991). Nevertheless, we did not find any confirmation of white (i.e. achromatic) association with analgesics and green/blue with sedative drugs (Buckalew and Coffield, 1982a; 1982b; Blackwell, Bloomfield and Buncher, 1972). A gender effect also appears in our results. Women appear to distrust medicines more than men do. Color preferences among gender were not controlled for in this study. Yet, specific preferences might play a role, similar to those exposed by Cattaneo, Lucchelli and Filippucci (1970; study 2), where men preferred orange (warm) capsules and women preferred blue (cool) ones. The ICOMED index does not seem to influence the participants’ ways to evaluate color packages. However, the relative youth (and health condition) of participants (mean age=20) may explain an absence of mediation. We may add that ICOMED was also tested elsewhere on adults (30-50 years old) and seniors (65 to 80) and that it presented higher reliability levels and better fitness indices in confirmatory factor analyses. Links between medicine beliefs and health involvement should be explored (e.g. Perrien et al., 1998). But again, it should be noted that significant differences in ICOMED appear according to gender: female participants scored higher on the defiance scale ($p<.001$) and lower on the global index ($p<.05$) than their male counterparts did.

Implications for future research. Some additional packaging features have not been addressed in this experiment and some experimental extensions seem warranted. For instance, package graphics or picture (Underwood, Klein and Burke, 2001), letter fonts and styles, cardboard texture, along with brand name sounds (Klink, 2003; Yorkston and Menon, 2004) would deserve a further exploration. A similar experiment is to be submitted to healthy adults and senior patients. Recurrent treatments for chronic illnesses or ailments are likely to impact attitudes towards specific medicines and their packaging. Also, individual characteristics such as aesthetic sensitiveness (Bloch, Brunel and Arnold, 2003) or style of processing (Childers, Houston and Heckler, 1985) should be included as moderating variables in future studies. Another

question is whether cultural color meanings impact drug expectancies in line with packaging hues (Madden, Hewett and Roth, 2000).

Implications for business research. Pharmaceutical businesses should heed the form and color of their new packages before marketing, be they prescribed or OTC. The impact of color on drugstores’ shelves is obvious (see for example Celebrix® or Prilosec®), but the likely development of blister-packaged prescribed drugs, along with FDA compulsory notices, will also stress the growing importance of boxes’ general outlay, either in physical outlets or on-line (189 million scripts by mail order in 2003). The expanding R&D costs and shorter ROI periods imply a maximization of market shares and profits during the market life of a drug; an attractive and meaningful package can then make the difference against a more ordinary and conventional container.

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Consuming the Fashion Tattoo

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ABSTRACT

From being considered a marginal and sometimes deviant behavior, the consumption of tattoos has become a mass consumer phenomenon. As tattoos have gained in popularity, it can be expected that the reasons for why people get tattoos have shifted as well. This paper explores consumers' motivations for getting a fashion tattoo and the meaning associated with its consumption. Through phenomenological interviews with fashion tattooees, the themes 'art/fashion', 'personalization and biographing', 'contextual representation of self', and 'meanings?' are related to existing consumption theory.

Having a tattoo has gradually become a mainstream consumption practice that can be found among people from all walks of life. Once associated with sailors or with biker culture and considered as a somewhat deviant behavior performed in opposition to the mainstream society, it has now transformed into a mass consumer phenomenon (DeMello 2000). In fact, it has been argued that to some extent tattoos are now considered so mainstream that they are almost passé (Sweetman 2000). These days, getting a tattoo has become more comparable to other consumption practices where people seek to beautify their bodies according to current fashion norms. Therefore, people are not necessarily getting a tattoo in order to express affiliation with a certain life style or a specific subculture. In this article we will examine consumers' motivations for getting a fashion tattoo and the meanings associated with its consumption. The emergence of tattooing as a mass consumer phenomenon has received scant attention in consumer research. The major contributions to research on tattoo consumption practices has been made from a subcultural/post-subcultural perspective with a focus on 'spectacular' consumers such as heavily tattooed women (Goulding and Follet 2002; Patterson and Elliot 2004) who in one way or another define themselves in opposition to mainstream society (DeMello 2000). Furthermore, there is a tendency in prior research to consider tattoo consumption as a socially disvalued activity (Sanders 1985) where tattooees are considered to constitute a subculture in its own right (Velliquette, Murray, and Creyer 1998). The purpose of this paper is to investigate the consumption practices underlying tattoo consumption as a mass phenomenon. That is, our empirical focus is primarily on consumers who have few tattoos and no intentions of having any more (all informants bar one had only a single tattoo). We thus focus on what Goulding et al. (2004) refer to as fashion and aesthetic tattoos, where the tattooees acquire the tattoo to beautify their bodies while paying less attention to the symbolic or 'tribal' meaning. According to Goulding et al., these tattooees are driven by peer group referents and fashion trends but unlike more heavily tattooed people, they do not define themselves as member of a tattoo sub-culture. Our findings are organized in a number of themes, some of which are different than from identified in other studies and others confirming previous research on tattoo consumption. We discuss our findings and previous research in relation to poststructuralist consumption theory, specifically Holt's (1995) typology of consumption practices in order to illuminate the variety of practices of this emerging consumption phenomenon.

IDENTITY IN THE LATE MODERN AGE

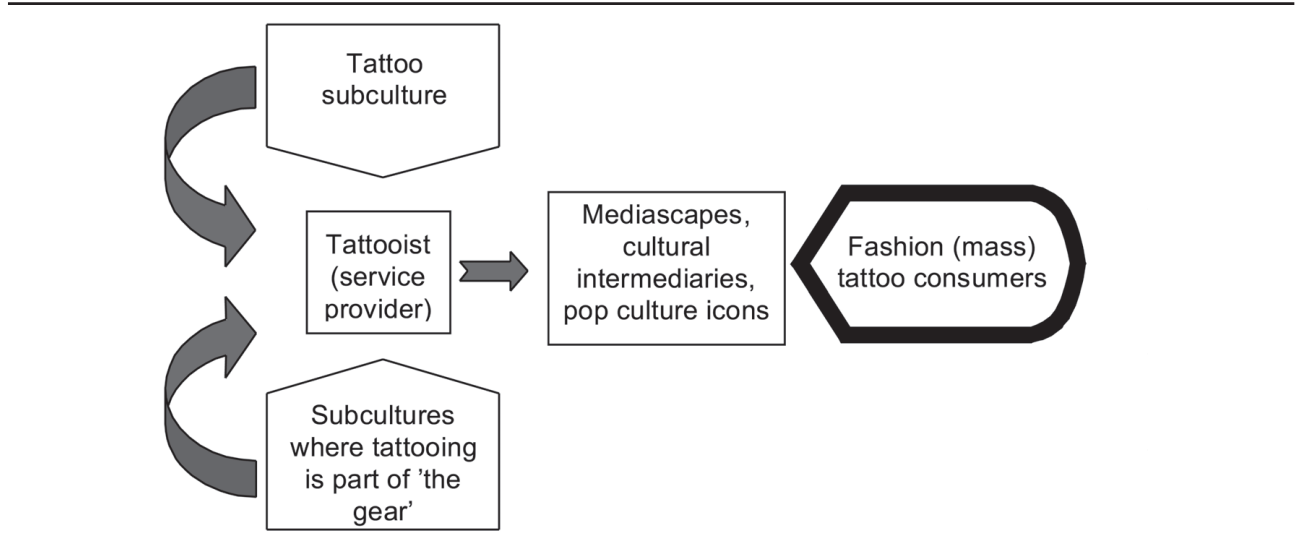
Tattoo consumption has emerged as a consumption phenomenon of the global cultural economy and one which has become a relatively conspicuous one (Sweetman 2000). Under conditions of late modernity, the body has come into focus and is considered as malleable and hence something that can be modified and improved. In this way, the body becomes an excellent site for expression of self identity, a phenomenon Baudrillard (1998) discusses as 'investing in the body'. The mass consumption of tattoos is one result of this increased interest in the body. In the late modern age it has been claimed that individual identities have become reflexive articulations of imagined biographies (Giddens 1991). As such, identities have become fluid in that there is a constant rearticulation taking place. Bauman (2001) goes as far as claiming that the identity strategy of today is less about committing oneself to one identity than it is about keeping possibilities for identity change open. It is somewhat paradoxical that while body expression on the one hand is part of a reflexive identity negotiation, it is characterized on the other hand by a higher degree of permanence and hence something that closes off the possibilities for identity change. One way to explain this possible paradox, however, is that body expressions are attempts to anchor self-identity in order to obtain some stability in contemporary consumer culture (Sweetman 2000).

The phenomenon of tattoo consumption illustrates the postmodern breakdown of the mind-body dualism (Firat and Venkatesh 1995) by pointing to the stylization of the body as an integral part in the construction of self-narratives. As body modifications—such as tattoos—feature in popular representations (such as ads, movies, music videos) and among both generalized and immediate Others' of consumers, the body increasingly becomes represented as an integral part of self construction. The body hence achieves new meanings and a new status which consumers learn through socialization. We interpret this to be much in line with the dialogical model of fashion outlined by Thompson and Haytko . The malleability, however, of the body we interpret as being part of a postmodern cultural ideology of the body in which the bodies become "living records of [...] life histories and consumption habits" (Thompson and Hirschman 1995, p. 151).

THE PRESENT STUDY

In order to identify tattoo consumption practices, we conducted interviews with fashion tattooees. The purpose of the interviews was two-fold. First of all to investigate how imagery was categorized and typologized by consumers—i.e. what kind of symbols would be appropriate for tattooing—including the symbolism in the tattoo motifs chosen by our informants. Secondly, to look at the practice and experience of acquiring the tattoo. Our overall understanding of the tattoo market was to get beyond a purely sub-cultural understanding and more towards a market system understanding. Indeed, this perspective includes the symbolic meanings inherent in the tattoo subculture, but we consider this as an influencing factor rather than being the lens through which the field is examined. Our understanding is summarized in Figure 1. Phenomenological interviews were carried out with 14 fashion tattooees who do not subscribe to membership of a subculture as motivation

FIGURE 1
Overview of the tattoo system



for acquiring their tattoo. In addition, we conducted interviews with two tattoo artists, in order to get an understanding of the service providers' interpretation of the popularization of tattooing (see also Bengtsson, Östberg and Kjeldgaard (forthcoming)).

FINDINGS

In the following we discuss our research findings in terms of four overall themes which constituted the discourse on tattoo consumption among our informants. First we discuss how tattooees categorize imagery in terms of appropriateness for tattooing, evoking an art/fashion dichotomy. Secondly, we discuss the theme of personalization of imagery and meaning, thirdly how tattoos are used for contextual representations of self, and fourthly the (lack of) meaning of tattoo symbols.

Art or fashion

Many tattoo artists consider tattooing as a form of art and in that respect define themselves as artists. This is a shift in discourse compared to the time when tattooing were mostly for bikers and other people from the low end of the society (DeMello 1995). Today, the tattoo industry is increasingly characterized by educated professional tattooists that provide fine art designs, and this has given the tattoo subculture legitimacy within the art world (Sanders 1989, p. 108). One of the tattoo artists we interviewed expressed his ideas about tattoos as art in the following way:

"In their [people not tattooed] eyes, I know they think I look terrible. Because if you have no knowledge about the art—just like a man looking at an abstract painting and thinks it looks a mess. But that's because he hasn't learned to look at it properly. I think it's often that way with tattoos as well." (male tattoo artist)

On the other hand, when it comes to fashion tattooees the art discourse seems to be less obvious. Therefore, a dichotomy between art and fashion is constructed as fashion tattooees have to define their tattoos in opposition to the 'mainstream' discourse among tattooist who belong to the tattoo subculture. Consider this

tattooee's reflections about the half-moon she has tattooed on her foot as a sign to mark her nine month world tour with a gymnastics team.

"I think that those who have many tattoos may look at it as an art form just like other kinds of art—paintings and stuff. And they like to adorn their body with that. Uh ... it's not like that when you just have a single one done. Then you don't think art. A half-moon—where's the art in that? [...] it's just another form of adornment, I mean just like jewelry and clothes and earrings for example." (female, aged 24)

The tattooist and the tattooee both relate to the art discourse but their remarks reflect different practices and identity positions in relation to the categorization. However, they nevertheless acknowledge each others' positions in the tattoo marketing system (the informant above make references to the tattoo / body modification subculture, other informants make references to other subcultures where tattoos are part of the gear). Among the fashion tattooees there is a reflexive understanding of the tattoo as being non-art and non-subcultural. Since none of the consumers we interviewed were heavily tattooed, they would primarily rely on such a fashion/adornment discourse rather than the artistic discourse. The notable exception, however, are the consumers who construct (literally) their own tattoos. This practice of 'crafting' will be elaborated on below.

Personalization and biographing

We found, as with many other consumption objects, that consumers sought to personalize their tattoo consumption (cf. McCracken 1986). One aspect of personalization is the practice of crafting one's own motif, rather than choosing a pre-made design from the flash cards in the tattoo studio or more broadly from popular culture. One key way of making a tattoo personal, is to link the imagery to the individual biography. One of the tattooees interviewed had a tattoo that was a combination of the sign of his military regiment's coat of arms and a part from the logo of the university he was attending (cf. Sanders 1988) (Figure 2):

FIGURE 2
Crafting a tattoo



FIGURE 3
Tattoo motif from popular culture



“Well basically it is my coat of arms. From Jutland’s dragon regiment up in Holstebro. Then I have removed the escutcheon of King Christian V, the founder of our regiment, and put the apples of the University of Southern Denmark there instead. So I think that was a bit funny. I have always known that I would have a tattoo. But I have never known what it would be. But in this way it became something that is reflecting who I am as a person, but also something that is unique.” (male, aged 29)

To this informant the tattoo becomes a way of making aspects of his biography more manifest by marking his body with two readily available images in combination. The tattoo is more personal, both because of the close link he has to the two institutions in question, but also by the fact that he is combining two symbols. The link to biography in this case consists in marking and fixing specific life events. Another aspect of incorporating the tattoo into the personal biography is when the act of getting the tattoo in itself becomes a significant life event and hence part of the story of the self. The quote below illustrates how the specific life time period in

which the informants had her tattoo is evoked more generally in terms of identity:

“Well, to me it is just like a memory both of the year I spent in Switzerland, but also as a memory about how I once was. Because, that Jane who was in Switzerland is definitely not the kind of person I am today. In fact, I was much more wild and crazy. Very different from today.” (female, aged 29)

Another aspect of personalization concerns the meaning of the image and the way tattooees claim possessiveness over the meaning and make it a natural extension of their self (Belk 1988). The following informant had a tattoo of the death metal band Sepultura on his calf since he had always been fond of the band (Figure 2).

“The tattoo has become mine. And even if other people don’t know its meaning, I will still know myself what the tattoo means. I know what it means to me from Sepultura’s part [i.e. what Sepultura intends]. And they have already changed; the

logotype has a new background which happened after they changed their lead singer. So it's [tattoo] already different from Sepultura." (male, aged 20)

The informant is utilizing the logotype of a rock band in order to make his body unique. However, we have been told by other tattoo consumers (not part of the study) that having this band's logo on the calf is popular among fans of the band in particular and among metal fans more generally. Sepultura is a kind of high cultural capital metal band very much concerned with political issues such as the deforestation of the Amazon and of the right of land to native populations—hence there is more than merely a manifestation of music taste in having the tattoo. Our informant also tells us that he is a 'socialist'—hence the tattoo enters into this overall and relatively coherent story of his self.

Contextual representation of self

An important matter to decide upon for tattooees is where to place the tattoo on the body. Prior research has found that most male tattooees place their tattoos in a place where it can be displayed in public, typically on the arm or on the hand. Female tattooees on the other hand tend to choose a place where only people with whom they are intimate can see the tattoo (Sanders 1988). These differences between men and women regarding placement of tattoos are furthermore confirmed by Watson (1998). For the fashion tattooees, however, it appears to be important that the tattoo can be hidden with clothes in order to be able to act like a 'normal' person to people who might have a negative idea about tattoos.

"My tattoo is placed so that I can always cover it if I need. If one day I will be a manager for a marketing department, then I want to be able to walk with a short-sleeved shirt and still not show my tattoo. Also because I don't think it looks nice to have tattoos all over the arms or on the back of the head [...]. It can be offensive to some people." (male, aged 20)

"If I would sit in a nice church or some other place down south or whatever, then it would be smart to be able to cover it with a t-shirt or a long-sleeved sweater, so that you almost don't need to wear gloves or whatever. Well...I like that it is one that you don't see no matter what [you wear]." (male, aged 25)

These informants evoke a cultural understanding of the deviant meaning of tattoos still present despite the popularity of tattooing. They do not reject or resist this cultural order but actually subscribe to it and therefore adopt a more contextual representation of their selves. We believe this a fundamental difference from the findings reported by for example Goulding and Follett (2002) where informants interpret themselves as being in opposition to the mainstream and therefore achieves self-identity by being in opposition and being in the minority. The informants in our study consider themselves as part of mainstream culture and therefore acknowledge the social sanctioning that might occur. The positioning of the tattoo on the body in places that can easily be hidden is therefore not only a matter of the tattoo being intimate but is also instrumental in relation to self expression. The reflexivity about tattoo placement, and the interpretation of its significance is an example of consuming as classification. However, it is classification performed from a different perspective compared with consumers who define themselves as members of a sub-culture.

Meanings?

One fundamental question related to tattooing concerns the meaning of the imagery. For many fashion tattooees, however,

having a tattoo is primarily a matter of adornment of the body. As one of our informant noted earlier, the actual choice of symbol is more an unarticulated expression of personal aesthetic preference rather than searching for specific symbols which are expressive of, or shared with, perceived personal traits. The following quote illustrates how the meaning of the tattoo is subordinate to its aesthetic qualities.

R: "It's a kind of band around the arm. You can see it if you like? It's just very ordinary.

I: Ok ... it's a tribal...

R: Yes, there is no deeper meaning in it, not that I know of. It was just a motif that I liked.

I: How important was the motif for you?

R: Nothing other than it had to be nice. Other than that it's not important." (male, aged 28)

The informant does not attempt to justify the choice of motif in terms of elaborate explanations of the symbolism of his tattoo. We consider this as an expression of the role the tattoo plays in a general bodily beautification also noted by Goulding and Follett (2002). The lack of interest in the motif's symbolism is furthermore reported by Sanders' (1988) tattooee informants who generally made reference to aesthetic criteria.

TATTOOS AND CONSUMPTION PRACTICES

In the following we relate our findings as well as previous research to Holt's (1995) typology of consumption practices: consuming as integration, experience, classification, and play. Holt's (1995) classification of consumption practices is based on the principle that consumption objects are consumed by different groups of consumers in a variety of ways. In outlining a typology of consumption practices, Holt identifies four metaphors that can explain various forms of consumption. First, consumption can be categorized by examining the structure underlying the action, i.e. whether consuming primarily is focused on the object per se or on interactions with other people where the object becomes the important resource. Second, the purpose of consumption can be distinguished as whether or not the act is an end in itself or a means to some other end. By combining these two dimensions, the four metaphors 'consuming as experience', 'consuming as play', 'consuming as integration', and 'consuming as classification' can be identified.

Consuming as Integration: Globalization of Common Individual Differences

In the realm of individual identity articulation we are witnessing a kind of hyper differentiation in which the market system is constructing new stages on which to express identity. Tattooing can be viewed as such an extension of the areas in which identity can be expressed. We compare this to Wilk's (1995) notion of structures of common difference. Wilk argues that in a globalized world, being able to express cultural difference is valorized in the global cultural economy. This does not mean that a homogenization is not taking place. However, what are homogenizing are the stages at which we can express our difference. Wilk (ibid.) highlights areas such as the national flag, food culture, and in the case of his study of Belize, beauty pageants. Essentially, he argues that in the global cultural economy you can (and are indeed encouraged to) express difference. These differences however, are more easily recognized by the Other if it occurs through similar institutions. The global structures therefore are arenas through which cultures can express difference.

Although we acknowledge the danger inherent in transferring a macro-sociological/anthropological conceptual framework of globalization to the individual level, we nevertheless find the concept intriguing in explaining the emergence of the fashion tattoo. The fashion tattoo—and other forms of body modification—which primarily is performed to beautify the body could be considered as a new structure through which to articulate individual difference. The very fact that the tattoo practice has become a mass phenomenon indicates that it has been instituted as a commonly acknowledged means through which to express identity—an addition to other instituted structures of identity expression such as cars, houses, clothing, and grooming. The purpose of utilizing the structure, and indeed which kind of imagery to fill it with, can have a variety of motivations which are primarily rooted in the discourse. The practice of tattooing can vary from identity discourses that revolve around the logic of expressing individual authenticity to one which revolves around a logic of collective belonging to global consumer culture (Kjeldgaard 2003). Nevertheless tattooing is a commonly acknowledged means through which to express identity. When tattoos are consumed for these reasons, we interpret this as an account of consuming as integration.

Consuming as Experience: Meanings?

As we discussed in the data analysis, the imagery chosen by tattooees seems to lack in signification in many cases. There is simply no signified attached to the signs written on the bodies. We interpret this as a matter of consuming as experience since the act of getting the tattoo is an end in itself and where the individual consumer is primarily engaged with the object. This appears to be a common characteristic among fashion tattooees and it fits well with theorists who suggest that postmodern fashion does not refer to anything but itself (Sweetman 2000). The meaning, as we interpret the findings, resides in the very act of getting the tattoo—an urge to participate in this newfound structure of utilizing the body in a radical way (yet safe due to the mass aspect) for the construction of style. The radicalness emerges in the informants' elaborate narratives of having the tattoo made—the pain and the patience involved (Sanders 1989; Sweetman 2000). The signified of the tattoo in the cases of our informants therefore resides in the experience itself, one which implies danger and transgression. In a sense, all tattoos refer to the experience of transgression. The transgression involves two things. The historical connection to 'dangerous' and 'exotic' subcultures makes the act of tattooing a transgression. The other transgression involves the act of permanently altering one's body. The nature of the newly instituted practice of tattooing is hence one of transgression. The fashion tattoo, however, means that it involves taking a risk without going all the way. Many informants expressed anxiety about 'getting hooked' and suddenly wanting to have more tattoos made which they did not find desirable (cf. Vail 1999).

Consuming as Classification: The Tattoo Fashion

Tattoos have traditionally been considered as anti-fashion among cultural studies theorists due to its inscription in spectacular and oftentimes deviant subcultures in which only artisan capitalist market system operate (Hebdige 1979). It is indeed somewhat paradoxical, however, to discuss tattoos in terms of fashion since any permanent body modification is as much anti-fashion as it gets (Sweetman 2000). On the other hand, Craik (1994) argues that improved techniques of tattoo removal have alleviated some of the stigma associated with tattooing and hence paved the way for tattooing to become high fashion. But for heavily tattooed people whose integrating practices are directed towards achieving individuality through what they themselves acknowledge as deviant

behavior, it is still likely that tattooing is considered as anti-fashion, non-mainstream and in opposition to the 'normal' society. This cultural meaning of the tattoo is still part of practice for some of our fashion tattooees, and hence it constitutes a classifying practice in which the structure of action is interpersonal and the object engagement is instrumental. However, they work strategically with this cultural classification system in that they have a contextual strategy for self-representation. As was noted earlier, the tattoo is not consumed for its deviant qualities—indeed our informants seem to accept the mainstream judgment of the tattoo—but for personal beautification. They work with and hence reproduce existing classificatory systems through their contextual self-representations. However, with the development of the popular fashion tattoo, new ways of classification also take place, as when some of our informants discuss tattoos in an art/fashion classificatory system.

As opposed to other types of adornment—whether anti-fashion or fashion—the tattoo, however, lacks the fundamental quality of interchangeability due to its permanency. Hence, the consumer is stuck with the choice of imagery which some consumers also seem to be aware of (choosing personalized motifs). However, the difference remains that the consumer is stuck with his/her final consumption and fashion choice and hence become a 'sign of the time'. Fashion obsolescence, however, not only generates the need to craft individual tattoos but also for informants to reflexively personalize the meaning of the tattoo. There is, perhaps, a more intense incorporation of the tattoo into one's self-definition than with many other consumer objects, partly because the image has become embodied, but also because the image may become out of fashion or indeed redesigned by the organization behind (cf. the example of the Sepultura logo).

Consuming as Play

In our study we did not come across instances of the practice of play—except when tattoos themselves become part of sociality. Heavily tattooed people who define themselves as members of the tattoo subculture generally feel an immediate social bond to other people with tattoos. Whether this constitutes the practice of play is arguable. However, institutionalized events such as tattoo and body modification conventions exhibit exactly the combination of autotelic object involvement and interpersonal structures of action. The subculture of body modification is also to some extent about the practice of play as it is about integration.

DISCUSSION: IMPLICATIONS FOR CONSUMER RESEARCH

By relating consumers' motivations and practices for acquiring a fashion tattoo to the typology of consumption practices we can conclude that prior research on tattoo consumption has primarily been concerned with consuming as 'classification'. This study on the other hand incorporates the perspectives of consuming as 'experience' and 'integration'. Furthermore, we also find that tattoo consumption is a practice of classification. However, it is a different type of classification since the classifiers (tattooees) do not themselves consider their tattoo consumption as a sign of sub-cultural affiliation. The study reported in this paper positions itself in consumer research in relation to a number of areas. First of all, it studies the consumption of tattooing in a fashion perspective and as a mass phenomenon rather than as a marginal, sub-cultural and socially disvalued activity (cf. Patterson and Elliot 2004; Sanders 1988; Velliquette and Murray 1999). The tattooees interviewed for this study are not highly involved tattoo consumers but are rather using this kind of body modification as a supplementary form of adornment and for this reason as a supplementary aspect of identity expression. We believe that our results point to other aspects of

tattoo consumption than the approaches mentioned before which have the tattoos themselves as a focus. Our study therefore seeks to situate the consumption of tattooing in the wider life world of consumers and thus provides insights into other practices of tattoo consumption (Holt 1995; Holt 1997). By relating fashion tattooees' motivations for getting a tattoo, and the meanings associated with it, to existing consumption theory, we provide an additional understanding for the various reasons why people partake in this consumption.

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ROUNDTABLE

Concepts, Concept Development, and Consumer Research

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ABSTRACT

Concepts serve critical functions in science. Indeed, the advancement of human knowledge relies on concepts, both for their descriptive powers and for their role as the building-blocks of theory. Concept development, therefore, plays a similarly critical function in science. Consumer research, however, suffers from a conceptual immaturity—there is a lack of philosophical discussion of concepts in the consumer research literature, and concept development has largely been neglected by consumer researchers. The purpose of this roundtable, therefore, is to provide a forum for consumer researchers to explore concepts and concept development, and their implications for consumer research.

CONCEPTS AND SCIENCE

Science could not exist without concepts, for it is the advancement of all human knowledge—Knowledge, perhaps—which is considered the goal of science, and concepts are the basic unit of human knowledge. Any and all science, therefore, depends on its concepts.

Accordingly, scientists have an enormous stake vested in concepts. First, they are interested in concepts for their descriptive powers. Concepts allow scientists to describe the world; they are the link between data and abstraction. In describing the world with concepts, scientists advance Knowledge—they develop concepts which become public entities and which are adopted by scientists in their fields and in other fields.

Second, scientists are interested in the use of concepts for explaining and understanding phenomena. They form systematic linkages between and among concepts, resulting in formal theoretical structures. Scientists also advance Knowledge, therefore, by using concepts as the building-blocks of theories.

CONCEPT DEVELOPMENT AND SCIENCE

It follows, therefore, that when concepts are undeveloped, their functions in science are severely limited. First, their contribution to the advancement of Knowledge, with respect to their descriptive powers, is minimal. The manner in which scientists understand the world becomes a source of difficulty when the meanings of concepts are diverse or when their referents are specified poorly.

Second, the role of concepts as the building-blocks of theories (and consequently their contribution to the advancement of Knowledge) is reduced, if not altogether erased. The value of a theory is derived from the extent to which it connects fruitfully with the world, and concepts are the means, and the only means, of establishing such connections.

Concept development, therefore, also serves a key function in science. Accordingly, scientists, as the agents of science, must be aware of the development of the concepts with which they work, and, additionally, must embrace concept development as a research goal in itself, and as part of theory-building exercises.

CONCEPTS AND CONCEPT DEVELOPMENT IN CONSUMER RESEARCH

In 1978, when consumer research was still in its infancy, Jacoby voiced concern in his 'state of the art' review over its conceptual immaturity. He wrote that. . .

[e]ven in those instances where consumer researchers seem to be sincerely interested in conducting research based on a firm conceptual foundation, they sometimes manage to misplace their concepts when it gets down to the nitty gritty. . . the consumer behaviour literature contains numerous examples of our inability to have our measures of concepts correspond to these concepts (p. 88).

It is more than twenty years later, however, and consumer research still appears to be suffering from a conceptual immaturity.

I suggest that this conceptual immaturity reflects first a conspicuous lack of philosophical discussion of concepts in the consumer research literature. Indeed, despite the on-going 'quantitative/qualitative' debate which has improved the philosophical grounding of consumer research dramatically, consumer researchers remain relatively ignorant of the philosophical dimensions of concepts.

And second, the conceptual immaturity in consumer research emphasizes that concept development has largely been neglected by consumer researchers, usurped perhaps by scale construction, statistical techniques, and other measurement and interpretation concerns. Two notable exceptions are Fournier and Mick, who devoted a research project to the development of the concept of satisfaction—not an odd thing, really, except that the research was published in 1999, and the concept of satisfaction has been central to the discipline of marketing since its inception.

The lack of philosophical discussion of concepts in the consumer research literature and the neglect of concept development among consumer researchers points to the basic need for a greater understanding of concepts and concept development. The purpose of this roundtable, therefore, was to provide a forum for consumer researchers to explore concepts and concept development, and their implications for consumer research. Topics included:

- concepts and science;
- concepts, epistemology, and knowledge;
- different philosophies of concepts (for example: entity philosophies of concepts, linguistics philosophies of concepts, or mental philosophies of concepts);
- concepts and constructs;
- concept development and science; and
- different approaches to concept development (for example: Wilsonian approaches to concept development, quantitative approaches to concept development, or literature-based approaches to concept development).

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SPECIAL SESSION SUMMARY

Simple Payments and Complex Rewards: Consumers' Preference for Complexity in Payment versus Reward Schedules

Tom Meyvis, New York University

SESSION OVERVIEW

Marketers can choose from many ways in which to frame the costs and benefits that follow from consumption. The services industry in particular has recently seen a proliferation of both payment and reward plans. These plans can differ widely in terms of their complexity. Payment schedules range from simple flat rates to per-unit fees and 2 part tariffs, whereas rewards programs range from single-medium plans to multi-medium plans and from simple fungible plans to complex plans in which only specific levels of points can be exchanged for rewards. The three papers reported here examine the effects of varying types of complexity for both payment and reward plans. Together, they indicate that consumers have a strong preference for simplicity in payment plans, but sometimes prefer complexity to simplicity when it comes to reward schedules.

The paper by Meyvis and Xie compares consumers' preference for simple flat rates versus more complex per-unit pricing. Whereas previous research has documented a preference in favor of the simple flat rates, these studies show that this preference is magnified in a dynamic setting: consumers are less likely to switch from a flat rate to an equivalent linear rate than they are to switch from a linear rate to an equivalent flat rate. The added dynamic advantage for flat rates seems to be due to asymmetries in loss aversion, not to asymmetries in the adjustment of usage estimates. Whereas the first paper examines different ways to formulate the cost incurred with consumption, the remaining two papers focus on ways to formulate the benefits/rewards accrued with consumption.

While simplicity is preferred on the cost-side, it is not always optimal for formulating rewards. The paper by Soman, Shi, and Li demonstrates that adding additional intermediate stages (e.g., points to be exchanged for vouchers) to reward plans can increase consumers' preference for these plans. Although the complexity of the plan increases, the intermediate stages may serve as subgoals that can make final rewards seem more achievable and enhance consumers' motivation.

Finally, in the paper by Nunes and Drèze, the complexity of the reward plans is changed by varying the fungibility of the accrued points. As the number of reward levels decreases, the point become less fungible and harder to redeem. However, although a perfectly fungible points program is the least complex plan, it does not maximize consumers' loyalty as spending becomes too easy and the rewards no longer serve as meaningful goals.

By bringing together research on both payment and reward schedules, we aim to highlight the differences as well as the similarities in consumers' reactions to the properties of these schedules. Pricing plans and reward programs share similar characteristics and can vary along the same dimensions, one of which being the degree of complexity. Just as payment plans can be flat or usage-based, reward schedules can also vary in their degree of contingency. Just as reward schedules can incorporate different numbers of mediums, payment plans can include mediums, such as the requirement to purchase points that can later be used to acquire services.

“Switching between Flat and Linear Pricing Schedules: A Dynamic Advantage for Flat Rates”

Tom Meyvis, New York University

Jinhong Xie, University of Florida

Many services offer consumers the option to either pay for each unit they consume (per-unit pricing) or to simply pay one flat, fixed fee instead. Examples include cell phone calling plans, public transportation, and health clubs. Several studies have documented a flat rate bias: consumers often choose flat rates when they would have been better off by paying per unit (Kridel, Lehman, and Weisman 1993, Nunes 2000). A number of factors may contribute to this exaggerated flat rate preference, including reduced complexity, increased convenience, increased enjoyment of the service, reduced uncertainty, self-control goals, and overestimation of usage. The objective of this project is to examine whether, aside from the documented static preference for flat rates over linear rates, there may also be a dynamic preference for flat rates. More specifically, even when flat and linear rates are equally attractive, consumers may find it easier to switch from the linear rate to the flat rate than to switch from the flat rate to the linear rate.

In our first experiment, we created three different between-subjects conditions. In the *control* condition, subjects were indifferent between an attractive flat rate and a comparably attractive linear rate. In the *switch-from-linear* condition, subjects were first presented with the attractive linear rate from the control condition and an overpriced flat rate. Subjects naturally preferred the linear rate. When this flat rate was then gradually reduced to the attractive rate from the control condition, the majority of the subjects switched to the flat rate. Finally, in the *switch-from-flat* condition, subjects were first presented with the attractive flat rate from the control condition and an overpriced linear rate. Subjects naturally preferred the flat rate. When the linear rate was then gradually reduced to the attractive linear rate from the control condition, only a minority of subjects switched.

There are a number of mechanisms that can explain the observed disproportionate “stickiness” of flat rates. First, consumers who currently have a flat rate may forget to adjust their usage downward when considering switching to a linear rate. This would make the linear rate appear overly expensive and thus discourage the switch. In contrast, when consumers consider switching to a flat rate, the increase in usage is very salient, as the flat rate in essence implies “use as much as you want.” Second, consumers who consider switching to a linear rate may adjust their usage, but anchor on their current flat rate usage and adjust insufficiently (e.g., Mussweiler and Strack 2001), again making the linear rate appear overly expensive. Finally, consumers may sufficiently adjust their estimates of service usage, but feel worse about reducing their usage of the service (when switching to a linear rate) than they do about giving up money (when switching to a flat rate). This last explanation assumes that consumers exhibit a greater loss aversion bias for service usage than they do for money. This would be consistent with prior findings from the promotion literature that consumers are more reluctant to trade down (sacrifice quality for price) than to trade up (sacrifice price for quality) (e.g., Hardie, Johnson, and Fader 1993).

Whereas the first experiment demonstrated the disproportionate stickiness of flat versus linear rates, the subsequent experiments tried to distinguish between the three alternative accounts of the effect. The results of the second experiment demonstrated that the effect was magnified when participants were asked to explicitly estimate how much their usage of the service would change if they would switch to the new rate. This is inconsistent with the first explanation (i.e., consumers forget to adjust their usage downward when considering to switch to a flat rate), but consistent with both the second explanation (i.e., anchoring and insufficient adjustment) and the third explanation (asymmetric loss aversion for money vs. usage). In a third experiment, we observed that the effect persisted when the usage estimates for the different (randomly ordered) pricing plans were elicited before the experiment. Since this manipulation removed any systematic anchoring effects, these results ruled out the anchoring and insufficient adjustment account, but were consistent with the asymmetric loss aversion account. Finally, in the fourth experiment, we observed that the disproportionate "stickiness" of flat rates persisted even when the increase in spending when switching from a linear rate to a flat rate was made salient.

Together, these studies indicate that consumers are more likely to switch from a linear rate to an equivalent flat rate than they are from a flat rate to an equivalent linear rate. This dynamic advantage for flat rates seems to be driven by a greater loss aversion for service usage than money. Furthermore, this asymmetric loss aversion is not the result of a greater salience for reducing usage than for increasing expenses, but instead seems to result from fundamental differences in the valuation of decreasing benefits versus increasing expenses.

"Multi-Medium Reward Programs"

Dilip Soman, University of Toronto

Mengze Shi, University of Toronto

Xiuping Li, University of Toronto

Consumer reward programs offer a reward for repeatedly purchasing from the same marketer. In a typical reward program, consumers earn a number of points for every purchase they make (Neslin 2002). More recently, Hsee et al. (2003) demonstrated the mediating role of the reward points, which they conceptualized as "medium," in the relationship between an action and a final reward (outcome). They found that in choice situations where the effort and outcome were held constant, consumer choice was systematically influenced by the presence and quality of the medium, both of which should be irrelevant normatively. In another recent paper, Soman and Shi (2003) show that in goal oriented situations, the temporal path of task completion influences the perceived progress towards the goal, and hence consumer motivation and choice.

Drawing on the above findings, we argue that "points" serve as a metering device for consumers to track and evaluate progress in a loyalty program. The current paper contributes to the literature on loyalty programs by investigating the impact of complexity. Here we use complexity to reflect the number of mediums in a reward program. For instance, a multi-medium reward program such as "Expenses:Points:Vouchers:Rewards" will be regarded as more complex than a single medium program like "Expenses:Points:Rewards."

More importantly, we suggest that a complex reward program actually enhances the perception of progress by breaking down a seemingly large goal (N points) into a number of smaller, more attainable sub-goals (Locke and Latham 1990). As a result, we expect that consumers in a complex reward program will find it more attractive, resulting in increased purchases of the brand

offering it. In a dynamic decision situation, we predict that consumers in a complex program tend to be more "obsessed" with collecting points, and hence tend to achieve their final goal earlier.

We first propose an analytical model that captures consumers' evaluation of points in a loyalty program. Assuming that the value consumers derive from the reward is independent of the value gained from perceived progress, we formulate the perceived value of progress from x reward points as follows:

$$F(x, Ivoucher) = [\eta(x) + Ivoucher \rho(x_v)], V_R$$

where $Ivoucher=1$ for reward programs with a voucher; 0 for programs without vouchers; $\eta(x)$ is the consumer's perceived cumulative progress when the reward program does not offer vouchers; $\rho(x_v)$ is a consumer's incremental valuation for x reward points due to the presence of vouchers, and x_v is the number of vouchers from x reward points. Finally, V_R denotes a consumer's evaluation of reward R .

We will present the results from two studies comparing single-medium and multi-medium programs. In the first study, participants are asked to make a series of choices between two brands. This experiment is designed to test how participants' relative preference for two alternatives is impacted by (1) the presence of vouchers and (2) the number of points already accumulated, which is a within-subject factor.

We find that (1) the presence of vouchers increases the perceived value of progress from additional reward points. Consumers are more likely to shop at a store that has a complex program, rather than at the store that simply awards points for expenses; (2) the use of vouchers does not change the perceived value of progress from additional reward points when a consumer has not collected any vouchers yet or when a consumer can reach the goal within a new purchase. These results were successfully replicated in a follow-up between subjects experiment.

In our second study, we put participants in a real dynamic decision making scenario. Instead of choosing between two brands, the participants need to decide whether to work hard on a main task to earn some extra money or to do an enjoyable (distracting) task without extra payment. The main task is a proof reading task, in which participants need to finish 50 pages of proof reading. There are two between subject factors: (1) the complexity (voucher vs. no voucher) of a reward program; (2) motivation level (high vs. low). The motivation level is manipulated by offering different incentives (low=\$3 vs. high=\$8). We predict that when the incentive is low, participants in complex reward programs will work harder on the boring proof reading task than participants in the simple reward program. However, since we argue that the vouchers influence consumers by providing extra motivational value, the difference between complex and simple reward programs should be eliminated in the high motivation condition.

"Too Close to Quit: The Effect of Reward Fungibility on Consumer Purchase Intentions"

Joseph C. Nunes, University of Southern California

Xavier Drèze, University of Pennsylvania

The increasing popularity of loyalty programs has given rise to dozens, if not hundreds of *alternative currencies*, including frequent flier miles, hotel points and credit card rewards. Many of these mediums of exchange are uniform, divisible and storable on their own, and can be exchanged for particular goods and services of the firm's choosing, and that the consumer desires. While the ability for consumers to utilize these currencies in new ways is growing rapidly, the amounts that they can spend in any single

transaction and the products they can acquire are still severely limited and controlled almost entirely by the firm issuing the currency. In this sense, alternative currencies are unlike legal tender in that their use is constrained; in other words, these currencies are not perfectly *fungible*. Indeed, these alternative currencies are neither universally accepted nor can they be spent in any increment, thereby restricting the ways in which consumers can expend these assets.

We propose that this complexity, or lack of fungibility, allows the firm to influence strategically the marginal values of the alternative currency it issues, which affects consumers' motivation to acquire more of the currency, which in turn motivates purchase decisions and ultimately influences consumer loyalty. In other words, the effectiveness of reward programs depends on the number of rewards offered and the amount of the alternative currency required to redeem each reward, both of which are decided by the firm. Consider the following illustrative, yet somewhat artificial example. An individual has accumulated 30,000 frequent flier miles on an airline that offers only one reward, a free round-trip ticket for 25,000 miles. After cashing in 25,000 miles, she is left with 5,000 miles. At this point, another 3,000-mile flight would mean little as 20,000 more miles on the same airline, a non-trivial amount, are required before her inventory is useful and subsequent purchases are rewarded. Thus, the 5,000 miles already in her account are inherently worthless and wasted if she switches carriers permanently.

However, if the airline were to offer a free upgrade at 10,000 miles, this award may be tempting enough to secure this flyer's next purchase of a roundtrip ticket, particularly one from Boston to Los Angeles (5,200 miles). But if the airline offered rewards in exchange for 5,000 miles (the least complex and most fungible option mentioned), it would be easy enough for this consumer to expend her remaining miles such that her inventory might have no effect on her choice of carrier in the future. Therefore, the value of miles accrued and yet to be earned depends on the rewards offered and the amount of miles required to redeem the rewards; in other words, their fungibility. Rewards that require effort but seem attainable are motivating, while rewards acquired too easily appear gratuitous and are uninspiring.

The primary purpose of the present research is to improve our understanding of loyalty programs. More specifically, we examine how different reward schedules affect consumer goal setting and purchase decisions (i.e., loyalty). A fundamental premise underlying this research is that frequency program rewards serve as incentives or goals that motivate consumers to continue purchasing from a particular seller or supplier. We believe that consumer response to rewards offered by loyalty programs is a function the reward's value (how much the goal is valued), the number of rewards (sub-goals) offered, as well as the perceived difficulty associated with reaching the various rewards (goals). Simpler programs are typically more fungible (any amount can be exchanged for stock goods), while complex programs are typically less fungible (more disparate rewards levels and less uniform rewards).

In Study 1, we demonstrate how rewards levels can affect people's purchase behavior. We show that consumers closer to earning a reward (their goal) are perceived as more likely to make an additional purchase, even though the incremental purchase, while bringing them even closer to the goal, is not enough to reach it. In Study 2, we show that when consumers are far away from a big goal, we can increase their likelihood of purchase by increasing the fungibility of the reward system (i.e., inserting a sub-goal or smaller reward that appears more attainable). We also show that inserting

attainable rewards increases the marginal value of an alternative currency for those with no immediate exchange opportunities, but does not diminish the value for those holding a surplus and are closing in on a superior reward. In Study 3, we test the limits of the positive effect of fungibility on motivation and show that too much fungibility can actually be de-motivating. We also examine how goals affect effort differently depending on whether people are above or below a goal, and whether success in achieving one goal engenders complacency or further motivates the person towards achieving the goal a second time. While in Studies 1 through 3 we explore how consumers respond to choices that can move them closer to their goals, in Study 4, we look at actions that move consumers away from their goal rather than closer. We find that fungibility also affects consumers when their choices can move them away from a goal.

Taken together, these studies provide convergent evidence supporting the proposed notion that rewards can serve as goals, and that the value consumers ascribe to an alternative currency depends on their proximity towards achieving a goal. As such, this is the first research to test the effects of increasing and decreasing fungibility on both the valuation of an alternative currency and the continued patronage necessary to continue accruing the currency (i.e. loyalty). Theoretically, this work adds to the marketing literature by connecting the goal literature with the promotions literature and illustrating how loyalty programs that utilize rewards create extrinsic goals for consumers. We also advance the goal literature by exploring the effects of increasing and decreasing the number of goals, or in our words, increasing the fungibility of an alternative currency. We show how attainable goals can increase the marginal value of an alternative currency, which motivates consumers to act such that they accumulate more of the currency. However, we also show how too much fungibility (too many small goals) can decrease motivation and negate the effectiveness that larger more difficult rewards can have in stimulating loyalty.

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SPECIAL SESSION SUMMARY

Using Construal Level Theory to Uncover Cognitive Drivers of Decisions for the Future

Sucharita Chandran, Boston University
Manoj Thomas, New York University

SESSION OVERVIEW

Research on temporal effects in decision-making is a fertile area of investigation for both economists and psychologists. While economists focus on rational utility maximizing models of intertemporal choice, psychologists focus on the cognitive and affective processes by which individuals make time-related evaluations and choices (Loewenstein, Read and Baumeister, 2003). Recently there has been a great deal of interest in formulating richer process models that derive value from both disciplines. In this endeavor, the psychological processes underlying such intertemporal choices have received much research attention (e.g. Liberman & Trope, 1998; Metcalfe & Mischel, 1999; Ebert, 2001; Frederick, Loewenstein and O'Donoghue, 2002). In this context, a great deal of interest is focused on *Construal Level Theory* (CLT) by Nira Liberman and Yaacov Trope which proposes a comprehensive process model that accounts for a wide variety of temporal effects including intertemporal preference reversals which cannot be explained by many theories of intertemporal choice. CLT posits that the greater the temporal distance, the more likely it is that events are represented by a few central and abstract features (high-level construals) rather than by concrete and incidental details of the events (low-level construals). Thus temporal distance changes the way people mentally represent events and this in turn changes their judgments and choices for future events (Liberman & Trope, 2000; Trope and Liberman, 2003). In this session, the three papers key in not only on the substantive issue of intertemporal choice, but are also remarkably well aligned in their theoretical underpinnings. Each of the papers draws from Construal Level Theory in building a process model for the findings.

The first paper by Ebert demonstrates individuals' propensity for myopic thinking about short-term costs versus long-term benefits. The second paper by Malkoc and Zauberger demonstrates shifts in time preferences where individuals value the near future more in deferral decisions than in decisions to expedite outcomes/actions. The third paper by Thomas, Chandran and Trope explores differences in the structure of discount and price cognitions between purchases in the near future and those in the distant future. Taken together the three papers examine temporal effects in choice and judgment across a variety of contexts and dependent measures. The scenarios investigated range over decisions on social interactions such as dating, choosing lotteries, choosing concert tickets, and buying products such as coffeemakers, software and memory sticks. Further, each paper uses CLT to understand a unique and distinct aspect of time related decisions. Together, these papers underscore the importance of understanding psychological mechanisms that drive such time related decisions.

CONTRIBUTIONS

Three papers were presented that document a better understanding of time related decision-making. This is of particular importance as the field of intertemporal choice is increasingly adopting an interdisciplinary approach to our understanding of time and decisions. The increased focus on psychological factors and processes has practical implications for designing products and services that incorporate consumers' time related preferences. Each paper explored psychological mechanisms derived from CLT to

address a separate and distinct aspect of time related judgments. In each case, the results demonstrate the limitations of traditional models of intertemporal choice in accounting for the effects. The paper by Ebert looks at the interaction of social distance (making decisions for others versus for oneself) and temporal distance (costs are in the near future while benefits are in the distant future) in decision domains such as work and social interaction and finds that people place more importance on short-term costs for themselves than they do for others (such as having to ask someone on a date in the pursuit of long-term romantic happiness). Ebert suggests this self-other difference may be explained by self-other differences in the concreteness of representations and consequently their affective intensity and may explain why people sometimes make normatively inferior choices for themselves relative to others. The paper by Malkoc and Zauberger also looks at the role played by the concreteness of representations of decisions to defer vs. expedite actions. They propose that when faced with deferral decisions (vs. decisions to expedite) people's mental representations are relatively more concrete. This increased concreteness increases the value of the near future in deferral decisions both for monetary outcomes like participating in a lottery and for non-monetary events like attending a concert. Finally, the paper by Thomas, Chandran and Trope proposes that the concrete and contextually rich representations of the near future drive people to overweigh incidental features relating to price promotions, while the more abstract and structured perspective taken in the distant future leads individuals to focus on notions of overall value over contextual details of the price promotion. They test this notion across a variety of process measures for purchase decisions involving coffeemakers, memory sticks and software. Each of the papers thus, draws from CLT to derive an integrative theoretical framework in understanding how people make time related decisions.

The contribution of the session was greatly enhanced by the presence of Yaacov Trope as the discussion leader who as an acknowledged expert in the area integrated findings, suggested new research directions in the area and lead the discussion from the audience in sketching a larger theoretical framework in which to understand intertemporal choice.

"Self-Sympathy in the Short-Term: Self-Other Differences in Long-Term Benefits and Short-Term Costs"

Jane E. J. Ebert, University of Minnesota

People frequently appear shortsighted in their behaviors. They choose unhealthy foods and skip a session at the gym despite resolutions to eat healthily and exercise regularly. They procrastinate at work, invest insufficiently for retirement and fail to take preventative health measures (Frederick, Loewenstein, & O'Donoghue, 2002). Such myopic behavior suggests a tendency for people to place more value on short-term than on long-term desires. However, while people are frequently myopic in their own decisions, it appears they may be more far-sighted and patient when making decisions on behalf of others. In three studies I looked at people's trade-offs of long-term benefits and short-term costs in a variety of decision situations either for themselves or for others. People were less myopic in their decisions for others than they were in the same or similar decisions for themselves. This finding may be

due in part to different construals of long-term benefits and short-term costs, consistent with temporal construal theory (Liberman and Trope, 1998). The reasons for myopia in consumers' lives are only partially understood. We know that immediate concerns or desires (e.g., eating a cheeseburger) can exercise a uniquely powerful hold on people's attention (Mischel & Baker, 1975) and are especially potent when visceral needs are heightened (e.g., the person is hungry). In addition, researchers have suggested that the distant future lacks motivational force because it is perceived as remote, pallid, and uncertain, relative to a more arousing, vivid and predictable near future (Rae, 1834; Böhm-Bawerk, 1889). Consistent with this, Ekman and Lundberg (1971) found distant future events were rated lower in felt affect than were near future events. More recently, in proposing and supporting temporal construal theory, Liberman and Trope (1998) have found that temporally distant events are construed abstractly and at a more general level while more proximal events are construed in more concrete and specific ways. Such differences in construal may correspond to differences in affect, as imagining events in more concrete and specific detail results in greater affect (Williams et al, 1996).

Psychological differences like these between proximal and distal future events may help account for the myopic behaviors people show. For example, people may give disproportionate weight to vivid, concrete and affectively arousing short-term costs (e.g., exerting the effort to exercise) relative to pallid and abstract longer-term benefits (e.g., good health in old age). This effect may be particularly pronounced for people own decisions compared to their decisions for other people. Trope and Liberman (2003) have suggested that construals may differ for forms of psychological distance other than time, such as the self versus others. So construals of events may be more concrete, and perhaps more affective in nature, when relevant to the self than when relevant to others. Similarly, psychological research on risk suggests that people's judgments and decisions for themselves may depend more on feelings relative to their judgments and decisions for others (Hsee and Weber, 1997). If judgments of concrete short-term costs are based more on feelings than are the judgments of short-term costs when made for other people, we might expect to see people weight short-term costs more heavily in decisions for themselves than for other people. Whereas, we might expect to see no difference in the weights people place on more abstract long-term benefits for themselves versus others.

This is exactly what I found in three experiments. In experiment 1, subjects were asked to describe a real situation in their lives, namely something they wanted to do that would benefit them in the long-term but which they were currently reluctant or hesitant to do because of associated costs or difficulties in the short-term. They then rated the importance of the long-term benefits and short-term costs. Half the subjects produced a description and made the ratings for themselves, while the other half did this for a friend. Those making the ratings for themselves showed more myopia in their judgments of importance than did those making the ratings for their friends. This effect was driven by differences in the importance of the short-term costs. While self and friend ratings did not differ on the importance of long-term benefits, people's ratings of the importance of short-term costs for themselves were significantly larger than their ratings for their friends. Such "self-sympathy" was found again in experiment 2. This experiment was very similar to experiment 1, except that, instead of subjects producing idiosyncratic situations that might vary in multiple ways, all subjects made ratings of the same set of 4 situations. The situations were all shown in pretests to be relevant to undergraduates, e.g., asking someone out on a date (short-term cost) to become involved in a relationship (longer-term benefit) or attending a class (short-term cost) to obtain

a better job in the future (longer-term benefit). Once again, people's ratings of the importance of short-term costs for themselves were significantly larger than their ratings for their friends.

In experiment 3, I replicated this self-sympathy finding and demonstrated a role of temporal construal theory in this effect. In this "yoked" experiment subjects came to the lab with a friend, and both made ratings of the benefits and costs of the same real situation: a currently relevant situation for the subject described and submitted by him or her at an earlier date. Coders blind to both the hypotheses and subjects' ratings coded the descriptions of the short-term costs. Self and friend ratings of the importance of short-term costs differed only for those situations where the cost descriptions they read were relatively concrete and specific, rather than more abstract and general, consistent with the idea that self-other differences on the importance of short-term costs reflects a self-other difference in construal for events. This experiment also ruled out other possible explanations for this effect, such as self-other differences in expectations.

"Expediting versus Deferring Utility: The Effect of Temporal Perspective on Sensitivity to Prospective Duration"

*Selin Malkoc, University of North Carolina at Chapel Hill
Gal Zauberman, University of North Carolina at Chapel Hill*

When considering how consumers prefer to experience events, consumers often face a tradeoff between level and the timing of consumption. For example, consumers who purchase a book can receive it in a day for \$15 shipping fee or wait 7-10 days and pay no shipping charges. How sensitive are consumers to the duration on which this decision takes place? Will sensitivity to duration depend on whether consumers' decision is to expedite future consumption or to postpone current consumption? Research on intertemporal choice has repeatedly documented declining discount rates over time, commonly interpreted as hyperbolic discounting (e.g., Thaler, 1981). In addition, Loewenstein (1988) found that people display greater time discounting when they delay an outcome than when they expedite that outcome over the same time period. In this work, we focus on how people incorporate time horizon into their decisions and examine its interactive effect with temporal framing. We propose that when faced with a deferral decision, people are anchored to the near future, leading to more concrete mental representations (Trope and Liberman, 1998; 2003). As a result of this increased concreteness, individuals' value of the near future more in deferral decisions than in decisions to expedite. This phenomenon is manifested by more pronounced hyperbolic discounting in deferral as compared to expedite decisions.

We explore these effects in five experiments with both monetary and non-monetary outcomes. In our experiments we use a temporal perspective manipulation (expedite or defer a focal event) and a manipulation of time horizon on which the decision takes place (near future vs. distant future). For space considerations, we focus on the implied discount rate measure. In the first experiment (N=149) participants were presented with a lottery prize scenario. Framing (defer vs. expedite) and prize amount (\$15, \$250, \$3000) were manipulated between participants and time horizon was treated within-participants (3 months, 1 year, and 3 year). Replicating previous findings, we find a main effect for temporal framing, prize amount, and time horizon. More importantly, we find the predicted two-way interaction between time horizon and temporal framing ($F(2, 286)=40.36, p<.0001$), indicating an increased value associated with near future in the deferral versus expedite decision. To ensure that these results were not an artifact of the experimental design, we replicated the results with a second experiment in which time horizon was manipulated between participants.

To further test the generality of effect, we introduced non-monetary outcomes. In the third experiment (N=98), participants considered having purchased a concert ticket for \$80 for the 75th row of a local arena with 150 total rows. We manipulated temporal framing between-participants by informing participants about an option to either defer or expedite the concert date. Time horizon was a within-participants factor (3 months vs. 1 year). These results replicated previous findings with two significant main effects for temporal framing and for time horizon. In addition, we replicated the significant two-way interaction between time horizon and temporal framing ($F(1, 96)=47.160, p<.0001$), indicating that the effect of interest is not limited to monetary scenarios.

To test whether our results were generalizable across non-monetary response units, we have ran a fourth experiment (N=95) where participants considered having reserved a 5-day vacation and were informed by their travel agent that they either needed to defer or expedite their vacation (between participants). Participants were asked to indicate the number of days they would require (give up) to delay (expedite) the vacation time horizon was manipulated as a within participants factor (4 weeks vs. 10 weeks). Our analyses produced a significant temporal framing by time horizon interaction ($F(1, 93)=7.583, p<.001$), indicating that the effect of interest is not limited to monetary response units.

The last experiment (N=222) directly tested the role of perceived concreteness using a similar design to that of experiment 1, but asking participants to indicate the level of concreteness of their future plans upon the completion of the experiment. The stimulus was a \$100 gift certificate and time horizon was manipulated within-participants at two levels (3 months vs. 1 year). Once again, the predicted two-way interaction was obtained ($F(1, 205) = 11.184, p=.001$). More importantly, as predicted, we found a two-way interaction between frame and concreteness ($F(1, 205) = 4.698, p=.031$), indicating that deferral decisions lead to more concrete mental representations. Moreover, the predicted three-way interaction of time, frame and concreteness ($F(1, 205)=4.772, p=.03$) was also obtained. These results show that the frame by time horizon interaction is moderated by the level of concreteness of mental representation.

In conclusion, we go beyond existing findings and demonstrate a systematic and robust interactive effect of time horizon and temporal framing. Specifically, shifts in time preferences are significantly more pronounced in deferral decisions than in decisions to expedite. This differential sensitivity is moderated by the different levels of concreteness of representations between the two decision frames.

“Distance Lends Structure to the View: Temporal Construal and Value Perceptions”

Manoj Thomas, New York University

Sucharita Chandran, Boston University

Yaacov Trope, New York University

While there is a large body of work that examines temporal effects on consumer behavior, there is little work that looks at how temporal distance impacts the structure of price cognitions. Price evaluations are seldom based on a single piece of information. Cognitions about the product, the gross price, available discounts and promotions etc. underlie consumers' response to prices. In this paper we look at the effect of immediate versus distant future purchases on the cognitive structure of discount and price evaluations and their impact on purchase intentions. Drawing on construal level theory, which suggests that representations of the distant future are relatively more schematic and coherent than those of the near future (Liberman, Sagristano and Trope, 2002), we propose

that for distant purchase decisions consumers form more coherent and structured evaluations of price and discount information, leading to more stable purchase intentions. For more immediate purchase decisions, price cognitions will be more fragmented and purchase intentions will therefore be more variable.

We test this hypothesis through four studies that employ the same manipulation of psychological distance whereby participants are asked to contemplate purchase of a product either in the near future (tomorrow) or in the distant future (this time, a year from now). In study 1 we assessed participants purchase intentions for a memory stick twice, once before discount information was displayed and once after presenting discount information. As expected, we found systematic differences in information processing across the two time-related purchase conditions. Participants assigned to the distant condition demonstrated stability in purchase intentions which did not change pre and post viewing of discount information although participants assigned to the near condition did change their purchase intentions after seeing the discount. Further, we observed that participants in the distant construal took into account only price evaluations, while near construal participants took into account both price and rebate evaluations while forming their final purchase intentions. Study 2 used a similar paradigm except that we used a coffeemaker as the stimulus and conducted the study on computers to examine the effect of temporal construal on response time. We replicated our earlier results of decision stability in the distant construal. Further, participants took significantly more time to make the post-discount judgment of purchase intention in the distant construal than in the near construal, while pre-discount response latencies were no different across time conditions. This suggests that their evaluation was more carefully considered and thoughtful.

In the third study we investigated whether such systematic differences in information processing extended to non-monetary aspects of promotions. Participants in this study, who saw a piece of software offered for purchase with a mail-in rebate, were told that the rebate redemption process was either painful/difficult or that it was painless/easy. We found that participants in the near (vs. distant) future purchase condition rated the price of the offer with the easy-to-redeem rebate more favorably and indicated a higher likelihood to buy the product. Further they placed a higher weight on ease of redemption of the rebate, while participants in the distant purchase condition placed a higher weight on overall need for the product. Finally, in order to gain greater insight into the thought process that individuals go through, we asked participants to list the most important factors while purchasing a product offered with a mail-in rebate, again either tomorrow or next year. We found that while the total number of thoughts across conditions was about the same, the structure of cognition was significantly different in two important ways. Participants in the near future (versus the distant future) condition, listed: i) significantly more thoughts pertaining to the rebate, ii) more categories of thoughts overall, suggesting that their thinking was more fragmented and also more influenced by contextual aspects of the decision environment.

Taken together these results demonstrate systematic differences in the structure of price and discount cognitions as a function of temporal construal. In the distant future: i) construal of prices and discounts are more structured, ii) Purchase intentions take more time to be constructed and finally iii) such evaluations are more stable across presentations of contextual and incidental information.

SPECIAL SESSION SUMMARY

Speed- and Online Dating: Insights into Preference Construction in Frequent, High Involvement, Personal Decisions

Itamar Simonson, Stanford University

SESSION OVERVIEW

A central question in research on decision making refers to the drivers and evolution of consumer preferences and the correspondence between actual consumer decisions and what consumers say and believe about the drivers of their decisions. This question will be examined in the proposed session in the context of a very personal and often rather important decision—choosing a date. Both speed dating events and online dating involve repeated choices and thus allow for a more dynamic perspective on decision making and the manner in which preferences evolve over time. Thus, the proposed session will provide new insights into preference construction from a more dynamic perspective than prior research. Furthermore, all three papers are based on field studies (e.g., speed dating events) and involve real dating decisions.

The first paper, by Frost and Ariely, focuses on the important topic of preference learning, which poses a challenge to consumer researchers because in most cases the learning process is slow and thus unsuitable for laboratory experiments. Frost and Ariely examine the ability of people to learn and update their preferences by learning from the prior successes and failures of their online dating decisions. The research is based on secondary data from a major online dating service as well as on a field experiment that is being conducted in collaboration with that online dating service. The dataset they rely on makes it possible to examine how dating preferences evolve over time. For example, Frost and Ariely examine what online daters look for in terms of physical features (attractiveness, body type, and age), soon after they joined the online dating service, and how their preferences changed over time. Also, in the study being conducted, they examine the impact of forcing participants to define their preferences more carefully on their online dating success rate.

The second paper, by Iyengar, Simonson, and Fisman, examines the relation between what people say is important to them when selecting a date and what actually drives their dating decisions in a speed-dating event. Previous research has shown that there is a significant gap between stated attribute importance and actual decisions, with the correlation between the two often quite low (e.g., Slovic and Lichtenstein, 1971), and various explanation for the discrepancy between stated and revealed attribute importance have been offered (e.g., Barlas 2003). Prior research has implicitly assumed that the relation between stated importance beliefs and actual attribute importance derived from choices people make (hereafter, revealed attribute importance) is rather stable over time. The present investigation examines whether the gap between stated attribute preference and revealed attribute importance fluctuates over time based on the two-way feedback between stated preferences and revealed preferences.

This research, based on a series of actual speed-dating events, generated important new insights regarding the relation between stated and revealed preferences. Furthermore, the research revealed a series of important differences, related to attribute observability and gender, with respect to the dynamic relations between stated and revealed preferences. Also, consistent with prior work by Iyengar and Lepper (2000), the findings indicate that the correlation between prior stated preferences and revealed preferences is higher when the speed dating event involves fewer decisions, though this

relation reverses after the event (i.e., the correlation between revealed preferences and stated preferences after the event is higher among those who had participated in speed dating events with more dates). Finally, a series of findings suggest that men and women recognize that their stated importance weights often differ from their actual attribute weights.

The third paper, by Raghunathan and Walker, further examines the drivers of judgments and preferences about dates, again in the context of speed dating. In particular, building on prior work regarding judgments that are based on “thin slices” (e.g., Ambady et al. 1993, 2000), they propose that nonverbal cues play a key role in evaluations of dates. Consistent with the research by Iyengar et al. (the second paper in this session), Raghunathan and Walker argue that the limited insight of men and women with respect to their own preferences makes them particularly susceptible to influence by less conscious, nonverbal aspects.

Study 1, which is currently being conducted in collaboration with a professional speed-dating organization, will involve two stages. In the first stage, participants will be videotaped as they are having a speed date with opposite-sex confederates. In the second stage, the videotaped dates will be edited and subsequently coded by groups of independent judges assigned to focus on different dimensions (such as personality, attractiveness, etc.). Among others, it is expected that the personality ratings of targets—which are known to correlate significantly with nonverbal cues (cf. Ambady 1993)—will be highly correlated with targets’ date-worthiness ratings. In the second study, we will assess whether targets who elicit “bad” ratings on the nonverbal dimension and “good” ratings on other dimensions (physical attractiveness, earning potential) are better off presenting the latter type of information to potential dates first (e.g., through email, telephone conversation, etc.) before meeting them face-to-face.

We believe that this session will be of much interest to a broad audience, not only because of the intrinsic interest of dating decisions, but because this unique decision category provides important insights into dynamic aspects of decision making in an area of great personal significance. Furthermore, because in such domains people may often be unaware of the drivers of their preferences and/or be unwilling to admit what drives their preferences, observing actual behavior in speed and online dating can provide valuable insights regarding the processes involved in preference construction.

“The Influence of Nonverbal Cues in Judgments of Dating Partners”

Rajagopal Raghunathan, University of Texas at Austin

Rebecca Walker, University of Texas at Austin

The objective of this research is to assess the relative weight men and women place on nonverbal cues versus other types of cues in assessing the dateworthiness of others they have met for a short (less than five minute) time. Evidence from thin-slice research (e.g., Ambady and Rosenthal, 1992, 1993; Walker and Raghunathan 2004)—a thin slice can be defined as “a brief excerpt of expressive [nonverbal] behavior sampled from the behavioral stream” (e.g., Ambady, Bernieri, and Richeson 2000, p. 203)—suggests that nonverbal cues will have a significant impact on judgments of

potential dates. However, there is cause to believe that judges may rely less on nonverbal cues in dating (versus other types of) contexts since the context of judging others as potential dates (as opposed to that of judging them as teachers or as salespeople) is, arguably, more involving. As a result, judges may explicitly attempt to weight nonverbal cues “appropriately” or to even discount them when judging potential dates, since giving importance to nonverbal cues may be seen as irrational or even inhuman. Further, previous relevant research has not revealed evidence for use of nonverbal cues in dating contexts; findings reveal, rather, that while men find “physical attractiveness” desirable, women find “earning potential” desirable (e.g., Davis 1990; Deaux and Hanna 1984).

In sum, it is unclear whether and to what extent we may expect nonverbal cues (versus other cues) to influence judgments of the dateworthiness of potential dates. Towards addressing this question, we conducted a study consisting of two stages. In the first stage, five men and five women at a speed dating party were videotaped as they were engaged in a conversation with opposite-sex confederates. After the targets completed their speed dates with the other party participants, we gathered data on how many of the opposite-sex participants wished to see these targets again. In the second stage, videotapes of these target dates were shown to undergraduate students participating in a study for extra credit. One set of the undergrads was exposed to the full three minute video of the targets, containing both verbal and nonverbal cues, and asked to rate the targets’ earning potential, how fun-loving they were, and their sincerity and commitment. A second set was asked to rate targets on their personalities on the basis of exposure to 30-second video clips with the sound removed. Silent clips were used to eliminate contextual and verbal cues were, thus forcing the judge to rely solely on nonverbal cues. On the basis of Ambady and Rosenthal’s (1993) findings, we expected these personality ratings to be significantly correlated with the target’s nonverbal cues, that is, we expected that targets with “good” nonverbal cues would elicit more positive personality ratings than those with “bad” nonverbal cues. A third set of undergrads rated the target’s physical attractiveness, based on a still photograph of them.

Then, a step-wise regression was conducted, using target’s personality ratings (based on silent video), their perceived earning potential, fun-loving nature, and sincerity/commitment (based on the full video), and their physical attractiveness (based on the photograph) as predictor variables and their dateworthiness (operationalized as the number of participants from the speed dating party who wished to see the target again) as the dependent variable. Results indicated that physical attractiveness and nonverbal cues were more significant predictors of the targets’ dateworthiness than were their perceived earning potential, sincerity/commitment, and fun-loving nature. These results are consistent with our thesis.

Given the evidence (from study 1) that nonverbal cues play a significant role in influencing perceptions of dateworthiness, it is important to assess how one should present oneself to a potential suitor: should one expose the suitor to one’s nonverbal cues first (e.g., by meeting them face-to-face or by exposing them to one’s video file), or should one first expose others to one’s verbal profile (e.g., a description of one’s personality, likes/dislikes, etc.) first?

To address this question, subjects were randomly assigned to one of the following 16 conditions: 2 (Nonverbal cues first vs. Profile first) X 2 (Valence of Nonverbal Cues: Good vs. Bad) X 2 (Valence of Profile: Good vs. Bad) X 2 (Target gender: Male vs. Female). That is, male and female subjects saw targets with good or bad video and good or bad verbal profiles, with the profiles or the videos coming first. After each exposure (video and verbal profile), subjects were asked to rate the target. The overall rating (second

rating minus the first rating) and the overall positivity of the second rating were used as the dependent variables. Results indicated that a better overall impression is created with exposure to video first than with exposure to profile first when both the nonverbal cues and the profile are good. Exposure to a bad video and then to a good profile produces a far better impression than the reverse, perhaps because of contrast effects, or perhaps because there is a penalty for presenting misleading information. Finally, a bad video followed by a bad profile produces a worse impression than a bad profile followed by a bad video. Thus, overall, if a target has good nonverbal cues, these should be exposed first. If however, the target has bad nonverbal cues, these should be exposed later (unless the profile is contrastingly good). Interestingly, women rating women were generally very forgiving of a bad video and of a bad profile, perhaps because such presentations are seen as a sign of honesty. Male participants did not show this effect.

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“Dating Preferences and Speed Dating Decisions: The Relationship Between What’s “Important” and What Counts”

Sheena Sethi-Iyengar, Columbia University

Itamar Simonson, Stanford University

Raymond Fisman, Columbia University

The gap between stated attribute importance and actual decisions has been well documented and interpreted as a sign of poor insight into one’s decision process (for a review, see, e.g., Barlas 2003). Goldstein, Barlas, and Beattie (2001) showed that attribute importance is interpreted differently depending on people’s communicative goals. And Barlas (2003) has recently proposed that the goal to justify decisions influences (stated) importance beliefs more than choices whereas the goal to accurately assess preferences influences choices more.

Prior research has implicitly assumed that the relation between stated importance beliefs and actual attribute importance derived from choices people make (hereafter, revealed attribute importance) is rather stable over time. In a typical study, subjects are asked to state their attribute importance (e.g., by allocating 100 points among attributes), and they also make choices, which can be used to derive the revealed importance weights. However, it is

reasonable to expect that the degree of correspondence between importance beliefs and revealed attribute importance fluctuate over time.

In the present research, based on actual speed dating events conducted at Columbia University (with mostly graduate students), we examined the dynamics of the relationship between importance beliefs and revealed attribute importance weights by measuring the gap between the two at three points in time. First, we measured importance beliefs prior to making choices. Next, respondents made repeated decisions as part of a “speed dating” event in which they participated, followed by a second measurement of importance beliefs. Finally, three weeks later, they again indicated their importance beliefs. In addition, the revealed importance weights were derived from the actual choices, which allows us to track the relationship between importance beliefs and actual behavior over time.

The speed dating context provided a particularly rich environment for studying the determinants of consumer preferences. Among others, we focused on the impact of attribute type, the choice set size, and gender differences (building on a very large literature regarding mate selection). Since actual attribute importance is likely to depend on the available information, it was expected that the revealed attribute weights would be different from the importance beliefs stated prior to the event. For example, although women may consider sincerity more important than shared interests when evaluating prospective dates, the difficulty of assessing sincerity in a four-minute speed date is likely to shift the revealed importance weights in favor of the more easily assessed attribute of shared interests. Such changes in actual importance were expected to be reflected in importance beliefs measured soon after the repeated choice event, but that effect was predicted to be short-lived, with the previously held importance beliefs re-emerging after some time. These predictions were supported in the studies we conducted.

The results also showed that the correlation between stated and revealed preferences is higher when the speed dating event involves 10 rather than 20 dates, but the correlation between the two after the event was higher in those who had had 20 dates. Furthermore, whereas men give the same proportion of “Yes” (i.e., express interest in going on a regular date) regardless of the number of dates, women become more selective and select about the same number of dates in speed dating events with 10 dates and with 20 dates. These differences are consistent with the evolutionary psychological and social status perspectives of mate selection. Finally, a series of tests conducted as a part of a follow-up study indicate that men and women recognize that their stated importance weights differ from their actual (revealed) attribute weights, though they underestimate the magnitude of that gap.

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“The Online Pursuit: Preference Learning in Online Dating”

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Over time and with experience, consumers learn, change, and refine their preferences. Familiar examples are cases where consumers start by liking one type of food and years later end up liking another. For example, very few like heavy beers early in their

drinking experience, but many do end up liking such beers later on. The same holds true, for example, for spicy foods, jazz, and even wine. Despite its importance, preference learning poses a challenge to consumer researchers because in most cases the learning process is slow (which makes it unsuitable for laboratory experiments), and there is no readily available data to examine such learning processes. In the current work, we examine the learning process in one domain—online dating—an activity that was common to about 40 million Americans last August [1]. The dataset we have, provided by a major online dating service, allows us to examine how preferences evolve in response to participants’ successes and failures and the impact of performance (e.g., getting dates) on their preferences.

In our first set of analyses of the learning process, we examined what online daters look for in terms of physical features (attractiveness, body type, and age), soon after they joined the online dating service. We then follow how their preferences changed over time. For example, we see that early on in the online dating experience the “ideal” woman tends to be in her late twenties to early thirties while the “ideal” man for most women is in his early 40’s. The difficulty of course is that the supply of these two popular types is below the demand, and thus most of those who are looking exclusively for these age groups are unsuccessful.

The online dating panel data allow us also to test the ability of online daters to learn who is likely to positively respond to them and who is likely to be a good fit. For example, we examined whether the (importance) weight online daters place on the attraction indicators (attractiveness, body type, and age) seem to decrease or increase over time, suggesting some learning based on their past success. Somewhat disappointing, the results show very little learning, suggesting that wishful thinking can overcome reality. We also identified a few patterns (or segments) of behaviors that we term spammers (online daters who send email indiscriminately), jugglers (online daters who have simultaneous relationships with many others), and passive daters (online daters who wait for others to email them). Again somewhat disappointing, the results show very little learning aside from general disheartening with the online dating service as a whole. An interesting question that arises from these results concerns the limited ability of online daters to learn how to increase their success rates. We provide some speculations about the nature of this limited ability to learn.

A different approach to examine the ability of online daters to learn how to better predict preference and success in email as well as physical dates relates to the possibility that the nature of the online dating market is such that it encourages behaviors that are ultimately self-defeating. In particular the temptation to send many people email and the free cost of these emails could promote lack of discriminating emails, lack of learning, and the spamming we see in our data. To test this idea, in collaboration with the online dating site (that provided the data), we are introducing a program that limits the number of emails members can send to others; this will allow us to test whether a market with a structure that causes people to think more carefully about who they send email to will force them to define their preferences and tactics more carefully and accurately and, ultimately, improve their success rate. Specifically, we will give some people a limited supply of introductory emails that we call virtual roses. The number of virtual roses will vary on three levels, with the high restriction of only 2 emails a month, a lower restriction with 8 emails a month, and a low level of restriction with 100 emails a month. This experiment will test whether, under more limiting market conditions, individuals are better able to judge their probability of success and learn what is most important for them. To the extent that this approach improves online dating, we could conclude that the temptations in the current market structure are just

too high and limit the ability of online daters to maximize their chances of corresponding and dating. This experiment started running in Early March and should be completed by May or June.

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SPECIAL SESSION SUMMARY

Investigating the Impact of Negative Self-Conscious Emotions on Consumer Memory, Processing, and Purchase

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SESSION OVERVIEW

The negative self-conscious emotions, embarrassment, guilt, and shame involve distinct phenomenological experiences (Tangney 1992). Guilt results from actions or inactions that run contrary to internal or social standards and it is quite common for a transgression to elicit guilt based on its negative implications for another person. Embarrassment tends to involve trivial transgressions that have no implications for others but involve “a deficiency in one’s presented self” (Tangney, Miller, Flicker, and Barlow 1996, p.1258). Shame is a negative emotional state focused on the global self (e.g., *I am bad*) whereas with guilt and embarrassment experiences, the self is implicated but is not the central focus of the experience (e.g., *I did something bad*) (Tangney 1990).

Guilt and embarrassment are considered adaptive because the experience of these emotions can help signal whether particular behaviors should be undertaken or avoided. Generally, individuals are motivated not only to prevent but also to repair these negative states. Shame, on the other hand, can be maladaptive because the global self as opposed to a specific act is viewed as ‘bad.’ Thus the experience of this emotion is debilitating. Individuals often feel powerless to resolve their shame and as a result pursue inapt behaviors to cope.

Despite the phenomenological differences between guilt, shame and embarrassment, all three of these emotions involve the evaluation of the self against certain standards (Tangney and Fisher 1995, pg. 14). These standards are defined by socialization experiences and made salient in social contexts (Baumeister, Stillwell, and Heatherton 1994). As such, the consumption context represents a sufficiently unique environment for exploring 1) why and what standards become salient and serve to elicit self-conscious emotions and 2) how consumers respond to and cope with the experience of these emotions. Each paper in this session investigates one or more of the identified negative self-conscious emotions and relates issues of salience and coping to consumer purchase or memory and processing.

The first paper in the session (by Lau-Gesk and Drolet) explores the consequences of consumer’s feelings of embarrassment and the strategies they employ to reduce such feelings in the context of embarrassing versus non-embarrassing product offerings. The moderating role of self-consciousness in response to embarrassing products is identified. Results of this research indicate that if embarrassment potential is salient, either because an individual is highly self-conscious or because the potential for a situation to be embarrassing is emphasized, individuals display an increased willingness to purchase embarrassing products in an effort avoid embarrassment.

The second paper (by Dahl, Honea, and Manchanda) examines the interpersonal aspects of guilt in the consumption context. Results of this research indicate that social connection with a retail salesperson can lead to a guilt response when a consumer does not foster that relationship through purchase. Furthermore, the experience of guilt motivates consumers to pursue reparative actions (e.g., commit to spending more money) during future purchase interactions in order to reciprocate that connection and resolve their guilt. The final paper in this session (by Matta, Patrick, and MacInnis) examines the distinct impact of shame and guilt on consumer

information processing and memory. Results indicate that individuals that experience shame will recall more self-related counterfactuals regarding how the experience of shame could have been avoided. Comparatively, feelings of guilt are shown to produce retrieval of behavioral counterfactuals involving emotion avoidance. Finally, this research shows that experiencing either feelings of shame or guilt restricts cognitive processing on the part of the consumer.

Each of these three papers provides a distinct contribution to our understanding of self-conscious emotions by identifying both specific issues particular to a consumer behavior context as well as generating theoretical insights for the larger psychological and sociological literatures.

The role of embarrassment in consumer behavior, as suggested by this session, is interesting in that consumers are willing to incur some level of embarrassment in order to avoid situations that might involve greater embarrassment. Consumers will experience some level of an emotion to prevent the possibility of a deeper experience of that same emotion. The examination of guilt in a consumption context provides some equally unique insights. A social connection with salesperson that is not reciprocated through purchase can elicit guilt even if a consumer’s response to that connection involved reciprocal interaction. Consumers who experience guilt in such situations display a disposition to engage in reparative actions toward the salesperson. Interestingly, guilt and its related purchase intentions are motivated by an individual with whom the consumer had no previous relationship.

In a consumption context self-conscious emotions not only motivate certain behaviors (e.g., purchase) and impact intentions (e.g., willingness-to-spend) but can have a distinct impact on processing and memory. The experience of emotions such as shame and guilt can actually bias the counterfactuals an individual retrieves regarding avoiding these emotions. Taken together, the results of the research projects presented in this session provide an interesting catalyst for future research. We know that the potential for embarrassment motivates purchase (as an act of prevention) and the experience of guilt in relation to a salesperson inflates spending intentions (as an act of reparation)—drawing a connection between these findings and the biasing effect self-conscious emotions have on retrieval may help to develop a framework for understanding when the experience of a particular self-conscious emotion is likely to result in adaptive or maladaptive coping responses.

“Public Self-Consciousness and Purchase Intentions for Embarrassing Products”

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If you’ve ever had a credit card declined, triggered a store alarm because a salesperson forgot to remove a security sensor, or had to explain “accidentally” ordering an adult film from a hotel pay-per-view, you’ve probably experienced embarrassment as a consumer. Embarrassment can arise in a variety of consumer situations, including purchase (e.g., buying condoms or *The National Enquirer*), usage (e.g., using hemorrhoid medication or hair removal products), and disposition situations (e.g., donating out-of-style clothes or Milli Vanilli records to Goodwill).

To reduce and cope with negative feelings of embarrassment, consumers can use a variety of strategies. For example, consumers who anticipate feeling embarrassed during an upcoming purchase situation might plan to pay in cash rather than reveal their identity by paying with a check or credit card. Consumers may be motivated to overcome the embarrassment associated with a purchase if they are seeking to forestall greater future embarrassment. Indeed, a main purpose of many products (e.g., disposable absorbent underpants, gas prevention aids, acne medication, and mouthwash) is to help consumers avoid certain particularly embarrassing moments (e.g., bladder control loss, uncontrolled flatulence). Accordingly, the major emphasis of many marketing communication strategies is how consumers can prevent embarrassment through product purchase. The present research focuses on one individual difference variable that relates to consumers' tendency to buy products aimed at preventing embarrassment: public self-consciousness (PUBSC).

Individuals high in PUBSC appear more eager to avoid embarrassment, and thus are more likely to alter their behavior in ways that will help them do so. For example, Froming, Corley, and Rinker (1990) paid college students to sing "The Star Spangled Banner" in front of another student. The longer they sang, the more money they earned. Students high in PUBSC sang for a shorter time than students low in PUBSC sang. Interestingly, the behavior of students high in PUBSC did not change when the student observer was a friend versus a stranger. This heightened concern with public self-impression also reveals itself in preferences for brand label products. Bushman (1993) finds that high PUBSC is associated with increased preference for national brand label products, which are generally considered to have more favorable public images, versus bargain brand label products, which are generally considered cheap or inferior by comparison. This finding implies that consumers high (vs. low) in PUBSC have a greater motivation to act in a socially desirable way.

In experiment 1, we tested whether consumers high in PUBSC are more likely to purchase products that may help them avoid future embarrassment, even if these products are embarrassing to purchase. We demonstrate that a high level of consumer PUBSC is associated with increased intentions to buy embarrassing (e.g., douche) but not non-embarrassing (e.g., shampoo) products ($N=157$).

In experiment 2, we investigate conditions under which the purchase intentions for embarrassing products between high and low PUBSC consumers might be comparable. Recent research indicates that, in general, individuals tend to overestimate the extent to which others notice and remember their embarrassing moments (Gilovich and Savitsky 1999; Savitsky, Epley, and Gilovich 2001). In one study, researchers had students walk into small college classrooms wearing a t-shirt with a large picture of Barry Manilow on it. At the end of class, students were asked to estimate how many others had noticed the Barry Manilow t-shirt. Students' estimations were much higher than actually was the case. Their overestimates went down only slightly if students acclimated themselves to wearing the t-shirt by putting it on before the class and waiting around the hall prior to entry. Individuals high in PUBSC appear even more likely than other individuals to exhibit this overestimation bias. Given that high PUBSC individuals tend to feel others are watching them and judging them negatively and expect to experience embarrassment more often, we expect that the purchase intentions of low PUBSC consumers may be more equal to those of high PUBSC consumers under certain conditions. We expect that the purchase intentions of low versus high PUBSC consumers will be more equal when the experience of embarrassment is more readily imaginable.

In experiment 2, participants ($N=214$) were exposed to ads either showing embarrassment (uncontrolled flatulence at a social

gathering purportedly because of not using the advertised product) or not showing embarrassment (controlled flatulence purportedly because of using the advertised product). We predicted and found consumers low in PUBSC to report increased purchase intentions in response to an ad depicting (vs. not depicting) embarrassment. For low PUBSC consumers, the depiction of embarrassment increased its salience. Because consumers high in PUBSC tend to see themselves feeling embarrassed, ads relating at all to embarrassment, either its experience or its avoidance, prompted high PUBSC consumers to think of embarrassment. These findings support the idea that higher purchase intentions for embarrassing products among consumers high versus low in PUBSC is due at least in part to the increased salience of embarrassment and its negative consequences for self-impression.

To provide additional support for this explanation, we tested the effects of cognitive load on the intentions of high versus low PUBSC consumers to buy embarrassing products in experiment 3 ($N=114$). Studies demonstrate that cognitive load can inflate dispositional tendencies. For example, Shiv and Fedorikhin (1999) study consumers who are chronically high versus low in impulsivity. High impulsivity consumers are generally more likely to choose impulsive alternatives (chocolate cake vs. fruit salad). Increased cognitive load due to a working memory task increases the tendency of high impulsivity consumers to choose impulsive alternatives. Cognitively preoccupied, individuals appear more likely to rely on more automatic, association-based thinking strategies versus more controlled, rule-based thinking strategies (see Drolet et al. 2004 for a review). Thus, we expected and showed that load will increase the intentions of high PUBSC consumers to purchase embarrassing products. Ward and Mann (2000) test the effects of load on the eating behavior of chronic restrained versus non-restrained eaters. They find no effect of load on the eating behavior of non-restrained eaters, suggesting that load does not influence the eating behavior of non-restrained eaters because they do not automatically associate restricted eating with positive self-impression. Thus, we expected and found that cognitive load does not influence the intentions of low PUBSC consumers to purchase embarrassing products.

On the whole, our investigation implies that embarrassment salience is an important psychological factor that moderates the effects of PUBSC on consumers' intentions to buy embarrassing products. The present research adds to research on consumer embarrassment. As Dahl et al. (2002) discusses, even though the importance of this emotion for consumer behavior seems self-evident, very little research has examined consumer embarrassment.

"Guilt and Purchase Commitment: Understanding Feelings of Guilt in a Retail Purchase Context"

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Guilt can compel consumers to purchase (Ruth and Faber 1998) but also oblige them to return (Martin 2002). Critical incident reporting suggests both intrapersonal appraisals of control (e.g., Smith and Ellsworth 1985) and interpersonal concerns (e.g., Tangney 1991) as key drivers in the experience of guilt, yet to date there is no empirical examination of whether these factors are actually interdependent in the experience of guilt, the extent of a relational bond necessary to elicit guilt over interpersonal concerns, nor a clear understanding of the types of behaviors, adaptive or maladaptive, that guilt may motivate in a consumption context. This research develops a conceptual framework that identifies the role of the interpersonal factor of social connection and the intrapersonal factor of control in the elicitation of guilt. Furthermore, it explores

the potential outcome effects when a guilt response is realized by the consumer and identifies how guilt reactions can be avoided through purchase behavior.

In Study 1, participants were asked to visit a new store and acting as a “mystery shopper,” evaluate it as a prospective retailer in the campus community. When the participant entered the store a trained confederate, acting as a salesperson, either did not interact with the participant (no social connection condition) or initiated a scripted dialogue with the participant (social connection condition). After visiting the store participants returned to the experimenter and were asked to complete a short questionnaire to provide their evaluation of the store (referred to as Retailer A for the remainder of this abstract). Within this series of questions, participants were asked to indicate the level of guilt they experienced on a battery of scale items drawn from previous research (Bozinoff and Ghingold 1983; Coulter and Pinto 1995; Jones, Schratte, and Kugler 2000). We expected that when participants developed a social connection with the store employee and did not make a purchase they would be more likely to feel guilt than when no social connection was realized and a purchase was not made. As predicted, participants that developed a social connection with the store employee felt a higher level of guilt for not patronizing the store than those participants that did not form a social connection.

It is important to note that in Study 1, participants visited a store and did not have directed goals related to purchase. This replicates situations where a consumer might be browsing as opposed to shopping with intention. Study 2 used a similar design and measures as Study 1 but broadened the experience of the participant by expanding the experimental task to include a shopping visit to another retailer (Retailer B) and asking the participant to make a purchase at one of the stores. This added complexity allowed for the introduction of self-agency into the purchase outcome decision and manipulation of purchase control (some participants were told to purchase from Retailer B and others were allowed to decide independently where they would purchase). As expected, there was a significant interaction between control and connection. When subjects did not make a purchase from Retailer A, participants in the social connection condition reported a significantly higher level of guilt when they had freedom in their purchase decision than when they were controlled in their decision. In contrast, participants in the no social connection condition did not experience significantly different levels of guilt whether the level of purchase control was controlled or not. In the social connection-independent decision cell, participants were most likely to report that the failure to make a purchase was the driver of their emotional response.

A last set of studies, an experimental field survey administered to a consumer panel and a follow-up laboratory study, explored potential outcome effects when a guilt response is realized by the consumer and how guilt reactions can be avoided through purchase behavior. Results suggest that guilt in response to even minor social connections in a consumption context serves to shift emphasis from the intrapersonal to the interpersonal. The resolution of interpersonally motivated guilt manifests itself in relationship-enhancing behavior as guided or distorted by the consumption context. Specifically, consumers' intended future purchase amount increased in those instances where they experienced guilt. Satisfaction and willingness-to-return (loyalty) measures appeared to be impacted more generally by connection and the success of the purchase incidence, and were not directly affected by the guilt response.

This research provides a social-functional perspective of guilt in a consumption context and identifies a boundary condition under which the interpersonal dimension of guilt is more likely to be experienced. Significantly, we provide evidence that concern for

others can be an important component of consumer guilt. Secondly, this research explores the behavioral intentions, adaptive or maladaptive, motivated by guilt in a consumption context. We identify the norms of both purchase and reciprocity as drivers of the guilt reaction. We also demonstrate the reparative strategies consumers employ to resolve experienced guilt. What is perhaps less obvious in our pattern of results, is the fact that emotional arousal does not simply guide an individual to be responsive in terms of interaction. The social aspects of the consumption context sets a standard for reciprocating connection but the consumption context inserts its unique twist, predicating that responsiveness to a connection with a salesperson should come in the form of purchase.

The results of this work indicate that based on the degree to which interpersonal motives are triggered in a consumption context, consumer behavior may or may not follow the same course as it might in the face of purely intrapersonal concerns. While an intrapersonal role for guilt would likely predict that it would serve to curb consumption behavior, it appears the interpersonal function of guilt may motivate purchase behavior and increase consumer spending. Thus, the elicitation of the self-conscious emotion guilt in a consumption context may or may not be truly functional at the intrapersonal level.

“Exploring Shame and Guilt in Consumer Behavior”

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Shame and guilt are powerful, negative self-conscious emotions that can arise from consumption of products and services viewed as normatively inappropriate—those one ‘should not’ or ‘ought not’ to have consumed (e.g., overeating, compulsive buying, pornography, alcohol use, smoking, gambling, shoplifting). They can also arise from non-consumption of products and services viewed as normatively appropriate (e.g., failure to give a gift, failure to use exercise facilities, failure to consume healthy foods). Once activated, shame and guilt can, in turn, motivate *consumption of normatively appropriate or non-consumption of normatively inappropriate* products and services as a way of reducing these negative emotions. Despite their potential relevance, little research has examined the two emotions in a consumer context.

Two studies described here investigate (a) the incidence of, appraisals leading to, and motivations arising from the experience of shame and guilt—particularly as they apply to consumption contexts (Study 1), and, (b) their effects on information processing and memory (Study 2).

Defining Shame and Guilt

Though shame and guilt are often used interchangeably, research in psychology suggests they differ in causal locus. Shame concerns the *self*, which is the focus of evaluation. Guilt concerns *behavior*, in which the action engaged or not engaged in, is the focus (Lindsay-Hartz 1984; Niedenthal et al 1994; Schmader, Lickel, and Ames 2002; Tangney 1992; Tangney et al 1996; Wicker et al, 1983). Shame and guilt are thus defined as follows: *Shame is an emotion evoked from a perceived transgression of the self in evaluating a consumption episode. Guilt is an emotion evoked from a perceived transgression of one's own behavior in evaluating a consumption episode.*

Shame and Guilt in Consumption Contexts

Study 1 investigated (a) whether shame and guilt are salient in a consumption context, (b) if the intensity with which they are experienced approaches their intensity in a non-consumption context, (c) the appraisals leading to, and the motivations arising from

these emotions, and (d) whether the marketplace is viewed as a mechanism for their reduction. One hundred and fifty seven undergraduates participated in a 2 (emotion: shame vs. guilt) x 2 (cause: emotion evoked by action or inaction) x 2 (context: consumption vs. non-consumption) between-subjects study. Students were instructed to provide a detailed written account of a personal shame or guilt evoking episode arising from doing or not doing something in a consumption or non-consumption context. They rated the intensity of experienced emotions using a battery of 24 emotions—including shame and guilt. Respondents were then asked to complete measures of appraisals leading to, and motivations arising from the experienced emotion. The results revealed four important findings: (1) *shame and guilt in a consumption context arose from distinct appraisals*, (2) *led to different behavioral motivations* (3) *are as intense in consumption contexts as they are in non-consumption ones*, and that (4) *consumers rely on (non)consumption to repair situations evoking shame or guilt*.

The Effect of Shame and Guilt on Consumer Information Processing and Memory

It is well established in psychology and consumer behavior research that an individual's emotional state can strongly influence various aspects of information processing including encoding and retrieval, processing strategies, evaluations, etc. (for a review, see Bagozzi, Gopinath and Nyer 1999). We expect the difference between shame and guilt (in implicating the *self* versus *behavior*) will manifest itself in the effect of these two emotions on information processing and memory. Specifically, consumers who are asked to recall an experience of shame (guilt) will present more counterfactuals involving the self (behavior) about how the experience of shame (guilt) could have been avoided compared to consumers who experience guilt (shame). Also, consumers who experience shame (guilt) encode more personality-related traits (behaviors) when exposed to information about another person, compared to consumers who experience guilt (shame).

In study 2, sixty undergraduates provided a detailed written account of a personal shame, guilt or pride experience. They were asked to list a set of counterfactuals about how the situation might have been different. They then read a narrative in which an individual describes two episodes involving shame or guilt in a consumer behavior context (one episode involved eating fatty food and the other involved purchase of adult entertainment on the Internet). Both were pre-tested as being equally likely to evoke shame and guilt. Following a two minute distracter task, participants were asked to write down as much of the narrative as they could recall. Consistent with the hypothesis, *subjects who recalled an experience of shame (guilt) were more likely to retrieve counterfactuals involving how changes in their self (behavior) might have helped avoid the emotion* compared to subjects in the guilt (shame) or pride conditions. Consistent with expectations, *subjects primed to consider shame or guilt recalled significantly less of the narrative than subjects primed to consider pride*.

The contributions of this research lie in the introduction of shame and guilt in consumer behavior research, and in developing a foundation for future research in this area. Though the antecedents of and the motivations arising from shame and guilt have been researched in social psychology, the impact on information processing and memory are unique contributions of this article.

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An Exploration of Identity Re-Creation in the Context of Internet Dating

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EXTENDED ABSTRACT

Evidence of individuals using their behavior to form and reform identities has been found in many offline consumer contexts (Arnould and Price 1993; Celsi, Rose, and Leigh, 1993; Kozinets, 2002; Thompson and Troester, 2002), as well as in several online consumer contexts (Kozinets 1997; Schau and Gilly 2003; Schau and Muniz 2002). Although researchers have suggested that both online and offline feedback from others concerning information posted about oneself on the Internet might have an impact on that person's identity, an explicit examination of the ways in which this feedback affects people's perceptions of themselves has been absent from previous studies. If identity is truly a social phenomenon as suggested by the symbolic interactionist perspective (Cooley 1902; Mead 1934; Solomon 1983), then feedback from others would be an important part of the identity creation and re-creation process.

The purpose of our research, then, is to expand the current understanding of the identity re-creation process as it occurs online not only by exploring the ways in which individuals use their web postings to explore aspects of their own identities but also by investigating the impact that online and offline feedback to these web postings have upon these individuals' identities. We focus on the consumption of Internet dating services because, within this context, the potential exists for both online and offline interaction with and feedback from others.

Theoretical Framework & A Priori Themes

According to Markus and Nurius's concept of possible selves (1986), an individual's identity is composed of many different self-conceptions, or ideas about the person he or she thinks that he or she is. Self-conceptions can be divided into now selves, which "describe the self as it presently is perceived by the individual," and possible selves, which are "images of the self that have not yet been realized" (Markus and Nurius 1986, p. 957). At any given time, an individual's identity will be composed of some combination of both now selves and possible selves. However, this combination does not remain completely stable over time. Instead, identities are endlessly created and re-created as individuals engage in the continuous, dynamic process of cognitive negotiation and renegotiation. During this process, the importance of feedback from others is emphasized (Wurf and Markus 1991) as individuals re-create their identities by either changing their possible selves into now selves or removing possible selves from their identities following validation or refutation from others, respectively.

Using the concept of possible selves as a theoretical framework, our study examines the process of identity exploration and re-creation in the context of Internet dating. Our research is guided by the following questions: What motivates individuals to begin the identity exploration and re-creation process by posting personal profiles on Internet dating service websites? To what extent do the profiles that individuals create on an Internet dating website represent current conceptualizations of themselves (i.e., now selves)? To what extent do the profiles that individuals create on an Internet dating website represent conceptualizations of themselves that they would like to possess in the future (i.e., possible selves)? What effect does response in the form of e-mail messages from other users have on an individual's identity? What effect does an offline encounter with other users have on an individual's identity?

Method

Due to the fact that one's identity is a complex phenomenon, an ethnographic interview technique (Holloway and Jefferson 2000; Schouten 1991) was used because it allowed the informants to freely explain their perceptions of themselves and their Internet dating experiences. Eleven adults (6 females, 5 males) who had been actively using at least one Internet dating service sometime in the past year were recruited for participation by networking through friends and colleagues. Face-to-face interviews lasting between 45-120 minutes were tape-recorded and transcribed verbatim. We then read these transcripts several times from start to finish and coded key phrases. These phrases were constantly compared and contrasted across all interviews in an effort to create categories that represented important themes in the responses. In cases of disagreement, we negotiated until agreement was reached.

Principle Emergent Themes

Informants' responses seemed to support the a priori themes. It does appear to be the case that individuals can re-create their identities through the use of Internet dating services. Markus and Nurius's (1986) concept of possible selves did seem to be applicable to the Internet dating context. By posting profiles of themselves that contained aspects of their identities that they would like to possess but did not currently possess, informants were able to test the identity water, so to speak. Posting anonymous profiles allowed informants to safely explore aspects of their personalities that they may or may not have wanted to explore through overt behavior in the offline world.

The importance of feedback from others in the process of identity creation and re-creation was evident in informants' responses. The symbolic interactionist notion that one's identity is constructed not only of self-characterizations but also of reflexive-characterizations was manifest when informants indicated that they took other people's perspectives into account both when they were describing themselves through the use of now selves and also when they were attempting to appeal to other users through the use of possible selves in their profiles. The effect of online and offline validation or refutation of the identities presented in these profiles, in turn, seemed to have an impact on informants' beliefs about themselves and their behavior in both online and offline environments. Thus, our data support Wurf and Markus's (1991) contention that validation of possible selves is a key aspect of the identity re-creation process.

Future Research

Several issues remain unexplored by our research. Although our interview questions referred to other points in time, it is unclear from our data how long the identity re-creation process takes, how enduring the changes in one's perception of oneself are, and how often the identity re-creation process can occur via consumption of Internet dating services. Addressing these issues in a longitudinal study could prove to be a fruitful area of future research.

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Competition and Attachment in On-line Auctions

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EXTENDED ABSTRACT

Ariely and Simonson (2003), among others, argue that bidding in an auction is fundamentally different from buying a product for a fixed price either *on or off line*. Auctions are dynamic affairs and making decisions in this environment could influence how bidders come to understand how they value items. Moreover, auctions present their participants with a task of setting the dollar amount they are willing to pay, which differs from deciding whether to buy at a known price. Evidence supporting the influences of these unique features of online auctions has shown that winning prices are positively related to the total number of bids and to the total number of bidders.

We propose two possible causes for increased valuations for goods as the auction progresses: quasi-endowment and the opponent effect. We define quasi-endowment as the feeling of ownership a bidder can get from an auction even though they are not actually the owner. It is possible that even without a legal claim high bidders could have a feeling of ownership for the duration they are the highest bidders, leading to similar changes in valuation as true ownership. "Endowment" because they can construct a reference point such that losing the auction will feel like they had actually lost the item. "Quasi" because this counterfactual represents only a weakened or partial perception of ownership (Rosch, 1973). Opponent effect, on the other hand, involves an increase in the subjective value of winning a competitive auction. There are several psychological theories that support this possibility including: self-perception (Bem, 1965), goal achievement (Kaplan & Middleton, 2002), decision under hot states (Loewenstein, 1996), and reason-based choice (Shafir & Simonson, 2000). We investigate these two effects via two experiments.

The first experiment was a survey that tested for quasi-endowment and opponent effects. There were four different questionnaire forms based on a 2 competition (high competition vs. low competition) x 2 duration of ownership (Low duration of ownership vs. High duration of ownership) between subjects design. Each condition presented a common scenario followed by the manipulations after which participants stated the bid they would place at the end of a week-long auction. The competition manipulation altered the number of bids that other people made while the quasi-endowment effect was based on a hypothetical bidding history from earlier in the week.

We use Analysis of Variance to study the effect of competition and duration on the final bid. The overall model was statistically significant [$F(3,87)=3.20, p=.03$] and the results supported both the quasi-endowment and the opponent effect hypotheses.

The second experiment consisted of real-money auctions in a laboratory experiment that included treatment conditions analogous to those of the first experiment, and repeated this process for four *within-subject replications*. The design was a 2 (duration of ownership) x 2 (competitiveness) x 2 (order of auctioned goods) x 4 items (2 gift certificates, t-shirt, chocolates) to be auctioned. Participants unknowingly were bidding against five computerized scripted competitors that varied according to the experimental conditions (see Häubl & Popkowski-Leszczyc, 2004) for similar procedures). The auctions were in discrete time with durations defined by nine periods of bidding. The competitiveness condition was defined by the total number of bids generated by the five

computerized bidders in the first seven rounds. Low competition condition had 3-5 bids in addition to the subject's bid and high competition condition had between 20 and 35 bids.

The exposure length factor was defined by the number of bidding rounds subjects participated in and could be perceived themselves to be in the lead. In the long exposure condition, subjects participated in all nine of the bidding rounds, increasing their bids as they please and spending at least a part of the rounds at the lead. In the short duration of ownership condition subjects were not allowed to participate until the eighth round. In the eighth round all subjects were presented with the same bidding history log. This information included all bids up to that point including bid amounts and round number for each bid (much like eBay's proxy bidding system the amounts revealed were the second prices at each point). At this point subjects were given the opportunity to bid on the final ninth round.

The overall results replicated those of Experiment 1. The average bid for the subjects in the long duration of ownership condition was \$6.39 as opposed to \$4.02 for those people in the short duration group. This difference is highly significant substantively as well as statistically ($F(1,125)=12.79, p<.000$). We take this as evidence of the quasi-endowment effect. The results also support for the opponent effect [$F(1,125)=3.10, p=.045$].

These effects replicate those of Experiment 1 although in a more realistic environment. Experiment 2 also provides a more specific definition of competition. Our findings also provide another explanation to the common empirical observation of multiple bids by the same individual. If the attributes of the auction experience change over time, the subjective valuation also changes, leading to multiple bids. Therefore influences that can otherwise be seen as irrelevant, might matter for the bids, such as the number of people in the auction, how aggressive their behavior is, how long a person has participated in the auction, and if and how long she has been in the lead.

The implications of the current work are numerous. First, to the extent that the increases in bids as the auction progresses represent a bias rather than a change in core valuation, bidders should be aware of these potential biases and take actions to de-bias themselves (Fischhoff, 1982). One such method, particularly effective in second-price auctions, is to submit their true valuation and not look again until after the auction is complete.

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Forming Parasocial Relationships in Online Communities

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ABSTRACT

Parasocial interaction theory has been used to describe the one-sided relationships that can occur between a media user and the media being consumed. Used to understand the process by which individuals form attachments to media personae, the theory may also help explain the behavior of those consumers who use Internet-based online communities. This paper provides an overview of parasocial interaction theory, and explores how parasocial interaction can affect the consumption behavior of online community users. Following a review of the extant literature, a number of research questions are outlined to help guide future research in this area.

INTRODUCTION

An emergent stream of research in the marketing literature has been to understand how consumers interact with each other using the Internet through online (or virtual) communities (e.g., Bagozzi and Dholakia 2002; Kozinets 1999, 2002). An implicit assumption in research to date has been that all consumers will eventually decide to interact with other users online. As a consequence, the importance of those users who merely browse for information, rather than actively participate in an online community has been overlooked. The aim of this paper is to introduce the concept of parasocial interaction (Horton and Wohl 1956)—a theory which examines the interaction between a media user and the media being consumed—in order to understand how lurkers (i.e., those people who unobtrusively read, but not write about a consumption interest online) may form relationships with other online users. After a review of the extant literature, this paper explores how parasocial interaction can affect the consumption behavior of participants using an online community, and provides a set of research questions to help guide future research efforts.

WHY STUDY ONLINE COMMUNITIES?

The importance of online communities to business was first explored by Armstrong and Hagel (1996). Arguing that online communities provide an opportunity for organizations to build new and deeper relationships with customers, the authors suggested that commercial success for any business with an online presence would be contingent on providing virtual communities that meet multiple social and economic needs. The integral role of online communities was further reinforced by Kozinets (1999), who posited that by understanding these communities and the opportunities they present, companies may gain insight into changes that are occurring in the way people decide on which products or services they should consume, as well as how they should consume them. Moreover, Kozinets (2002) suggested that the reasons for marketing interest in online communities are twofold. First, given that a critical influence upon brand preference is consumer advocacy, online communities, where consumers attempt to inform and influence fellow consumers about products and brands should be of considerable interest to any company. Second, since an important role of marketing research is to understand the decision-making influences of particular consumers and consumer groups, online communities provide another opportunity for marketers to study the tastes, desires, and needs of those consumers who interact in such forums.

Kozinets (1999) posited that five types of online communities are suitable for consumers to use to discuss consumption related

activities. The first of these, boards (e.g., USENET-based newsgroups), are typically based around specific products, activities, or interests which may be relevant to marketing researchers interested in consumer topics. Second, independent web pages (e.g., web-based message boards), provide an opportunity for consumers to exchange ideas using a web-based interface. The third type of community, lists (e.g., listservs), are e-mail mailing lists which are based around a certain topic of common interest. Lastly, multi-user dungeons and chat rooms are the final two types of online communities available to consumers. It is considered that these two community types contain information that is often less market oriented (e.g., Kozinets 2002), as they can often contain material that may be of a fantastical, social, sexual, or relational nature. Further, in terms of which types of forums are most suitable for exchanging information related to consumption related activities, the first three types (i.e., boards, independent web pages, and lists) can be considered as being more suitable.

In the literature, authors such as Kozinets (1999) have posited that the longer an Internet user spends online, the more likely they are to gravitate towards an online group of one sort or another. Once a consumer connects and interacts with others online, it is assumed that they will become a recurring member of one or more of these communities, and over time, increasingly turn to them as a source of information and social interaction. Similarly, Bagozzi and Dholakia (2002) emphasized the notion of “we intentions”, arguing that an individual's desire to participate in an online community is a result of individual determinant (e.g., positive anticipated emotions and desires) and community influences (e.g., social identity). Such approaches to understanding individual participation in online communities however, ignore the idea that some individuals may not decide to actively participate in online communities. Instead, rather than engaging with other users online, they may decide to unobtrusively read, but not write about their consumption interests. Consequently, the role of lurkers in online communities has often been overlooked.

Kozinets (1999) argued that the formation of a relationship with any online community was based on two non-independent factors: (1) the relationship a person has with a consumption activity, and (2) the intensity of relationship an individual has with other members of the online community. Using these two factors, the author outlined a typology of four distinct community member types: devotees, insiders, tourists, and minglers. Devotees are those people who possess a strong interest in a consumption activity, but have few strong social ties to other members of the online community. Insiders also have a strong personal interest in a consumption activity, but instead have strong social ties to other community members. Tourists lack strong ties with either the focal consumption interest or with other members of the online community. Finally, minglers maintain strong social ties with other members, but hold little interest in the consumption activity being discussed. Using the definitions provided by Kozinets (1999), devotees and tourists can be viewed as conceptually similar to lurkers in that they maintain weak social ties to a community. For example, they may not interact with other users, but instead use the information provided by others to meet their consumption-related informational needs. Given this, a key area of potential research interest is to understand how active participants within an online community are able to influence the decision-making processes of non-participa-

tive members. Drawing from the media and communications literature, parasocial interaction theory may provide some direction to help understand how non-participative users of an online community are influenced by the opinions of other more vocal (and active) members of that community.

PARASOCIAL INTERACTION THEORY

The concept of parasocial interaction has become well established in the media and communication literature since the term first appeared in an article by Horton and Wohl (1956). Parasocial interaction was originally defined as the apparent face-to-face interaction that can occur between media characters and their audience. While audience members consist of users of mass media, media characters can include several types of media figures (or personae) such as presenters, actors, or celebrities. The behavior of a persona during each interaction event (e.g., television program, commercial, or talk show interview) helps a viewer to form an opinion about that character, which the viewer then carries into the next parasocial episode (e.g., Auter 1992; Perse and Rubin 1989).

As with interpersonal relationships, these opinions will then influence a viewer's feeling about the personas behavior, which will then affect the parasocial relationship with that person (Alperstein 1991). Moreover, even though each encounter with a media persona will foster some degree of parasocial interaction, strong feelings about a media character will occur only after an individual has been exposed to a number of parasocial encounters (Auter 1992). It is with these repeated encounters that a viewer will gain increased attributional confidence about the media personality (e.g., Perse and Rubin 1989). Conceptually, parasocial relationships can be thought of as being similar to an interpersonal social interaction or relationship, although they typically consist of a much weaker bond.

In one sense, a viewer of a television program or other media event is meeting with the performer (Skumanich and Kintsfather 1998). Over time, these meetings may lead a viewer to begin experiencing feelings of intimacy with the performer as if they were a close friend. As the 'relationship' intensifies, viewing may increase in order to maintain the friendship (e.g., Rubin, Perse, and Powell 1985). Moreover, viewing episodes may become ritualistic in nature, in that these viewing episodes may be planned for by a viewer, and they may become an important part of the viewers daily life. Following Horton and Wohl (1956), viewers may try to affirm their loyalty through sending mail, collecting memorabilia of the performer, and purchasing products recommended by the performer. Research on parasocial interaction has been conducted in contexts such as the relationships that children have with their favorite television characters (e.g., Hoffner 1996), the role of parasocial interaction when people listen to talkback radio (e.g., Hofstetter and Ganos 1997; Rubin and Step 2000), and the formation of parasocial relationships when shoppers watch a cable home shopping channel (e.g., Stephens, Hill, and Bergman 1996). In the context of the Internet, Hoerner (1999) developed a parasocial interaction scale, although this measure was focused on measuring the parasocial interaction potential of fictitious persona on a company website.

Television programs, along with other media content (e.g., advertisements), are able to create the illusion of interpersonal contact when media figures speak directly out of the television and address the audience personally. Horton and Wohl (1956) described this type of interaction as creating the illusion of *intimacy at a distance*. In previous studies (e.g., Alperstein 1991), participants have described parasocial interaction while consuming media content in terms of being transported to another sometimes disorienting world where they become involved in the interactions of

those characters who appear in programming and commercials. This experience is also tied to the concept of suspension of disbelief, in which viewers fall out of touch with the real world, and in touch with their imaginary social world.

Other authors (e.g., Auter 1992) have further developed this idea with the concept of a media character breaking the fourth wall. This idea refers to the notion of a media personality stepping out of character to address an audience. For example, in television, like film and theatre, plots usually unfold within a three-walled environment. The fourth wall is the imaginary wall that separates a character from the audience. By breaking the fourth wall, the parasociability of a character is assumed to increase due to three main reasons. These reasons include: (1) the character that breaks the wall becomes more dominant due to their awareness of both the characters they are interacting with, and the audience behind the wall, (2) it helps acknowledge that the program is merely fiction, and (3) by directly addressing the audience (and adjusting to supposed responses), the persona raises the level of intimacy with the audience, thereby raising the interactivity level of the content.

Is Parasocial Interaction Desirable?

Early research on parasocial interaction assumed it was a form of dysfunctional behavior (e.g., Sood and Rogers 2000). As such, it was thought to result from factors such as neuroticism, isolation, loneliness, fear, a lack of adequate leisure activities, as well as limited opportunities for social interaction. Cohen (1997) surmised that parasocial relations may substitute for diminished interpersonal contact. In past research on motivations for television viewing, it has been found (e.g., Rubin et al. 1985) that like interpersonal interaction, television is often viewed as a way to battle loneliness. Consequently, television viewing in general, and parasocial interaction more specifically, are often seen as substituting for interpersonal relationships. However, Rubin et al. (1985) found there was no correlation between loneliness and the intensity of viewers' parasocial relationship with onscreen characters. Such findings regarding the use of parasocial relationships to help alleviate loneliness thus suggest that parasocial interaction may function to broaden the scope of interpersonal relations a person has, rather than compensate for a lack of relationships.

Other authors (e.g., Auter 1992) have noted that parasocial interaction has been treated as a need or motivational state in most research. For example, parasocial interaction is one of many important outcomes that audience members may seek when they select television shows to view. Moreover, parasocial interaction has also been established as an important determinant of media use, and an important concept to be investigated from a uses and gratifications perspective (e.g., Conway and Rubin 1991). Further, in contexts such as television news, parasocial interaction has been predicted by factors like higher levels of news realism, and feeling happy while watching the news (Perse 1990). These results have been used to suggest that parasocial interaction can also be predicted by emotional involvement. For example, Perse (1990) discovered that feeling happy while watching the news was related to parasocial interaction. However, feeling sad or angry was unrelated to parasocial interaction.

Although parasocial relationships are based on simulated interaction, they can continue beyond the viewing period when viewers experience characters as close friends they would like to meet (e.g., Skumanich and Kintsfather 1998). With this, parasocial relationships complement social relationships, and are better understood as part of a viewer's social life. It is perhaps not surprising that evidence has been gathering in support of the similarity between parasocial and social relationships. For example, viewers will judge media characters using many of the same criteria as those

they use to judge other people they meet (Perse and Rubin 1989), and there are similar patterns in the development of social and parasocial relationships (Rubin and McHugh 1987). Overall, parasocial relationships resemble social relationships, and although they may often be less salient and intense than close social relationships, for many television viewers, relationships with television characters and other celebrities are a constant, large, and in many instances—important part of their social world (Skumanich and Kintsfather 1998). Perse and Rubin (1989) also state that parasocial interactions resemble interpersonal friendships in three ways. First, parasocial relationships (like friendships) are voluntary, and often contain a personal focus. Second, both types of relationships provide companionship, and third, social attraction is a precursor to either type of relationship.

Although parasocial interaction is based on vicarious interaction (e.g., television viewing) rather than actual interaction, viewers often feel that they know and understand the persona in the same intimate way that they know and understand their flesh-and-blood friends. This type of parasocial relationship is based on the belief that a media personality is like other people in the viewer's social circle. Moreover, viewer involvement can often enhance parasocial interaction, and parasocial interaction may mirror social interaction. Increased interaction (i.e., increased viewing levels) and perceived self-disclosure through the medium may lead to a reduction of uncertainty, and deeper perceived intimacy with, and liking of the mediated characters (e.g., Perse and Rubin 1989). Similarly, Turner (1993) examined interpersonal and psychological predictors of parasocial interaction with television performers. Adopting the idea of homophily, or the tendency for friendships to form between people that are alike in some designated respect, the author found that attitude homophily was the best predictor of parasocial interaction. The two other dimensions of homophily (physical appearance and the media character having a similar background to that of the viewer) were not correlated as strongly.

The Parasociability of Different Media

Media messages can vary in their 'parasociability' for a variety of reasons (e.g., Auer 1992). In sum, this potential is influenced by the ability for a medium to approximate reality and content characteristics, such as the dominance of lead figures, as well as personae who regularly appear in the program (or in other media contexts). Television in general, and programming with recurring characters in particular, are considered to be higher in interaction potential than other media types. According to Horton and Strauss (1957) however, parasocial interaction can also exist even in those face-to-face situations where there are large audiences (e.g., show or lecture), where there is a large gap in status between a performer and their audience. This can also arise due to the audience being so large that a speaker cannot address audience members individually. Such a situation is similar to that encountered with the Internet. For example, while many people may visit an online community, given a large number of users, it is unlikely that an individual user would be able to directly interact with all other users online. Consequently, a common scenario would be that while a user might be able to interact with some community members, they would have to observe the interactions of many others. In the instance of non-participative members (i.e., lurkers, and perhaps devotees and tourists), these people would only be able to read the interactions between other online community participants. Given the potential for such a large number of one-sided interactions, parasocial interaction provides a theoretical contribution to understanding how non-participative online community users may process the information put forward by other online users. Moreover, questions are raised about how this information is

then integrated into the consumption-related decision-making of those non-participative consumers, and then ultimately reflected in their actual behavior. Building on the theory presented thus far, this paper will now outline three research questions to guide future research in this area.

HOW DOES PARASOCIAL INTERACTION DEVELOP ONLINE?

Cole and Leets (1999) provided an overview of three relational development theories that may offer some insight into the formation of parasocial relationships in online communities. The first of these is uncertainty reduction theory, which suggests that relationships develop over time through a process of increased certainty (e.g., Berger 1986). As uncertainty decreases, liking increases, and relationships are developed through being able to predict the other's behavior. Second, and quite similarly, is personal construct theory. This theory suggests that viewers of media figures develop a sense of 'knowing' media characters by applying their interpersonal construct systems to the parasocial context (e.g., Perse and Rubin 1989). Third, social exchange theory (e.g., Homans 1961) offers explanatory value to the process of parasocial interaction by connecting intimacy and relationship importance to a cost and reward assessment, where a parasocial interaction with a media personality would have a high reward and low cost exchange.

Thus, a research question becomes whether these three perspectives provide any utility in explaining the formation of parasocial relationships in online communities. For example, when online, how do non-participative community users interpret the messages put forward by active users? In the instance of regular contributors (or posters) to an online community, so long as the poster identifies themselves consistently with the same user name, how does a non-participative user develop a sense of understanding and potential parasocial relationship with an active user? Such a relationship would be with regard to the online personality of that user, and their behavior when they contribute to an online community. Further, the issue of how a parasocial relationship that is formed with an active user then influences the consumption-related attitudes and behavior of non-participative users is also of interest. With this, the first research question is:

RQ1: What relational development theories provide the most utility in explaining how parasocial relationships are formed and evaluated in online communities?

Attachment styles also play a key role in how people experience close relationships. In previous parasocial interaction research (e.g., Cole and Leets 1999), a three-category scheme of attachment styles was used to understand how people form parasocial relationships. These three categories include: (1) secure individuals, who hold a variety of positive expectations that will result in relational interactions and outcomes, (2) anxious-ambivalent people, who, driven by their fear of being alone and disappointment that their partners do not live up to their idealized expectations, are more likely to engage in an extreme range of behaviors which will ultimately lead to relational dissolution, and (3) avoidant individuals, who have a difficult time trusting others, and often engage in behaviors designed to keep others at a comfortable distance. In the context of television, the authors found that willingness to form a parasocial bond with a favorite television personality was related to the attachment beliefs of an individual. Specifically, it was determined that people with an anxious-ambivalent style of attachment were most likely to form a relationship with their favorite television personality. Additionally, avoidant individuals were least likely to form parasocial bonds with television personalities.

Another research question thus becomes whether attachment styles affect how a person uses an online community. The way attachment styles may offer some understanding is twofold. First, whether attachment styles predict how likely an individual is to use an online community, and if they do, whether they influence their online behavior (e.g., a user deciding to become an active or non-participative community member). Second, for non-participative users, whether attachment styles affect the extent to which a non-participative user is able to form a parasocial relationship with active users in an online community. Thus, the second research question is:

RQ2: Do attachment styles influence the degree to which parasocial interaction can occur when using an online community?

A potential way of understanding how consumers come to rely on online communities for their informational needs was provided by Grant, Guthrie, and Ball-Rokeach (1991). Proposing a hierarchy of dependency relations, the authors argued that television dependency would lead to a dependency on a genre of television programming, which would then lead to the development of parasocial relationships with the hosts of specific programs. A similar relationship was outlined by Rubin and McHugh (1987), and a model of mediated relationship development was provided by the authors. In this model, television exposure was predicted to lead to a degree of attraction towards a televised character. From here, social, physical, and task attraction were predicted to lead to parasocial interaction, which would then ultimately predict the perceived importance of a relationship with that televised character.

It is also possible that a similar process may occur when consumers first start using the Internet. Indeed, Kozinets (1999) posited that the longer an Internet user spends online, the more likely it is that they will gravitate towards some type of online group, thus suggesting that some type of medium to genre dependency is possible with the Internet. Once a user then decides to visit an online community, the issue of how that user relates to active users of that forum is of interest. Thus, the third research question is:

RQ3: Can the development of parasocial relationships with members of an online community be explained by a hierarchy of dependence relations?

Beyond the framework discussed in the previous section, the issue of how the formation of parasocial relationships in online communities manifests itself in actual consumption behavior is also of interest. Expanding on the two relationship development frameworks already outlined, Skumanich and Kintsfather (1998) developed a model for individual media dependency effects, which was applied to understanding television shopping behavior. In terms of understanding the consumption-related behavior of online community users, this model may also be adapted to understand the potential effects of parasocial interaction in this new medium (see figure 1).

The model posits that for online community dependency to occur, an individual must have a pre-existing dependency with (and also be using) the Internet. This dependency with an online community is then predicted to lead to increased parasocial interaction, which then leads to increased usage of that community. The mediating role of parasocial interaction is reinforced by the inclusion of a direct path from online community dependency to online community usage. Moreover, and similar to Kozinets (1999), a direct path flows from Internet usage to the usage of online

communities. Finally, online community usage may lead to consumption-related behavior (e.g., a non-participative online community user may decide what product to purchase, decide to switch to another brand advocated by active members of an online community, etc.) A feedback loop is also included, indicating that subsequent to some type of consumption-related behavior occurring, an online community member will then return to the community.

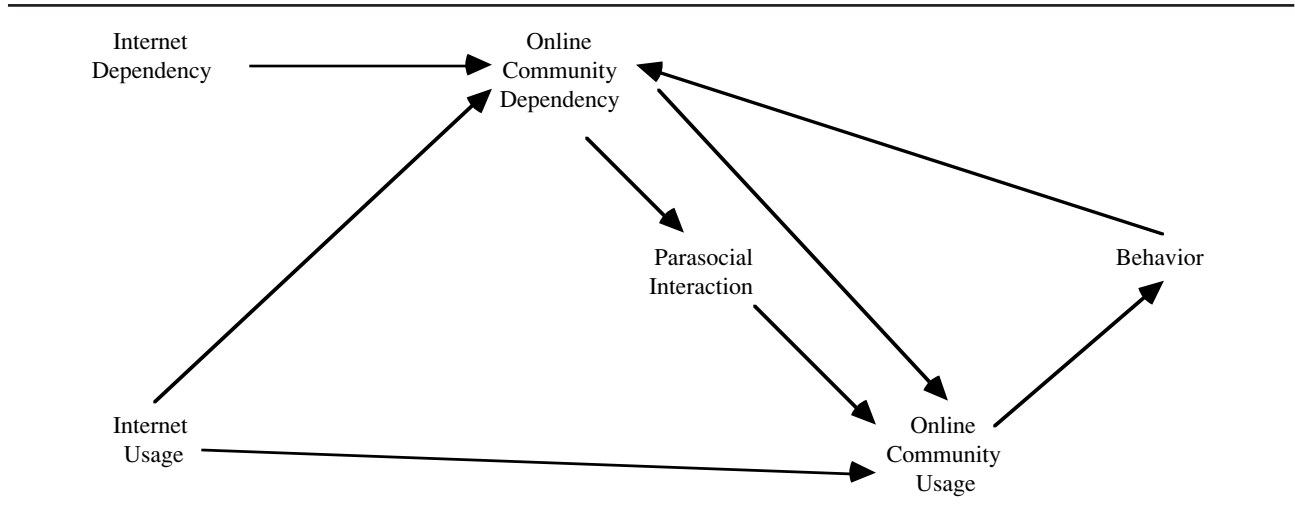
SUMMARY

This paper has provided an introduction as to how parasocial interaction theory might be used to understand consumers use of online communities. While parasocial interaction is not a new concept, it is a theory that has not yet been applied to the study of those consumers who use an online community. Given the important role of online communities in developing consumer preferences through the advocacy of other users, the development of theory to help explain how active participants within an online community can influence the consumption behavior of other non-participative users becomes critical. It is hoped that some of the ideas presented in this paper will provide initial direction for researchers interested in further understanding the behavior of consumers who use online communities.

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FIGURE 1
Adapted Model for Media Dependency Effects in Online Communities



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Source Perceptions and the Persuasiveness of Internet Word-of-Mouth Communication

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EXTENDED ABSTRACT

Word-of-mouth (WOM) communication is a powerful force in shaping consumers' attitudes (Brown and Reingen 1987). With the rise of the Internet, it is increasingly common for individuals to read about the product experiences of consumers who are unknown to them. The purpose of this research is to examine how individuals use the content of consumers' product reviews to make inferences about them—such as whether they are telling the truth—and from this the degree to which they are persuaded by the review.

There is some evidence suggesting that message content can influence source perceptions even beyond explicit information about the source's credentials (Ratneschwar and Chaiken 1991). Yet, the mediating role of source attributions on the persuasiveness of WOM communication is yet unclear (Folkes 1988). According to attribution theory (e.g., Jones and Davis, 1965; Kelley 1973), source perceptions play a critical role in determining whether a message is persuasive. Specifically, individuals try to determine whether the message accurately represents the attitude object or is attributable to irrelevant causes, such as an ulterior motive (Kelley 1967). For instance, consumers likely infer that advertisers want to sell a product. Thus, their glowing product advertisement is likely discounted because of their ulterior motive. One method for advertisers to establish credibility is to include some negative information about their products (cf., Settle and Golden 1974; Swinyard 1981). Because acknowledging the negative aspects of the product could result in a lost sale, such two-sided ads are often attributed to reflecting the source's true feelings. A similar pattern may emerge for consumer-to-consumer communication as well. Negative comments are less socially acceptable than praise (Mizerski 1982). Thus, even when the source is a consumer, two-sided messages may be perceived as more credible than one-sided messages.

Yet, research on message sidedness has yielded somewhat inconsistent findings, suggesting that the relationship between message sidedness, credibility and attitudes toward the brand (A_{BR}) is more complicated (Crowley and Hoyer 1994). I propose that the credibility and persuasiveness of two-sided messages depends on the source's brand attitude (tested in experiment 1) and the recipients' product attitudes (tested in experiment 2).

In terms of the source's brand attitudes, credibility likely depends on whether the content of the review reflects the sources' brand attitudes. If sources are telling the truth, then their attitudes should reflect their reasons for their attitudes. Oftentimes, considering multiple sides of an issue fosters attitude moderation (Linville 1982; Tetlock 1983). Individuals are likely aware of this, and consequently should perceive sources of two-sided reviews to be more credible when their attitudes are moderate rather than extreme (hypothesis 1). According to attribution theory, such attributions should lead to increased message persuasiveness (hypothesis 2).

To test this, 125 undergraduates participated in a study with a 2 (rating: moderate vs. extreme) \times 2 (review: one- vs. two-sided) design. Participants were first asked to imagine that they planned to see a movie and in deciding what to see, they visit a website where they read a rating and review of an animated martial arts film. Rating was manipulated by telling participants of the source's rating on a scale from -3 to $+3$. In the moderate condition, the source's rating was close to the midpoint ($+1$), whereas in the extreme condition, it was the highest possible ($+3$). Participants also received the source's review. The one-sided review contained all positive information. The two-sided review contained one piece of negative information.

After reading this rating and review, participants completed the survey, which included measures of their A_{BR} and their credibility perceptions. In addition, to test alternate theoretical accounts for the persuasiveness of two-sided messages, I included attitudes toward the review, perceived novelty, and a cognitive response measure.

Consistent with hypotheses 1 and 2, there was a significant rating \times review interaction for both credibility and A_{BR} . As predicted, the two-sided review was more credible and led to higher A_{BR} when the sources' rating was moderate (or consistent with the review) than extreme. Likewise, the one-sided review was more credible and persuasive when it was consistent with the source's rating (or extreme) than inconsistent (or moderate), although this difference was nonsignificant. Moreover, perceived credibility mediated the effect of review and rating on A_{BR} .

Whereas the results are consistent with an attribution account, they are inconsistent with inoculation theory, which predicts that two-sided messages reduce counterarguing, and with optimal arousal theory, which predicts that two-sided messages are more novel and lead to greater message liking than one-sided messages (for a review, see Crowley and Hoyer 1994). Specifically, there were no significant differences between conditions in the number of positive versus negative thoughts listed, attitudes toward the review and perceived novelty.

Experiment 2 was designed to examine whether the effectiveness of two-sided messages might also depend upon the recipients' receptivity to such messages. Two-sided messages introduce uncertainty (Sorrentino et al. 1988), which likely appeals less to those who generally like such products. Specifically, for those who generally like such products, the brand will likely provide a favorable experience (i.e., a gain). When dealing with gains, individuals prefer certainty (Kahneman and Tversky 1979) and consensus in opinions (West and Broniarczyk 1998). Thus, they should prefer one- to two-sided messages. If someone dislikes such films, then seeing such a film will likely be an unfavorable experience, or a loss. When facing losses, people prefer uncertainty (Kahneman and Tversky 1979) and disagreement (West and Broniarczyk 1998). Thus, they should prefer two- to one-sided messages.

When the message is inconsistent with individuals' preferences—such as when a two-sided review is read by someone who typically likes such products—they will likely respond by discrediting the source. Indeed, individuals judge a source whose position differs from their own to be biased and unfair (Sherif and Sherif 1967). Thus, I predict that the two-sided message will be perceived as less (more) credible than the one-sided message by those who typically like (dislike) such products (hypothesis 3). In addition, because credibility is related to more favorable source attitudes (Crowley and Hoyer 1994), the source of the two-sided message should be liked less (more) than the source of the one-sided message for those who typically like (dislike) such products (hypothesis 4). As a result, the two-sided message should be less (more) persuasive than the one-sided message for those who typically like (dislike) such products (hypothesis 5). Furthermore, those who typically like (dislike) such products will publicly rate the two-sided message as less (more) helpful than the one-sided message (hypothesis 6).

To test these hypotheses, 60 undergraduates received either a one- or two-sided review. The materials and procedures were the same as experiment 1, except that I held the rating constant as extreme (i.e., the product got 5 out of 5 stars). After receiving the review, participants completed a survey, in which they reported

their attitudes toward the brand, source, and product category. The latter measure was used to categorize participants as liking versus disliking such products. There were no gender differences in liking such films. Participants were also asked to rate the helpfulness of the review, which they were told would be posted on a website.

Consistent with hypotheses 3-6, there was a significant review x product liking interaction for credibility, liking, A_{BR} and helpfulness. Those who generally like such films found the source of the two-sided review to be less credible and less likeable than the source of the one-sided review. For those who generally dislike such films, although the cell means were in the predicted direction, the reviews had little effect on their perceptions of source credibility and liking. Furthermore, those who typically like such products held higher A_{BR} and rated the one-sided review as more helpful than the two-sided review. Again, among those who typically dislike such products, the two-sided review was slightly (although not significantly) more persuasive and rated as somewhat more helpful than the one-sided review. Moreover, consistent with attribution theory, attitudes toward the source mediated the relationship between product attitudes and review on A_{BR} and helpfulness ratings.

To summarize, the results suggest that two-sided messages do not always lead to credibility gains and greater persuasiveness than one-sided messages. In fact, under certain conditions, two-sided messages were perceived as less credible and were less persuasive than one-sided messages. Specifically, experiment 1 demonstrated that when the source's brand attitude is extreme, a two-sided message was less credible than a one-sided message. In addition, experiment 2 demonstrated that when the recipient typically likes such products, a two-sided message was less credible and less persuasive than a one-sided message. The results of both experiments were consistent with attribution theory.

One limitation of both studies is that the negative information appeared near the end of the message. Some argue that information appearing at the end of a message is interpreted as reflecting the source's true attitudes (Igou and Bless 2003). This may explain why a two-sided message was seen as less credible when it came from a source with an extreme attitude. Perhaps the source would be perceived as more credible if the negative information appeared earlier in the message.

Others have also shown that the persuasiveness of two-sided messages depends on whether the positive and negative attributes are negatively correlated or uncorrelated (Pechmann 1992). Examples of negatively correlated attributes include price and quality or taste and calories. Perhaps a two-sided message from a source with an extreme attitude would be perceived as credible if the negative information was correlated with the positive information. These are important directions to pursue.

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Once Burned Twice Shy, This Stock has Been Good to Me So Far, and It Could Have Been Worse: How Naïve Learning and Counterfactuals Influence the Repurchase of Stocks Previously Sold

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ABSTRACT

We establish two previously undocumented patterns in the purchase selections of individual investors and confirm a related pattern. These patterns hinge on investors' previous experience with a stock. We demonstrate that investors prefer to (1) repurchase stocks that they previously sold for a gain, (2) repurchase stocks that have lost value subsequent to a prior sale, and (3) purchase additional shares of stocks that have lost value subsequent to being purchased. We document these trading patterns by analyzing trading records for 66,465 households at a large discount broker between January 1991 and November 1996 and 665,533 investors at a large retail broker between January 1997 and June 1999. We argue that the first trading pattern results from a simple form of learning whereby investors repeat actions that previously resulted in pleasure while avoiding actions that previously led to pain (i.e., they repurchase their previous winners but not their previous losers). We argue that the second trading pattern is tied to counterfactuals. Investors who buy a stock at a higher price than they previously sold it for are painfully aware that they are worse off than if they had simply never sold that stock. Investors who buy a stock at a lower price than they previously sold it for experience the pleasure of knowing they are better off than if they had never sold that stock. We argue that the third pattern can also be understood in terms of counterfactuals. Investors who purchase additional shares of a stock at a higher price than they originally paid are aware that they would have been better off making a larger initial purchase, while those who purchase additional shares at a lower price are better off than if they had made a larger initial purchase. Furthermore, by purchasing additional shares at a lower price, investors increase the likelihood that they will be able to sell their shares for more than the average purchase price. From a Prospect Theory perspective, investors are lowering their reference point for this position. Buying stocks that have gone down in price since they were sold, or first purchased, is inconsistent with the general preference of investors for buying stocks with strong recent performance. Investor returns do not reliably benefit from any of the three patterns we document.

Improving Preference Assessment through Pre-exposure to Attribute Levels

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EXTENDED ABSTRACT

This article introduces a new technique for improving preference assessment by reducing the influence of context on preferential choices. We propose that a decision maker who is exposed to relevant attribute levels will form spontaneous valuations, which will insulate the decision maker from the effects of context during subsequent preference assessment. Results from three studies support this hypothesis. Pre-exposure to product attribute levels undermined the impact of attribute priming, decision framing, and asymmetric dominance on preferential choices. A fourth study demonstrates that similar results obtain when decision makers pre-generate attribute levels from memory.

Decision makers are routinely concerned with the quality of their decisions. Decision quality often depends on understanding others' preferences. Unfortunately, preference assessment is difficult because even seemingly trivial differences in context can dramatically alter reported preferences (e.g., Slovic, Fischhoff, and Lichtenstein 1977). These "context effects" are so pervasive that researchers in decision sciences, economics, marketing, and psychology have called for better preference elicitation methods.

This paper introduces a method for reducing the effect of context on observed preferences. We propose that pre-choice exposure to a list of attribute levels (e.g., the bottom of a backpack may be made of *leather*, *nylon*, or *rubber*) yields spontaneous valuations (e.g., "I like nylon," "I don't like leather."), which insulate decision makers against context during subsequent choices. In this way, preferences measured after exposure to attribute levels should more accurately reflect true preferences than those measured without such pre-exposure. We test this hypothesis in four preferential choice studies using three diverse context effects. In Studies 1-3, we cross pre-exposure to a list of attribute components (exposure versus no-exposure) with two levels of prevailing context. In Study 4, we alter the exposure technique by allowing participants to generate attribute levels without external aid. Data to support the hypothesis would take the form of a choice difference across contexts in the no-exposure condition but not in the pre-exposure or pre-generation conditions.

Study 1 replicated Mandel and Johnson's (2002) attribute priming effect on product choice, but only for participants who were not exposed to attribute levels before the choice process. Choices made by those who were pre-exposed to attribute levels did not reveal any influence of the attribute prime. Study 2 replicated Ganzach's (1995) finding that framing of task instructions altered preference for an impoverished over an enriched option; however, as predicted, the effect was reduced by exposing participants to a list of attribute levels before the choice process. Studies 3 and 4 extend the investigation to Huber, Payne, and Puto's (1982) asymmetric dominance effect. Consistent with Studies 1 and 2, participants in Study 3 who were pre-exposed to attribute levels did not exhibit the asymmetric dominance effect, suggesting that these participants based their choices on previously formed attribute valuations. Likewise, participants in Study 4, who generated attribute levels in advance of a choice process from memory did not fall prey to the asymmetric dominance effect.

Data from all four studies provides convergent evidence that pre-exposure to attribute levels mitigates the influence of context during a subsequent choice. We believe that pre-exposure to at-

tribute levels caused participants to spontaneously value the attribute levels and, later, to use these valuations as inputs during the preference construction process. We base this conclusion (in part) on the fact that individuals in the studies above saw the kind of information that would subsequently be used to describe the choice options, but they did not know which specific attribute levels would describe which option. As such, it was not possible for participants to construct preferences for specific products during pre-exposure.

Pre-exposure to attribute levels provides a simple way to enhance the likelihood that observed preference reports will reflect actual underlying preferences. Accordingly, we believe it offers clear value to those wishing to better understand individual's preferences, and it may also help decision makers who wish to improve their decisions by resisting the persuasive tactics rooted in context.

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Consumption Decisions Involving Goal Tradeoffs: The Impact of One Choice on Another

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ABSTRACT

Little empirical research has studied how consumers make goal tradeoffs to determine an overall consumption experience. Results from an exploratory study revealed that anchoring and assimilation and contrast effects might be involved in the decision process of highlighting one goal or balancing conflicting goals in a consumption episode. Findings from two experiments indicate that need for cognition (NFC), level of tradeoff conflict, and decision target affect the decision-making processes, and hence consumers' preferences for highlighting or balancing within consumption episodes.

INTRODUCTION

Much recent research has documented that consumers' goals play an important role in choice (Bagozzi and Dholakia 1999; Huffman, Ratneshwar, and Mick 2000). Some have classified goals as hedonic (goals with a pleasure focus) and utilitarian (goals with a more functional focus). While research has discussed the interrelatedness of consumer goals and goal conflict (Gutman 1982; Luce, Payne, and Bettman 1999; Ratneshwar, Pechmann, and Shocker 1996), little empirical research has studied how consumers make goal tradeoffs. Dhar and Simonson (1999) is an exception; they examine goal tradeoffs in the context of consecutive choices, that is, choice in a consumption experience. They define a consumption episode as decisions regarding two or more choices that belong to the same event or occur in temporal proximity. For example, in the consumption episode of weekend activities, a consumer may choose between a workout in the gym or watching videos in the afternoon, and between going out to dinner or having dinner at home. Dhar and Simonson examine the tradeoff between two goals, i.e., a hedonic and a utilitarian goal, and find that consumers prefer balancing (i.e., fulfilling both goals) to highlighting (fulfilling only one goal at the expense of another).

Our research seeks to add to the literature on goals and consumption episodes in the context of goal tradeoffs, specifically between a utilitarian goal and a hedonic goal. We begin with an exploratory study to better understand consumers' explanations for make highlighting or balancing decisions. We draw upon our exploratory study findings and the literature on anchoring and assimilation and contrast to identify factors that may moderate consumers' balancing tendency in consumption episodes involving goal tradeoffs. We develop hypotheses regarding the effects of need for cognition, level of tradeoff conflict, and decision target (making decisions for one's self versus for others) in the context of a consumption episode involving goal tradeoffs. We then report on two experiments conducted to test our hypotheses.

EXPLORATORY STUDY

Our exploratory study was designed to explore choices in a consumption episode; thirty-eight undergraduate students participated. They were given a decision scenario about an afternoon activity and dinner on that evening that involved the tradeoff between a goal to stay healthy (utilitarian) and a goal to have pleasure (hedonic) (Dhar and Simonson 1999). Specifically, participants were asked when they would order a tasty but fatty food dinner, either after a strenuous workout or after watching sports on TV. After reporting their decision, participants explained their reasons for making that particular choice.

Interestingly, a greater percentage of the participants made highlighting (60.5%) than balancing (31.6%) decisions; the remaining 7.9% reported no preference. A nonparametric χ^2 test showed that there were more highlighting than balancing choices ($\chi^2_{(1)}=3.46, p<.07$). Participants who made highlighting decisions mentioned that they would prefer stay in the same mindset throughout the day, e.g., "in health conscious state of mind," "in the healthy mindset and wants to keep that up," "would continue to do so," and "working out and healthy food goes together." However, those who made balancing choices explained that they "might not feel guilty about eating" fatty food after a strenuous workout, "earned fatty food," or "rewarded" themselves with a tasty (yet fatty) dinner. Participants' explanations suggest that they used the first choice as a reference point or anchor when making a second choice within the consumption episode. A majority chose to highlight, whereas a minority chose to balance. Participants' rationale suggests that they anchor on their first decision, and that in highlighting, assimilation effects occur, whereas in balancing, contrast effects occur. Hence, in the next section we examine goal tradeoffs in consumption episodes from the perspectives of anchoring, and assimilation and contrast processes.

DECISION-MAKING WITHIN CONSUMPTION EPISODES: ANCHORING AND ASSIMILATION AND CONTRAST EFFECTS

Anchoring

When making judgments or decisions, individuals may rely on some salient factors and form an "anchor" that serves as a starting point for decision-making (Hastie and Dawes 2001). Although most of the literature in anchoring has focused on the judgment of salient numbers, some recent research has studied how individuals anchor on their own experiences (Gilovich, Medvec, and Savitsky 2000) and how the anchoring effect influences choices (Brewer 2003). Given participants' explanations reported in the exploratory study of consumption episodes involving two choices, one could argue that a consumer's mental representation of the first choice serves as an anchor for making a second choice. Hence, a consumer who is in the mindset of fulfilling one goal may make a second choice fulfilling the same goal. For example, after a strenuous workout in the gym, a consumer may anchor on the goal of "staying healthy" and make subsequent choices (e.g. choosing healthy but less tasty dishes as a subsequent meal) based on this starting point, which results in a highlighting decision. However, if that consumer makes adjustment from his mindset of the first choice, he may try to achieve a different goal within an episode, which results in a balancing choice pattern, i.e., achieving both goals.

Assimilation and Contrast Effects

As found in the exploratory study, participants not only used the first choice as a reference point or anchor, they also assimilated or contrasted choice alternatives. Assimilation-contrast theory is based on the perspective that the perception of objects involves categorizing these objects relative to individuals' prior attitudes. Assimilation effects emerge when the object under judgment is assigned to the same category as the judgment context. As a result, the object will be more likely to be accepted. Alternatively, contrast effects emerge when the object and the context are assigned to

different categories, hence the object will be less likely to be accepted (Schwarz and Bless 1992).

The findings from our exploratory study lend support to assimilation and contrast effects occurring as consumers make consecutive consumption choices. Our discussion of assimilation effects suggests that an individual who sees choice alternatives fulfilling the same goal as belonging to the same category is more likely to engage in an assimilation process and continue with that goal, i.e., a highlighting decision. For example, one of the participants in our exploratory study who made a highlighting decision mentioned that “working out and healthy food goes together.” Alternatively, an individual who treats choice alternatives fulfilling different goals as in different categories is more likely to engage in a more cognitively demanding contrasting process, and determines that he wants to fulfill both goals, which leads to a balancing decision. Most participants who made balancing decisions in our exploratory study reported that they already “burned enough calories” in the workout so that they could “have a treat” at dinner.

Need For Cognition and Level of Tradeoff Conflict

Consumer research has demonstrated that the assimilation effect occurs more spontaneously, whereas the contrast effect requires more cognitive resources (Meyers-Levy and Sternthal 1993; Meyers-Levy and Tybout 1997). These studies suggest that consumers expending higher levels of cognitive resources are more likely to engage in the contrast process. In this section, we identify two variables that are related to the extent of processing, an individual’s need for cognition (NFC) and the level of tradeoff conflict in the decision, and develop hypotheses regarding their effects on decision-making within consumption episodes involving goal tradeoffs.

NFC is defined as an individual’s tendency to engage in and enjoy thinking (Cacioppo and Petty 1982). Consumers with a high NFC tend to put more cognitive resources in the decision-making process. Thus, based on the literature linking contrast effects with increased cognitive processing (Meyers-Levy and Sternthal 1993; Meyers-Levy and Tybout 1997), we argue that high NFC consumers are more likely to engage in the contrast processing, which will result in balancing decisions.

When consumers are faced with difficult and conflicting decisions, they tend to avoid tradeoffs, because these tradeoffs require more cognitive effort and usually result in negative emotion (Luce, Payne, and Bettman 1999). In our study, we consider level of tradeoff conflict as the degree of the discrepancy between the goals fulfilled by the choice alternatives in a decision. A high level of tradeoff conflict involves making a choice between two extreme choice alternatives (e.g., extremely hedonic versus extremely utilitarian), whereas a low level of conflict involves making a choice between two relatively close choice alternatives (e.g., moderate hedonic versus moderate utilitarian). In the context of a consumption episode in which a consumer is faced with choice alternatives fulfilling two more similar goals (as compared to two very disparate goals), we would anticipate increased cognitive processing, and hence a balancing choice. In contrast, a consumer who is making choices between alternatives fulfilling two very disparate goals is expected to highlight, i.e., stay with the status quo created by the first choice.

Given that NFC is an individual difference variable and level of tradeoff conflict is a context or situational variable, we consider how the interaction of these two variables might impact highlighting and balancing within a consumption episode. As stated above, we propose that high NFC consumers and consumers facing low levels of tradeoff conflict are more likely to balance their consumption episode decisions. Given that consumers tend to avoid difficult

tradeoffs (Luce, Payne, and Bettman 1999), and that making tradeoffs requires cognitive effort and high NFC consumers are more willing to expend such effort (Cacioppo and Petty 1982), we expect that high NFC consumers facing low tradeoff conflict decisions will tend to engage in more cognitive processing and have the highest propensity to contrast, make tradeoffs, and balance. In contrast, we would anticipate that consumers with high NFC facing highly conflicting tradeoffs, as well as those with low NFC would be less likely to balance. Thus, we expect:

- H1: Within consumption episodes involving goal tradeoffs, consumers with high NFC facing a low level of tradeoff conflict are more likely to make balancing decisions than those with either high NFC facing high level of tradeoff conflict or those with low NFC.

EXPERIMENT 1

Procedure

A total of 90 undergraduate students participated in experiment 1 for course credit. The experiment occurred in two separate sessions. During the first session, participants’ NFC was measured. A second session, which occurred about a month later, investigated how consumers make decisions within consumption episodes; participants were randomly assigned to our 2 (level of tradeoff conflict: high versus low) x 2 (order of choice presentation: utilitarian/hedonic versus hedonic/utilitarian) between subject design. No participants from the exploratory study participated in experiment 1.

In the second session, participants were given a hypothetical decision scenario which involved the tradeoff between a study (utilitarian) goal and a pleasure (hedonic) goal (see Appendix which presents the high tradeoff conflict scenario). Level of tradeoff conflict (high versus low) was manipulated by varying the discrepancy between the goals fulfilled by the two choice alternatives. The high conflict scenario involved a large discrepancy between the goals (i.e., “do some challenging homework” versus “hangout with friends”). In the low conflict level scenario, there was less of a discrepancy between the goals (i.e., “do some simple homework” versus “relax in your room”). After reading the scenario, participants were asked to arrange the two afternoon and two evening activities for two different days. Order of choice presentation was manipulated to determine if presenting the utilitarian versus hedonic goal first in the scenario affected the results. Specifically, Order 1 presented the utilitarian goal first and the hedonic goal second, whereas Order 2 presented the hedonic goal first and the utilitarian goal second. Participants’ decisions were coded as highlighting, balancing, or showing no preference.

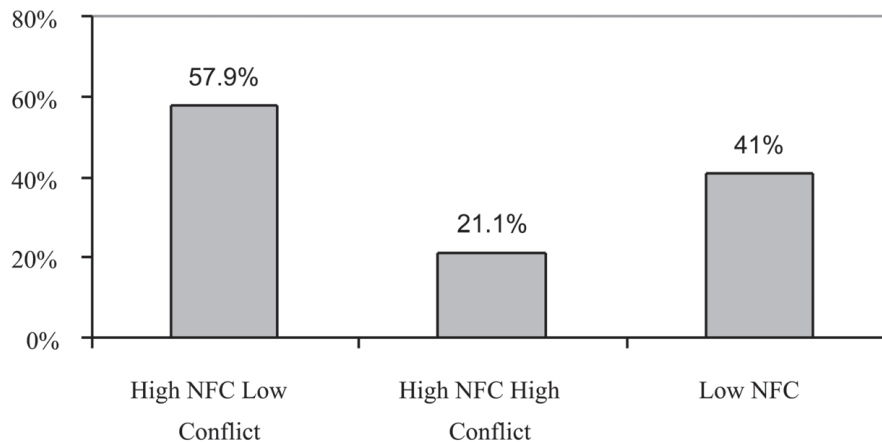
NFC was measured by 18-item 9-point scale (Cacioppo, Petty, and Kao 1984), with “+4” representing “high NFC” and “-4” representing “low NFC.” Cronbach’s alpha for the scale was .90. The summed score for NFC was median split to distinguish “high NFC individuals” ($M_{high}=1.91$) from “low NFC individuals” ($M_{low}=.12$) ($t_{88}=-11.45, p<.001$).

Results

Approximately half (50.8%) of the participants made highlighting choices, whereas 38% made balancing choices; the remaining 11.2% indicated no preference between highlighting and balancing. Considering only those who made a choice, a nonparametric χ^2 test showed that there were more highlighting choices (57.2%) than balancing choices (42.8%) ($\chi^2_{(1)}=3.47, p<.07$).

In preparation for examining H1, we first included order of choice presentation and gender into the binary logistic regression

FIGURE 1
Percentage of balancing decisions within each category in Experiment 1



model with the decision of highlighting or balancing as the dependent variable (i.e., those who had no preference were not included in the analysis), and neither was significant ($Wald_{order}=14, df=1, p>.7$; $Wald_{gender}=1.03, df=1, p>.3$). Therefore, they were not included in further analysis. The binary logistic regression revealed that the interaction of NFC and level of tradeoff conflict was significant ($Wald_{nfc \times conflict}=5.62, df=1, p<.05$), which supported H1. Further analysis revealed that participants who had high NFC and were in the low tradeoff conflict condition had a higher propensity to balance, i.e., 57.9% of them chose to balance, than either those who had high NFC and were in the high tradeoff conflict condition (21.2%) or those had low NFC (41%).

Our exploratory study indicated that consumers tend to anchor on their first choice when making a second choice within that consumption experience. Experiment 1 results indicate that when participants enjoyed thinking (high NFC) and were willing to make tradeoffs (a low level of tradeoff conflict), they were more likely to make balancing decisions, i.e., desire to accomplish both goals. Otherwise, they were more likely to anchor and assimilate, thus resulting in highlighting decisions. In Experiment 1, we used a median split to designate high versus low NFC consumers. Although the means of the two groups are significantly different, the two groups may not be exactly capturing high and low NFC. Rather, they might be representing moderate high versus moderate low NFC. Therefore, the actual effect of NFC on highlighting/balancing choice might be even stronger than reported in the experiment.

EXPERIMENT 2

In experiment 2, we consider the possibility that the decision target, i.e., making a decision for one's self versus making a decision for others, may affect consumers' choices within a consumption episode. For example, consumers are often in the situation of needing to purchase or make purchase recommendations for others, including those with whom they are familiar (e.g., significant other) and those whom they do not know well or do not know their exact preferences (e.g., a new neighbor). When individuals choose for themselves, they apply their own preferences. However, when individuals give advice, they apply their assumptions about others' preferences (Kray 2000). Likewise, West (1996) proposes that a purchase agent makes recommendations to the target by making adjustment from his own opinions based on the perceived difference between himself and the target. Slovic (1975) argues that

an advisor may be more concerned about recommending a course of action that is easier to justify than making a decision in the best interest of the advisee. Prentice (1990) suggests that feelings are less involved in the mental representation of others than self, and that an individual's mental representations of others are different due to the degree of familiarity, such that mental representations related with familiar others are much closer to self than to unfamiliar others (Aron, et al. 1991). Given that individuals treat familiar others more like themselves than unfamiliar others, the current research examines the differences in the decision-making for one's self versus for unfamiliar others someone whose preferences are not known.

Our exploratory study and experiment 1 indicate that the majority of participants when making decisions for themselves tend to anchor on their first choice and consequently highlight during a consumption episode. In the context of multiple goal decision-making within consumption episodes, when making decisions for others, we argue that individuals may be mindful of accomplishing multiple goals, particularly with regard to unfamiliar others for whom they do not know their preferences. Hence, we anticipate:

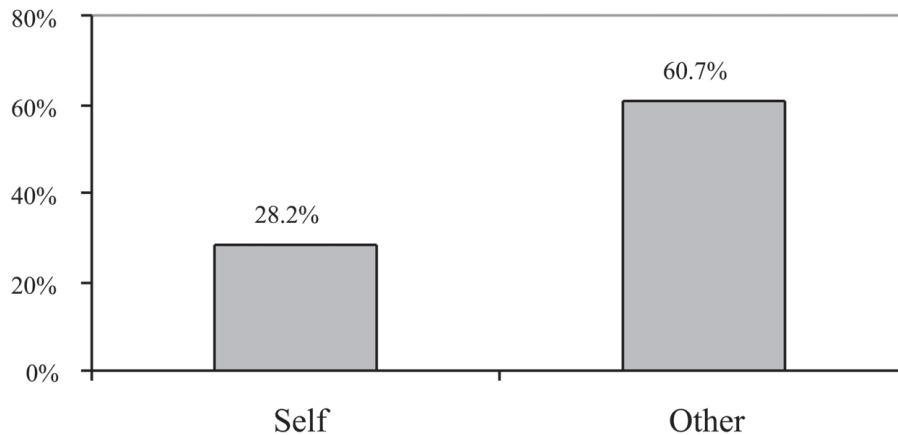
- H2: Within consumption episodes involving goal tradeoffs, consumers are more likely to make balancing (versus highlighting) decisions when they make choices for unfamiliar others (versus for themselves).

Method

A total of 134 undergraduate students participated in experiment 2 for course credit (none of them had participated in either the exploratory study or experiment 1). Participants were randomly assigned to a 2 (decision target: self versus other) \times 2 (order of choice presentation: utilitarian/hedonic versus hedonic/utilitarian) between subject design.

Participants were given a hypothetical decision scenario regarding leisure and dining activities in which the decision target was manipulated by asking the participants to make the decision for themselves or for "college student A," representative of someone unfamiliar to the participant (Kray 2000). As in experiment 1, order of choice presentation was manipulated to determine if presenting the utilitarian versus hedonic choice first in the scenario affected the results. The scenario used in this experiment presented participants with a first choice, either the utilitarian (i.e., thorough workout in

FIGURE 2
Percentage of balancing decisions within each category in Experiment 2



the gym) or hedonic (i.e., watch sports games on television or movie videos) after which were asked whether they would choose from either “fairly tasty but somewhat high-fat dishes” or “healthy but less tasty dishes” for their dinner (see Appendix which presents the self decision target scenario). Participants’ decisions were coded as highlighting, balancing, or showing no preference. The level of tradeoff conflict in experiment 2 was kept at a low level.

Finally, participants responded to a five-item 9-point scale (Desai and Ratneshwar 2003) designed to assess degree of health orientation; Cronbach’s alpha for the scale was .83. Health orientation was included as a covariate in the analysis.

Results

Slightly over one-third (37.3%) of the participants made highlighting choices, 33.6% made balancing choices, and 29.1% showed no preference between highlighting and balancing. When considering only those who made a choice, a nonparametric χ^2 test showed that the difference between the percentage of highlighting choices (52.6) and balancing choices (47.4%) was not statistically significant ($\chi^2_{(1)}=.26, p>.1$).

In preparation for examining H2, we first included health orientation, order of choice presentation, and gender into the binary logistic regression model with the decision of highlighting or balancing as the dependent variable (i.e., those who had no preferences were not included in the analysis). None of them was significant ($Wald_{\text{health}}=1.06, df=1, p>.3$; $Wald_{\text{order}}=1.67, df=1, p>.1$; $Wald_{\text{gender}}=.66, df=1, p>.4$). Therefore, they were not included in further analysis. The binary logistic regression revealed that decision target significantly affected choice ($Wald_{\text{target}}=9.31, df=1, p<.01$). The coefficients indicated that participants were more likely to make balancing decisions when they were making decisions for unfamiliar others than for themselves (odds ratio=3.94). We found that of those choosing between highlighting and balancing (i.e., exclude those with no preferences), 60.7% of the participants making decisions for unfamiliar others chose to balance, whereas only 28.2% of those making decisions for themselves chose to balance. These results provide support for H2.

GENERAL DISCUSSION

Our research contributes to the literature on goals and consumption by examining how consumers make goal tradeoffs within consumption episodes. Our exploratory work suggested that an-

choring and assimilation and contrast effects are prevalent as consumers make multiple choices. We have drawn upon the anchoring and assimilation and contrast effects literature base to consider underlying processes operating as consumers make decisions involving goal tradeoffs during consumption episodes. Further, we have considered how goal tradeoffs might be affected by the individual difference variable of need for cognition, as well as level of goal conflict and for whom the consumption decision is being made (i.e., for one’s self or for someone whose preferences are not known).

In both experiments, we considered goal tradeoffs (hedonic vs. utilitarian) in consumption choices relevant to undergraduate students, our study participants. The goals we included in our experiments would be considered as lower level goals (Huffman, Ratneshwar, and Mick 2000), and we found across experiments 1 and 2 that order of goal presentation (utilitarian/hedonic versus hedonic/utilitarian) did not affect whether participants chose to highlight or balance. In other words, our findings suggest that whether the anchor is a utilitarian or hedonic goal does not affect whether participants continue with the initial goal or attempt to accomplish multiple goals. This finding is interesting in that it suggests that even those whose consumption episodes begin with a more fun-fulfilling goal may switch gears to fulfill a more functional or utilitarian goal. Recent research has given more attention to emotional influences on goal setting (Bagozzi et al. 2000; Luce, Payne, and Bettman 1999), thus one might speculate that higher order goals may be more emotionally bound, and thus result in different highlighting and balancing patterns than those of lower level goals studied herein.

In experiment 1, we examined the tradeoffs related to studying (a utilitarian goal) and having fun (a hedonic goal), and in general, we found a greater percentage of participants highlighting their decisions, that is staying with the anchor of either a hedonic or utilitarian goal. However, these results are qualified by participants’ need for cognition (NFC) and the level of goal conflict that they faced. Specifically and consistent with our expectations, we found that individuals with high NFC facing low tradeoff conflict had the highest propensity to achieve both goals (i.e., they made a balancing decision). Other participants (those with low NFC and those with high NFC but faced with high tradeoff conflict) reported a greater propensity to highlight, i.e., stay with their initial goal, regardless of whether the first goal was utilitarian or hedonic.

In experiment 2, we examined the tradeoffs related to an afternoon activity (exercise—a utilitarian goal versus watching television—a hedonic goal) and dinner choices (choosing between a fairly tasty but somewhat high-fat dish—a hedonic goal versus a healthy but less tasty dish—a utilitarian goal), and found participants to be equally likely to highlight and balance their choices. These results, however, are qualified by for whom the decision is made. Specifically and consistent with our expectations, participants making choices for someone whose preferences they did not know were more likely to balance, i.e., accomplish both goals, rather than focusing on one—either hedonic or utilitarian goal. In contrast, participants making choices for themselves were more likely to highlight. While some research has argued that goal salience influences individuals' decision to highlight or balance, i.e., an individual will choose to highlight only one goal if that goal is much important than the other (Dhar and Simonson 1999), we did not find that participants' health orientation affected their choice to highlight or balance.

Our findings coupled with those of Dhar and Simonson (1999) yield conflicting results with regard to consumers' consumption episode choices. As we have noted our experiment 1 resulted in a majority of participants highlighting, our experiment 2 yielded equal percentages of highlighting and balancing, and Dhar and Simonson consistently report greater percentages of balancing decisions. What is the explanation for the contrasting findings? Our results indicate that consumers' balancing and highlighting decisions are susceptible to individual difference variables (e.g., need for cognition) as well as contextual variables (e.g., level of goal tradeoff and decision target). Hence, more exogenous variables that may alter consumers' highlighting or balancing tendency need to be carefully studied. Additionally, as we noted earlier, it may be that lower level versus higher level goal conflict may affect whether consumers balance and highlight within consumption episodes. Further, consumers' general ability and motivation to avoid goal conflict may impact their choice processes (Huffman, Ratneshwar, and Mick 2000). Given the early stage of research on goal tradeoffs within consumption decisions, it is evident that additional research is needed to more completely understand the boundary conditions under which consumers are more likely to balance and highlight goals within consumption episodes.

LIMITATIONS AND FUTURE RESEARCH DIRECTIONS

Our research extends the literature on goals and consumption episodes, yet several limitations should be noted and addressed in future research. First, consistent with past research, we defined the consumption episode to include two decision choices. Future research is needed to investigate the nature of consumption episodes and the number of choices that consumers consider in these episodes. Further understanding of consumption episodes can then be tested with different types of choices, and likely more complicated decision scenarios. Second, our study primarily focuses on the individual as the decision maker. Further investigation is needed to consider other social influencing factors, such as group dynamics. Many individual decisions take place in a group context wherein group members' choices influence individuals' decisions. Additional research may study the group dynamics and consider group member's influence on individual's decision of highlighting or balancing. Finally, our experiments did not assess for individual's involvement with the two hypothetical decision scenarios. Hence, future research may consider studying the influence of involvement on consumers' choice of highlighting or balancing in consumption episodes.

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APPENDIX
Decision Scenarios

Experiment 1—High Goal Tradeoff Scenario

Assume that you need to plan your activities for two different days during an upcoming week. During these two days, you plan to work on two school-related assignments, and also to take some time out and have fun. You know that on one of those two days, in the afternoon, you need to meet with your group members to discuss a difficult group project for one of your classes. On the afternoon of the other day, you will join your friends to watch a new movie. You also need to decide what to do in the evenings on those two days. On one evening, you need to work on some homework that is very challenging. On the other evening, you plan to hang out with your friends.

Experiment 2—Self Decision Target Scenario

Assume that you are planning your leisure activities at weekends. Also assume that every weekend you are likely to engage in activities that range from pure fun (such as watching sports on TV or movie videos) to a strenuous workout (such as running five miles). In terms of food, you like to eat dishes that range from tasty but containing some fat to those that are healthy but not as good taste.

Consider your two upcoming weekends. On one weekend, you plan to have a thorough workout at the gym before dinner. On the other weekend, you plan to watch sports games on television or movie videos before dinner. Suppose there are only two categories of food for you to choose from. One is fairly tasty but somewhat high-fat dishes, such as fried fish, roast chicken, or beef fajitas. The other is healthy but less tasty dishes, such as light pasta dishes or vegetarian meals.

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Investigating the Effects of Consumer Innovativeness on Shape of Consideration Sets: Focusing on Comparison between Consideration Sets of Innovators and Non-innovators

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ABSTRACT

This study investigated the effects of consumer innovativeness on brand consideration behavior. Specifically, we hypothesized that the shape (size and composition) of the consideration set is different between innovators and non-innovators: innovators' consideration sets are smaller in size and include more homogenous brands than non-innovators'. As expected, experimental results support our hypotheses. Regarding the probability of consideration of two similar brands, our study implies that the simultaneous consideration phenomenon would also be observed at the consumer segment level.

INTRODUCTION

Although researchers are increasingly recognizing the importance of the consumer consideration set for marketers (Hauser and Wernerfelt 1990; Roberts and Lattin 1991, 1997; Lapersonne, Laurent, and Le Goff 1995; Mitra 1995; Nedungadi 1990; Jedidi, Kohli, and DeSarbo 1996), little is known about the brand consideration behavior of various consumer segments. What draw the interest of marketers regarding consideration behavior is the consumer characteristics that have an influence on the properties of consideration set (e.g., size or composition). Although researchers in marketing only now are beginning to investigate this issue (Lapersonne et al. 1995; Mitra and Lynch 1995), the effects of many consumer characteristics are not discovered yet. Especially, little is known about consumer innovativeness that has gained a considerable amount of interest by high-technology marketers recently.

This study investigated how the characteristics of consideration sets of innovators and non-innovators differ. Specifically, we examined whether the shape (size and composition) of innovators' consideration sets is different from that of non-innovators'.

CONSIDERATION SET AND CONSUMER INNOVATIVENESS

Consideration Set

Consumers generally make a consideration set by selecting products that are expected to provide considerable utility to them among products recognized. The previous studies on consideration sets demonstrated that consumers do not consider all possible brands available in the market to reduce the burdens of evaluating alternatives (Payne 1976; Wright and Barbour 1977; Park 1978; Lussier and Olshavsky 1979; Ratchford 1982). Hauser and Wernerfelt (1990) and Roberts and Lattin (1991), which have gained a considerable amount of interest, showed how consumers make their decision to form brand consideration set. They developed cost-benefit models of the consideration set and, in particular, Roberts and Lattin (1991) empirically demonstrated the validity of their normative model. Since Hauser and Wernerfelt (1990) and Roberts and Lattin (1991), two major streams of consideration set studies have evolved.

First, several researchers incorporated the consideration set concept into a choice model in order to improve the predictability of their models (Siddarth, Bucklin, and Morrison 1995; Andrew and Srinivasan 1995; and Bronnenberg and Vanhonaker 1996). Second, other researchers investigated the consideration set itself as a main research issue. Lapersonne et al. (1995) found that in the

French automobile market twenty-two percent of consumers consider only one product. Mitra (1995) showed that advertising increases the stability of the consideration set. Also, Mitra and Lynch (1995) searched for factors determining the size of the consideration set and found that the size of the consideration set can be increased or decreased depending on the type of advertising. Reflecting on Roberts and Lattin (1991), Roberts and Lattin (1997) pointed out the four major areas that deserve future research regarding consideration sets: (1) dynamics of product codconsideration, (2) the shape of consideration sets, (3) retrieval and recall of products, and (4) characteristics of products and consideration probability

The Shape of Consideration Set

Studies on the shape of the consideration set largely focus on the "similarity of products included in the consideration set and the size of the consideration set." Hauser and Wernerfelt (1990) argued that consideration possibilities of products are independent, but Roberts and Lattin (1991) found that simultaneous consideration possibility is high in similar products from the analysis of the cereal market.

The literature about the economic information value (Hilton 1981; Mandeville 1998) indicates that heterogeneous products are likely to be included in the consideration set of consumers with high uncertainty about product information. According to the literature, when uncertainty is high, a consumer includes various possible brands to prevent the chance of excluding highly effective brands from his/her consideration set. Lapersonne et al. (1995) pointed out that satisfaction for car and dealer, perceived risk, product feature, and demographic factors could affect the shape of the consideration set. They found that only the probability of making a mistake had a significant effect on the size of the consideration set among involvement items like high interests, high symbolic value, high hedonic value, risk importance, and the probability of making a mistake. According to this, if there is a high probability of making a mistake with one's choice, he/she is likely to consider a larger number of brands.

Consumer Innovativeness

Consumer innovativeness means the degree of early acceptance of innovation of one member than by others in a society (Assael 1995). That is, this is about how fast and easily consumers accept new things, and the reason for the importance of consumer innovativeness is that it has a large influence on the adoption of new product and adoption speed (Midgley and Dowling 1978; Foxall 1988; Hirschman 1980).

The major problem of research on consumer innovativeness centers on the fact that almost all of the previous studies concentrated on investigating the measurement and characteristics of innovativeness. Rogers (1962) defined innovativeness as "the degree to which an individual in a society system adopts innovation before others adopt innovation." He divided individuals into innovator, early adopter, early majority, late majority and laggard according to the speed of acceptance of a new product, which separately is 2.5%, 13.5%, 34%, 34% and 16% of the total population. Midgley and Dowling (1978) defined innovativeness as "a person's sensitivity to new ideas" and called it "innate

innovativeness.” According to this study, innovativeness is a general concept and it affects new product adoption through a mediating variable (e.g., product category-specific innovativeness). Hirschman (1980) suggested the novelty seeking as another variable to heavily influence the adoption of a new product, and found that the concept is hardly separable from the innovativeness concept of a consumer. Goldsmith and Hofacker (1991) defined innovativeness as “the intention to try new things” and suggested that innovativeness should be measured related to specific products, because it is not right to measure innovativeness as a general concept in the domain-specific occurrence of the buying situation.

The previous studies on consumer innovativeness have mainly focused on the definition and measurement of innovativeness and there are few studies that investigate the relation of innovativeness with other consumer behavior variables. With this point of view, we explored the relationship between consumer innovativeness and the shape of his/her consideration set.

Consumer Innovativeness and Shape of Consideration Set

Because there are no previous studies that directly tackle the relationship between consumer innovativeness and product consideration behavior, we first refer to the studies that examined the relations with a consumer’s other characteristics (not innovativeness). Lapersonne et al. (1995) found that, when the perceived probability of mistakes in choice is high, consumers include many brands in the consideration set to reduce the risk. Generally, non-innovators have less expertise on the product category of concern compared to innovators. Thus, they may think that they have a high probability of making a mistake in their choice, which makes it a bigger possibility to possess many brands in their consideration set compared to innovators.

This prediction is also supported by Mitra and Lynch (1995). They showed that advertising provides varied product information to consumers and accordingly makes the consumer’s preference more sophisticated, which decreases the size of the consideration set indirectly. In the consumer analysis of fashion products, Goldsmith and Flynn (1992) found that innovators obtain more information from and watch more mass communicated advertising like magazines and TV advertising compared to non-innovators. Because innovators are more influenced by mass-media advertising than non-innovators (Rogers 1962), innovators are more likely to include less products in consideration set than non-innovators. This prediction is further supported by the notion of quality expectation. Because of the extremely high quality level required by innovators, relatively fewer products meet their requirement compared to non-innovators. Products in a market vary in quality levels and characteristics. Among them, a small group of products will satisfy the high expectation level of innovators. Therefore,

Hypothesis 1: The size of the consideration set of innovators is smaller than that of non-innovators.

Roberts and Lattin (1991) found that the probability to include two similar brands in a consideration set has some relation like including or excluding together, not independently. Economics literature, regarding information value (Hilton 1981; Mandeville 1998), indicates that consumers, with the high uncertainty about product information, will include heterogeneous products in the consideration set to avoid risk of making a mistake in choice. According to this, if the uncertainty of information is high, consumers form a consideration set consisting of “various” brands to prevent the chance of excluding high utility products from the consideration set. Because innovators have a higher expertise on the product category of concern than non-innovators, and have a

tendency to take risk rather than avoid it, they are more likely to include products in a consideration set that corresponds to their sophisticated requirements (similar brands that are strong in terms of the required product attributes, e.g., superior CPU brands for a PC). Therefore, there is a high probability for them to include similar products in a consideration set meeting their expected product characteristics.

On the other hand, non-innovators are in an inferior position in terms of product category knowledge, have high uncertainty about their choice and try to avoid the risk of purchase. This implies a high probability to include various (different) products in a consideration set to avoid the risk of excluding high utility products. According to research on fashion products by Goldsmith and Flynn (1992), innovators have an intense interest in style rather than the other features of products, such as practicality and price, when choosing fashion products. On the other hand, non-innovators have a general interest in style and practicality, etc. In addition, innovators usually have more interest in cutting-edge new products. These products are generally superior to other products in terms of some key product features that are of an extraordinary standard (e.g., CPU in laptop computer). Therefore consideration set of innovators may include similar products that excel other products in terms of key product attributes. On the other hand, non-innovators have high probability to make consideration set with products that have strength in terms of their own product attributes. Therefore,

Hypothesis 2: The composition of consideration set of innovators is more homogeneous than that of non-innovators.

Hypothesis 3: Innovators make homogeneous consideration sets with similar brands in terms of key product attributes, while non-innovators make consideration sets with various brands representing their own strong attributes.

RESEARCH METHOD

To empirically test the three hypotheses, we prepared two experimental sessions. The details of each session are as follows:

Session 1: Test of Hypotheses 1 and 2.

To empirically test hypotheses 1 and 2, we first divided the subjects into two groups based on their innovativeness scores and conducted an independent sample t-test to show the difference of size and similarity of the consideration sets between the two groups. In session 1, an experimenter informed the subjects that the intent of this study was to find out the consumer purchase behavior of laptop computers and cellular phones. Then the experimenter presented the description of five brands for each product category to the subjects. Then they were asked to assume that they needed to purchase both product categories and answer which brands they would consider to purchase. In addition, they were asked to evaluate the similarity of five brands that were presented to them in a paired comparison manner. Finally, they chose one brand for purchase and answered questions regarding innovativeness and demographic traits.

Session 2: Test of Hypothesis 3.

Because consumers consider brands with higher utility, the considered brands may well reflect the consumer’s preference structure. Thus, if a consumer values product attribute A more than attribute B, brands possessing the strong attribute A will be more likely to be considered by the consumer. Accordingly, we can test hypothesis 3 by comparing the preference structure of the innovator and non-innovator groups. If hypothesis 3 is true, the attribute importance measures of the innovator group will center on key attributes, while those of the non-innovators will be spread evenly

among all attributes. To identify the subjects' preference structure, we ran a conjoint experiment.

Subjects in the conjoint task saw 16 profiles for each product category and revealed their preference. As soon as they finished the conjoint work, they answered questions regarding consumer innovativeness and demographic traits. Using their evaluations we computed part-worths and obtained the attribute importance distribution for each subject. Then, we compared whether the distributions were different between the innovators and non-innovators, as suggested. An independent sample t-test was conducted for testing hypothesis 3.

Innovators vs. Non-innovators

According to Rogers (1962), about 2.5% of consumers are innovators. If we divide all the subjects into innovators and non-innovators according to this criterion, the size of the innovator group is too small to obtain sufficient number of subjects for the group. Therefore, we combined innovators and early adopters and treated them as an innovator group. In this case, the rate of the innovators group came under 16% of the total consumers and non-innovators are made up of 84% of consumers. To classify subjects into innovator and non-innovators we first rank ordered subjects with respect to innovativeness scores and selected the top 16% of the subjects for innovators. For the non-innovator group, we randomly selected the same number of subjects from the remaining subjects.

Subjects

College students, who are enrolled in a business course in a major university located in Seoul, Korea, participated in these experiments. 170 students participated in an experiment for hypothesis 1 and 2 testing, among them 150 valid samples were used for analysis. Another 160 students participated in the conjoint experiment, and 148 valid samples were used to obtain conjoint part-worths.

Products

Because the subjects of this study were college students, "laptop computers" and "cellular phones" were chosen as the stimulus products that are usually of particular interests to them. According to Hauser and Wernerfelt (1990), when the whole set consists of 6~47 brands, the maximum size of the consideration set is about 7 brands. Thus, we presented 5 brands per product category, considering the evaluation burden of the subjects.

In the experiment, before asking for the product evaluation by subjects, the experimenter screened whether they understood each described product attribute adequately. Ratneshwar, Shocker, and Stewart (1987) mentioned that brand names included in the consideration set could have an influence on the choice and evaluation of other products. To avoid this influence, brand names were excluded and only the product attributes were described and presented. To increase the reality of the experiment, a description of products was made up in reference to real brands in the current market.¹ The presented products were evenly included in terms of quality level close to a uniform distribution from the best level to the bottom level, and represented various product attributes. Products for hypothesis 3 testing are likewise laptop computers and cellular phones, but the representative product attributes and levels were

defined according to the standard procedure of conjoint analysis and 16 independent profiles among all possible profiles were chosen using the Marketing Engineering software program (Lilien and Rangaswamy 2003).

Measurement

For the measurement of brand consideration, we drew on Lapersonne et al. (1995). We asked the subjects to choose all the brands they would consider to purchase among the presented brands. The number of considered brands for each subject was then obtained by counting the number of brands chosen by answering this question. Regarding similarity measure, a paired comparison between brands was used and subjects answered on a 5-point interval scale to the question of "Evaluate the similarity between the following paired brands." Based on the evaluation, the similarity score of the consideration set for each subject was calculated following equation (1). If only one brand was considered, the case was excluded from the score calculation because it was impossible to compute the similarity for only one brand.

$$\text{Similarity score of consideration set} = \frac{\sum_{i,j,i \neq j}^n (a_i, b_j)}{n} \quad \text{----- (1)}$$

where, n: total number of pairs,
(a_i, b_j)= (b_i, a_j) : similarity score of brand i and brand j,
i, j: subject's considered brands

For testing hypothesis 3, we developed a skewness measure as shown in equation (2).

$$\text{Skewness score of attribute importance weights} = \frac{\sum_i^n (a_i - \bar{a})^2}{n} \quad \text{----- (2)}$$

Where,

n: total number of product attributes,

a_i : attribute importance weight of attribute i,

$$\sum_{i=1}^n a_i = 100,$$

$\bar{a} : \frac{100}{n}$: (if the total number of attributes is 5, then $\bar{a} = 20$)

If all product attributes are equally important, then the skewness measure is zero. As the importance of some attributes increases, the value of skewness measure increases.

For the measurement of "innovativeness," we used the question items of "general innovativeness items" and "domain-specific (product-specific) items" from the ACR Handbook of Marketing Scale.² Innovativeness scores for the subjects were the average scores of all the question items. One innovativeness measurement item was described in the opposite direction to check the reliability of answer. The subjects were asked to reveal their ratings of conjoint profiles on 7-point interval scales.

RESULTS

Reliability Test

Because consumer innovativeness is a major concept of our study, we checked the reliability of the innovativeness measurement items. The results of the reliability test show that our measure-

¹The products and product attributes were selected/composed in reference to Internet shopping mall site www.danawa.com and www.empas.com. We also consulted with sales people of major appliance stores regarding brands and important product attributes.

²We referred to Leavitt and Walton(1998) for the general innovativeness scales, while we used the scales of Goldsmith and Hofacker (1991) for the domain-specific innovativeness.

TABLE 1
Reliability Coefficient of Innovativeness Measurement Items

Variables	Number of Measurement Item	Cronbach' s α
Product-specific innovativeness (Laptop computer)	6	.8843
Product-specific innovativeness (Cellular phone)	6	.7718
General innovativeness	24	.5463

TABLE 2
Size Difference of Consideration Set (general innovativeness scores)

Classification according to general innovativeness scores		Number of cases	Mean	S.D.	t	p
Laptop Computer	Innovators	24	2.25	.5647	.526	.601
	Non-innovators	24	2.333	.5326		
Cellular Phone	Innovators	24	2.13	.99	1.727	.091
	Non-innovators	24	2.63	1.01		

TABLE 3
Size Difference of Consideration Set (product-specific innovativeness scores)

Classification according to product-specific innovativeness scores		Number of cases	Mean	S.D.	t	P
Laptop Computer	Innovators	24	1.88	.68	5.557	.000
	Non-innovators	24	3.00	.72		
Cellular Phone	Innovators	24	1.71	.91	3.92	.000
	Non-innovators	24	2.71	.86		

ments are reliable. As shown in Table 1, Cronbach's alpha values for product-specific innovativeness and general innovativeness items are .8843, 7718 and 5463, respectively, which indicate high levels of reliability. Furthermore, the reversed measurement item shows a significantly high correlation with the other measurement items (6 out of 8 correlations are significant at the 5% significance level).

Quality Distribution of Products

In our study, we devised five stimulus brands for each product category close to a uniform distribution, from top to bottom. However, because the quality distribution of brands may affect the results of our hypothesis testing, we checked the uniformity of quality distribution. In our experiment, we asked which brand they would purchase finally. If the presented brands are close to being uniform, we may expect that more innovators will choose (buy) upper level brands, while the opposite is true for non-innovators. The results confirm our expectation.

Results of Hypotheses 1 and 2

For testing hypotheses 1 and 2, we divided the subjects into innovators and non-innovators and then tested whether (1) the size of consideration set of the innovators was significantly smaller than

that of the non-innovators and (2) the innovators' considered products were significantly more homogeneous. We examined the difference between the two groups by an independent sample t-test.

As shown in Table 2 and Table 3, overall, we see that the average size of the consideration set of innovators is smaller than that of non-innovators. But, when we divided the subjects with the general innovativeness scores, the difference between the two groups was not significant at the 5% significance level (cellular phone p=.091, laptop computer p=.601), while significant differences for laptop computers and cellular phones existed at the 5% level in the case of the separation of two groups with the product-specific innovativeness scores (cellular phone p=.000, laptop computer=.000). Therefore, hypothesis 1 is accepted when consumer innovativeness is measured by the product-specific innovativeness scales.

Regarding hypothesis 2, as shown in Table 4, when groups are classified with the general innovativeness scores, the consideration sets of innovators are more similar than those of non-innovators, but, not significant at the 5% significance level (laptop computer p=.526, cellular phone p=.373). However, as shown in Table 5, when groups are classified with the product-specific scores, consideration sets of innovators for laptops and cellular phones have a significantly larger similarity than those of non-innovators (laptop

TABLE 4
Similarity Difference between Innovators vs. Non-innovators (general innovativeness scores)

Classification according to general innovativeness scores		Number of cases	Mean*	S.D.	t	P
Laptop Computer	Innovators	24	3.375	.8643	.639	.526
	Non-innovators	24	3.222	.7904		
Cellular Phone	Innovators	24	3.132	.7629	.900	.373
	Non-innovators	24	2.923	.8398		

* The larger mean value indicates higher similarity.

TABLE 5
Similarity Difference between Innovators vs. Non-innovators (product-specific innovativeness scores)

Classification according to product-specific innovativeness scores		Number of cases	Mean*	S.D.	t	P
Laptop Computer	Innovators	24	4.042	.7883	4.231	.000
	Non-innovators	24	3.097	.7581		
Cellular Phone	Innovators	24	3.431	.9311	1.947	.053
	Non-innovators	24	2.944	.7965		

* The larger mean value indicates higher similarity.

computer $p=.000$, cellular phone $p=.053$). Therefore, hypothesis 2 is accepted when innovativeness is measured by the product-specific innovativeness scales.

To further test our hypotheses, we ran a multiple regression. As shown in Table 6, the results support hypotheses 1&2. The product-specific innovativeness has significant effects on both size and similarity of consideration sets.

Results of Hypothesis 3

In hypothesis 3, we hypothesized that innovators consider similar products with strong key attributes, and, on the other hand, non-innovators include various products with each product's own strong attributes into their consideration set. We tested hypothesis 3 by comparing the attribute importance distribution of innovators and non-innovators. As shown in Table 7, the t-test results, using the skewness measure (equation 2), show that the attribute importance distribution of innovators is more skewed towards key attributes than that of non-innovators. However, the difference is significant at the 5% significance level for cellular phone only (laptop computer $p=.545$; cellular phone $p=.000$). To check further, we performed MANOVA about the simultaneous differences of the attributes importance weights between the two groups. The difference is significant at the 5% significance level for cellular phones only (laptop computer $F=.965$, $p=.084$; cellular phone $F=5.03$, $p=.001$). Therefore, hypothesis 3 is accepted for cellular phones only.³

Although both innovators and non-innovators equally put considerable weight on the price for cellular phones, innovators put a concentrated weight on "LCD resolution." On the other hand, non-innovators put a considerable weight on the other attributes, such as "digital camera" and "talk time and standby," etc.

CONCLUSION, IMPLICATION AND LIMITATION

This study investigated the influence of consumer innovativeness on his/her consideration behavior. We compared the shape of the consideration set between innovators (high-tech marketers' major target customers) and non-innovators.

The results of hypotheses testing showed that innovators form a smaller size of consideration set and put more similar products into their consideration set as we expected. In addition, the test results of hypothesis 3, comparing the attribute importance distributions, showed that innovators put more weights towards key attributes, which implies that they are more likely to consider brands with strong key attributes. In light of Roberts and Lattin (1997) and Hauser and Wernerfelt (1990), our study suggested interesting results. While Hauser and Wernerfelt (1990) indicated that the probability of consideration of two brands is independent, Roberts and Lattin (1997) found that similar two brands are simultaneously considered in the cereal market. Our study suggests that this issue may depend on consumer segments of interest. In our study, innovators formed more homogenous consideration sets than non-innovators.

The results of this study also give important strategic implications for marketers of high-technology products who are targeting innovators mainly. According to the results, innovators have a relatively smaller consideration set, so a concentrated marketing effort is needed to make innovators consider their brands. Furthermore, it implies that if a marketer wants to increase the consider-

³We think that these results are due to the subjects' different levels of prior product knowledge. The subjects (Korean students) seem to have superior knowledge about cellular phones than laptop computers.

TABLE 6
The Effect of Innovativeness on Consideration Set Size & Similarity

Hypothesis		Coefficient		T	P
		B	S.E		
Hypothesis 1 (Consideration set size)	Constant	3.264	.225	14.532	.000
	PI	-.247	.036	-6.810	.000
	GI	-9.3E-02	.059	-1.574	.116
	Dummy	9.164e-02	.084	1.093	.275
Hypothesis 2 (Similarity)	Constant	3.461	.317	10.919	.000
	PI	1.50	.054	2.763	.006
	GI	8.855E-02	.083	1.069	.286
	Dummy	.543	.118	4.613	.000

*PI=Product Innovativeness, GI=General Innovativeness, Dummy=(Laptop computer, Cellular Phone)

TABLE 7
Skewness Difference between Innovators and Non-innovators

Classification according to product-specific innovativeness scores		Number of cases	Mean*	S.D.	t	P
Laptop Computer	Innovators	24	604.67	345.96	.610	.545
	Non-innovators	24	527.71	512.44		
Cellular Phone	Innovators	24	1374.29	710.44	3.454	.001
	Non-innovators	24	776.17	463.49		

* The larger mean value indicates higher skewness.

ation rate of innovators, they should differentiate (upgrade) their products from their competitors in key product attributes rather than in other product attributes. If a marketer tries extreme differentiation from leading competing brands (differentiate in terms of all product attributes), his/her brand might not be included in the consideration set of innovators, which means less possibility to be chosen by them.

Although this study has been designed and performed very strictly, there are still limitations.

First, we may point out sample problems. Our sample consisted of students attending a major university in Korea. Future research may test US samples, possibly including diverse job groups. Also, in our study, early adopters were included in the innovator group due to the sample size problem. In future studies, researchers may form "pure innovators" by expanding the sample size drastically. Second, one may argue that instead of dividing subjects into innovators vs. non-innovators, it may be better to divide subjects into high-innovative and low-innovative groups. We prefer innovator vs. non-innovators distinction because innovators' behavior is emerging as of particular interest to high-tech marketers recently. However, although the results have not been presented in this paper, we actually performed another analysis by dividing subjects into high and low groups (divide subjects into two groups using the mean of the innovativeness scores). The results indicated a larger difference in terms of size and similarity between

high and low groups than the original two groups (innovators and non-innovators). Finally, although we specified theoretical drivers underlying the suggested hypotheses, we did not directly measure them (used innovativeness measures as proxies for them). Future studies may directly measure the drivers to better explain the rationale for the observed behavior.

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Materialism in Children and Adolescents: The Role of the Developing Self-Concept

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EXTENDED ABSTRACT

Materialism among today's youth is a topic of increasing interest among educators, parents, consumer activists, and government regulators. The topic of materialism has garnered interest for several reasons. First, longitudinal studies of materialism among college and high school students show dramatic increases in materialistic values (Korten 1999). Second, the popular press has characterized our children and adolescents as "hyper-consumers," spending approximately \$23.4 billion and influencing an additional \$485 billion of household purchases each year (McNeal 1999). Third, the astounding increase in marketing aimed at children has prompted parental concern about materialism, with 87% of parents of children aged 2-17 feeling that marketing aimed at children makes them too materialistic (www.newdream.org, 2002).

Surprisingly, debates about the development of materialistic values in our culture are largely uninformed by sound research. While explanations abound in the popular press and among consumer activists and social critics, there is no empirical research to support any of these claims or attributions of responsibility. Empirical work on the topic of materialism exists, but it has focused primarily on materialism among adults. In the area of consumer behavior, a number of researchers have examined materialism among adults, with interest centering on personality or social characteristics that are correlated with materialism (e.g., Belk 1985; Fournier and Richins 1991; Richins 1994; Richins and Dawson 1992). Only a handful of investigations have examined materialism among children and adolescents, with interest centering on demographic and environmental factors that are correlated with materialism (e.g., Achenreiner 1997; Goldberg, Gorn, Peracchio, and Bamossy 2003; Moschis and Moore 1979; Rindfleisch, Burroughs, and Denton 1997). These studies have produced some intriguing findings. Yet, a significant gap remains in understanding the process that drives the development in materialism among children and adolescents (John 1999).

The purpose of this paper is to address this gap in understanding how materialism develops in children and adolescents. We propose that changes in children's and adolescents' self-concept, which are fueled by increasing social-cognitive abilities, lay the groundwork for the adoption of materialistic values. Relying on concepts from the materialism and child development literatures, we forward hypotheses that relate components of the self-concept to materialism. We then test these relationships in an empirical study with children and adolescents ages 8-18.

In doing so, this research represents the first in-depth investigation of the development of materialism in children and adolescents. Although prior work has laid some important foundations in terms of measuring materialism and reporting a number of demographic (e.g., gender, income) and environmental factors (e.g., parental communication style, peer influence) correlated with materialism, this research is the first to provide a conceptual understanding for why materialism develops. By linking the developing self-concept to materialism, we uncover a general process capable of explaining why certain children and adolescents (and even adults) are particularly vulnerable to developing materialistic values.

In addition, this paper develops new empirical methods for studying materialism in children and adolescents. Significant ad-

vances have been made in developing reliable scales for measuring materialism in children (see Goldberg, Gorn, Peracchio and Bamossy 2003), yet there is still a need to develop multiple methods for measuring the construct of materialism with children and adolescents. Materialism is a complicated construct to measure in adults, and indications are that it is even more difficult to measure in children, especially with rating scales that try to capture thinking about the value of possessions in their lives. In this study, we incorporate several ways of studying materialism using both quantitative scales and new qualitative methods. Specifically, we develop qualitative methods based on collage techniques (see Chaplin and John 2005) and sorting methods to tap into the materialism construct in a broader and fuller way than what is currently available.

Our pattern of findings is counterintuitive for several reasons. First, most people would argue that materialism would be heightened either in the youngest age group (i.e., 3rd/4th graders) or the oldest age group (i.e., 11th/12th graders). On the one hand, some would argue that the youngest age group would be most materialistic because they think in concrete terms and therefore would *want* to *have* a variety of material things. On the other hand, some would argue that the oldest age group would be most materialistic because they have been exposed to more products. Yet, we find that materialism is heightened in the middle age group (i.e., 7th/8th graders), a time when individuals learn to think abstractly about themselves and about their world. It is also a time when they experience a major dip in self-esteem. Second, it is surprising to see that the level of materialism significantly decreases during late adolescence rather than stay constant throughout adolescence. Again, the level of self-esteem explains our pattern of findings. That is, by late adolescence, individuals experience a rebound in their self-esteem. Thus, self-esteem seems to be intricately tied to a child's level of materialism.

In summary, our research contributes to our understanding of materialism in several ways. First, our research provides the first conceptual account of how materialism develops throughout childhood and into adolescence. We provide a framework that describes developments in the child's self-concept as the impetus for the development of materialistic values. Second, our research provides a new methodology to study materialism in children and adolescents that does not rely on rating scales or in depth verbalizations. Our collage technique promises a method for measuring materialism that allows even young children to get across what is important to them, including material possessions. In addition, this technique is also engaging and interesting for a much older population of adolescents, which is a rare situation for any measurement technology used across such a wide age span. Third, our research provides a new technique to measure components of the self-concept. Rather than rely on established rating scales from the Psychology literature, as would traditionally be appropriate for adults, we present these scales in a more engaging format—as a sorting task. Our sorting technique provides a different approach to measuring constructs such as self-monitoring and self-esteem, more amenable with a children's sample. Thus, our research makes both theoretical and methodological contributions to our current understanding of materialism.

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A Multi-Perspective Approach to Family Communication and Parental Control of TV Viewing

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EXTENDED ABSTRACT

Background

The purchasing power of children has grown steadily for more than three decades in response to increased sources of income among children, increasingly diverse and complex family structures, and the continued growth of dual income families and time-pressed parents (McNeal 1992; 1998; Snider 2002).

Research on family communication has consistently utilized a single respondent, with early research generally focusing on the ratings of adolescents (Moschis and Mitchell 1986) and later research examining the perceptions of mothers of younger children, generally under the age of 10 (Carlson, Grossbart, Tripp 1990; Rose; Bush, and Kahle 1998). One of the key findings in the children's influence literature is the discrepancy between adolescent' and parent' ratings (Beatty and Talpade 1994; Belch, Belch, and Ceresino 1985; Foxman and Tansuhaj 1988; Foxman, Tansuhaj, and Ekstrom 1989). The importance of family communication, however, has only been established utilizing a single rater (Carlson, Grossbart, and Tripp 1990; Carlson, Grossbart, and Walsh 1990; Rose, Bush, and Kahle 1998), leaving open the question of potential differences across respondents. This study investigates the relationship between family communication and parental control of television viewing and the degree that these perceptions converge or diverge across family members.

Method

A questionnaire was distributed to married couples with at least one child between the ages of eight and twelve years old in the Northern part of Israel. The children took the questionnaire to their parents. Each of the family members filled out the questionnaire separately and the questionnaires were sent back to the school with the child. Of the 116 questionnaires distributed, 92 complete sets of responses were returned for a response rate of 79%.

Two dimensions of family communication were assessed with Moschis, Moore, and Smith's (1984) scale, which included a total of ten items. Typical items for these dimensions were: "I tell my child that buying things that he/she likes is important, even if others don't like them," for concept orientation, and "I tell my child what things he/she should buy" for socio-orientation. All of the items were measured on a 5-point scale with 1 being very seldom and 5 being very often.

Control of TV viewing was measured by the following items: "I place restriction on which programs my child can watch on TV," "...when my child can watch TV," "...how many hours each day my child can watch TV." The scale was measured by a 5-point scale ranging from "never" to "always."

A multitrait/multimethod (MTMM) approach was used as an analytic method of examining the patterns of agreement and disagreement among respondents on variables of interest (Campbell and Fiske 1959).

Findings

This study examined the consistency of perceptions between mothers, fathers, and their children regarding family communica-

tion and parental control over their children's television viewing. The results generally supported the validity of the measures and showed agreement between family members.

The correlation between children's ratings of the extent that their parents engaged in socio-oriented communication and controlled their TV viewing was high and exceeded some of the corresponding values in the validity diagonal. Children may generalize parental restrictiveness and have difficulty differentiating between parental restrictions in one area (e.g., control of TV viewing) from parental restrictiveness in general. Thus, the high correlation between children's perceptions of socio-oriented communication and control of TV viewing may indicate that children tend to experience parental restrictiveness as a general trait.

The pattern of relationships found was generally consistent across family members. However, the significance of two correlations (concept- and socio- oriented communication, and concept-oriented communication and control TV viewing) differed. Socio- and concept-oriented communication were independent (not significantly correlated) for mothers and fathers but negatively correlated for children. Again, children may experience parental communication in a more unidimensional fashion than their parents.

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Children's Responses Toward Gender Role Stereotyped Advertisement

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EXTENDED ABSTRACT

There has been a great deal of controversy surrounding the use of sex role stereotypes in advertising directed to children. Critics claim that marketers encourage sex role stereotyping by creating gender specific products, such as Mattel's Barbie and Hasbro's G.I. Joe. Toy makers, on the other hand, claim that their products reflect rather than create existing societal conceptions of gender roles. Previous research has utilized content analysis to document the existence of gender stereotyping in advertising (Hoek and Sheppard 1990; Hoek and Laurence 1993), but has not directly examined the effectiveness of sex-role-specific advertising directed toward children.

This study examines the effectiveness of agentic (stereotypically masculine) versus communal (stereotypically feminine) advertising targeted to children between the ages of 5 and 6 and 9 and 10. These age groups represent two different stages of sex role development, rigidity and flexibility, respectively (Trautner 1992), and should differ in their reaction to stereotypically masculine and feminine advertising appeals. Agentic appeals are stereotypically masculine and focus on competition, instrumental control over the environment, and winning. Communal appeals are relationship oriented and focus on cooperation, verbal communication, and nurturance. The effectiveness of these appeals has not been examined in marketing among children, despite a long tradition of gender role research in consumer behavior and a substantial conceptual foundation examining the development of children's gender role orientations in psychology.

Background

Numerous studies have found differences among boys and girls. These studies indicate that boys generally hold more traditional sex role attitudes than girls (Canter and Ageton 1984). Most studies still indicate that girls are less devoted to same gender activities than boys are (Turner, Gervai, and Hinde 1993). Girls' preferences for traditionally male sex-typed activities, moreover, increased from kindergarten to third grade, and from sixth grade to eighth grade. At the same time, their interest in female sex-typed preferences decreased from kindergarten to eighth grade. Although declining sex-typed preferences also appeared among boys during this period, these differences were less pronounced (Etaugh and Liss 1992).

Studies generally also show a high level of sex-role stereotyping among young children. As Huston (1983) indicated even very young children can distinguish between genders. Preschool children, for example, associate high power adjectives with boys such as being strong and fast, as well as aggressive and cruel to males, while adjectives such as needs help, cries a lot, affectionate, and nice are attributed to girls.

Developmental studies have generally found a reduction in children's stereotyping as they mature. Trautner (1992) showed that children's development of sex roles occurred in sequential order starting with awareness, rigidity, and finally flexibility. Children had high sex-typed preferences by the time they were seven years old. Between the ages of 7 and 10, their sex-typed preferences became more flexible.

Method

This study sampled children in kindergarten (from 5 to 6 years old) and third and fourth grade (from 9 to 10 years old). Storyboards were used as the stimuli in this experiment. The storyboards were drawn and colored by an artist. This was a process, which took several iterations to complete. The final storyboards included two sets for each product (one with an agentic theme and one with a communal theme). A voice-over was used with the storyboards. After pre-testing the recording, one of the male and one of the female participants were selected to record their voice-over to be used for the study. The gender of the voice-over for each storyboard was counterbalanced. A pool of products was selected for the study based on a review of the literature and discussion with various people. The "cracker" was chosen as a product for the main study.

Advertising preferences were measured with children's attitudes toward the advertisement. Items from MacKenzie and Lutz (1989) and Mitchell and Olson (1981) were modified. All items for this scale were measured with a 5-point scale, where 1=not at all and 5=a lot. In addition to the attitude toward the ad items, children's attitude toward the brand was also measured.

The experimental procedure was based on a 2 (sex of the child: male vs. female) x 2 (sex role depiction in the commercials: agentic vs. communal) x 2 (age group: kindergarten vs. third and fourth grade) between subjects factorial design.

Findings

The results indicate that children, particularly girls do exhibit greater flexibility in their sex role orientation as they mature. Girls' attitude toward the communal advertisement decreased from kindergarten to third and fourth grade. A similar directional pattern was found for boys concerning the agentic ad. However, the results were not significant.

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Age Differences in Children's Navigation and Information Processing of Web Sites

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ABSTRACT

This article empirically investigates the influence of interface design on children's information processing of web sites. A research model is advanced that conceptually integrates theories from a variety of disciplines, including developmental psychology, consumer behavior, and human computer interaction (HCI). Younger children, between the ages of 7 and 9, recall more content with a learning cue and can search more accurately when using a map. Older children, between the ages of 10 and 13, can recall Web content without learning cues and can search accurately with either a map or a content list. Implications for public policy, education, and business are discussed.

WORKING PAPERS

“Anticipating Returns: Preemptive Compensation As a Double-Edged Sword”

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Product returns are a costly experience for consumers and retailers alike. U.S. retailers received over \$100 billion in returns annually. Such costs are especially salient to consumers in remote retail environments where returns seem both more likely, due to a lack of “touch and feel” experience with the product prior to purchase, and more difficult, due to the necessity for shipping. Consumers return products for many reasons, but the one of the most common is that the product’s condition was worse than expected (Dubbs 2001). Paradoxically, extant research demonstrates both that consumers prefer lenient return policies and that they can experience suboptimal decision outcomes under such policies (Gilbert and Ebert 2002; Wood 2001).

Clearly, strategies that effectively attenuate return rates are of interest to both remote retailers and consumers. An innovative policy strategy recently observed in the marketplace (most commonly in e-commerce venues) is the use of non-solicited compensation to consumers for products that fall below average quality standards. In other words, retailers compensate consumers for poor products *before* consumers have the opportunity to complain or seek compensation and this compensation may arrive concurrently with the delivered product or service. We term this practice, *preemptive compensation* (PC).

Retailers who engage in preemptive compensation likely see such a strategy as benefiting consumers both financially and through “hassle” reduction. Retailers may also see this practice as self-enhancing as it communicates a commitment to quality, forestalls product return, and may increase customer loyalty.

However, while retailers might expect that the seemingly generous practice of PC will result in increased consumer satisfaction, we posit that non-solicited compensation can also serve to decrease satisfaction under certain conditions thus acting as a double-edged sword for the retailer. In this research, we describe and experimentally test two theoretical routes through which PC may negatively impact consumer satisfaction.

Two Routes: Emotional Venting versus Equity Signaling

Will retailers reap the rewards of preemptive compensation in the form of consumers’ increased satisfaction and loyalty? Based on two distinct research streams from economics and social psychology, we can develop hypotheses that suggest otherwise.

Emotional venting. A robust finding in social psychology about the study of negative affect is that people who feel bad will act to “repair” their bad mood. Such behaviors are labeled as mood maintenance or mood regulation effects (e.g., Larsen 2000). Thus, the act of complaining may serve some positive role in allowing individuals to release and “move on” from negative emotions. This benefit may be further impacted by individual difference characteristics such as assertiveness or aggressiveness. What happens, then, when retailers shut the tap on cathartic complaint? By anticipating and responding to product complaints before they happen, firms may take away the reasonable opportunity to vent negative feelings and keep consumers from working through feelings of dissatisfaction, leading to less favorable post-purchase evaluations.

Economic Signaling. It is well understood that retailer actions or advertising can signal a variety of messages to the consumer (e.g., Kirmani and Rao 2000; Simester 1995), and one might reasonably assume that PC might similarly send a signal to the consumer recipient. However, we posit that PC evokes two contradictory signals. First, PC may send a positive signal of the retailer’s commitment to an internally held standard of quality. Conversely, the PC offer may signal the unambiguous substandard quality of the received good relative to other comparable goods.

While each theory predicts the same overall effect, we can identify one difference, quality ambiguity, which will guide the design of a critical test. If the equity signaling theory holds, we should observe a cross-over interaction between PC and the presence/absence of another viable signal of quality. If another clear signal exists (unambiguous flaw), then PC will not hurt the product’s evaluation and will only have its intended positive effect in compensating the consumer for the unambiguous flaw. However, when no other signal exists (ambiguous flaw), the PC will exert a negative influence by explicitly signaling sub-standard quality. The emotional venting account does not predict this cross-over interaction. If PC negatively impacts satisfaction by thwarting the consumer’s desire to vent negative emotions through the complaint process, this effect should influence satisfaction regardless of other quality signals.

Study 1

Using an experimental methodology, we seek to create a test of the competing alternatives by manipulating the ambiguity of the product’s flaw in order to observe the pattern of results concordant with an equity signaling explanation or an emotional venting explanation.

A 2 (PC versus No PC) x 2 (Flaw Ambiguity) between-subjects design tested the influence of preemptive compensation on product evaluation. Participants were given a scenario where they ordered a used textbook online. They received a simulated mailed package containing a textbook and condition appropriate materials, and were then asked to evaluate the book. One hundred and fifty university students participated for course credit.

Results and Discussion

These results support an equity signaling explanation over an emotional venting account. Consistent with equity signaling, the PC x Flaw Ambiguity interaction was significant, showing that PC only helped when the product’s flaw was unambiguous and, when the product’s flaw was *ambiguous*, PC actually hurt satisfaction. Further, low and high scorers on Richin’s (1983) Assertiveness and Aggressiveness scale did not show evidence of differentially impact on satisfaction.

This research demonstrates that a retailer action aimed at forestalling product return through preemptive compensation may have negative consequences for purchase satisfaction. Participants who received PC reported decreased satisfaction with the purchase *only* when the product's flaw was ambiguous. This suggests that the PC signaled that an inequitable exchange had taken place and provided the consumer with a clear message that they had received a flawed product. However, when the product was more obviously flawed, the PC—as a signal of poor quality—was redundant. In this case, the PC had its intended positive effect on purchase satisfaction.

Conclusion

This research explores the practice of preemptive compensation and its potentially negative effect on consumer satisfaction. Empirical support from one major study demonstrates support for one of two competing theoretical explanations. A second study is currently under way to further investigate the role of signaling in preemptive compensation. This research is likely to appeal to a fairly wide range of ACR members, especially those with research interests in signaling, product return, and e-commerce practices.

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"Eat Bitter Food and Give Birth to a Girl; Eat Sweet Things and Give Birth to a Cavalryman: Multicultural Health Care Issues for Consumer Behavior"

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Abstract

Health care providers have recognized the importance of examining the multicultural influences affecting subcultural consumers' expectations and preferences. In many cases, products are used and hold special meanings that are unfamiliar to U.S. health care providers, potentially leading to conflict and misunderstanding. Customs are learned and brought to the United States that are thought to affect one's health and well being, yet they may be unknown or even interfere with commonly-accepted health care practice. The present paper provides an overview of the potential conflicts that can occur, plus suggests a framework for analysis, prediction, and understanding.

Paper Overview

The 2000 Census Bureau data indicate that 17.9 percent of the U.S. population aged 5 and older speak a language other than English as their primary language at home. Additionally, more than 11 percent of the people living in the United States were not born here, representing approximately 32.5 million people, as of March 2002. One significant part of such cultural heritage is found in the area of health care.

Multicultural folk remedies and healing practices are widely trusted within many subcultural communities, although they may be based on unfamiliar value systems. For instance, Hispanic communities in the Southwestern United States believe in a folk medicine system based on restoring harmony when disease occurs, most likely caused by an imbalance between hot and cold principles (Neff, 2004). Practices like these are often unfamiliar to U.S. health care providers, potentially leading to conflict and misunderstanding and possibly interfering with commonly accepted health care practice. As a result, health care providers have recognized the importance of examining the multicultural influences affecting subcultural consumers' expectations and preferences.

Medical care is well ingrained as a system of "things that must be done" in order to maintain one's healthfulness. The aspects of a subculture's medical care practices may not be viewed as discretionary, and instead become necessary for medical communities to understand. In some cases, the customs, rituals, and use of products associated with a specific ailment or condition are likely to be unfamiliar or even run counter to approved medical practice in the United States. It is likely that "resistance" may be encountered with unfamiliar health care practices that are not understood or seem to run counter to subcultural norms.

An assimilation model assumes that immigrants will tend to change their behaviors towards that of the host culture (Gentry, Jun, and Tansuhaj 1995). This is limited, since immigrant consumer acculturation is found to include "consumer movement, translation, and adaptation" (Penaloza, 1994). As Penaloza found in her work, Mexican immigrants assimilated U.S. consumption patterns, maintained aspects of the consumption patterns learned in their homeland, and resisted some aspects of both the new and old cultures (Penaloza and Gilly 1999). Assimilation is not an automatic progression towards the dominant host culture, which is certainly seen when analyzing health care in subcultural settings. I propose that Penaloza's framework can be usefully adapted when considering health care acculturation.

Kohn (1995) suggests that there are four types of barriers that are likely to impact health care acceptance, quality, and cooperation. These are based on differences in the cultural belief systems that form the backbone of the core value system. These barriers have great implications for consumer research into providing health care for multicultural communities.

1) *American medicine is an unfamiliar culture.* American medical care is based on Western cultural values and beliefs. For instance, many subcultures believe that illnesses are related to spiritual or religious beliefs and may be caused by some imbalance or misfortune. American medicine is based on science, with no causality attached to other beliefs. In addition, American medicine is based on a “master of destiny” approach, assuming that individuals can affect their health based on what they do. This is in great contrast to the notion that fate determines health. For instance, Flores et al (1999) report that “fatalismo” in Hispanic populations can affect clinical care. Fatalismo is the belief that an individual can do little to alter fate. Such a perspective can lead an individual diagnosed with a serious disease such as cancer to interpret it as a death sentence, rather than as a reason to seek and follow through with recommended treatment.

2) *American medicine is “delivered” primarily in Western communication styles.* The communications systems in medical care facilities are based on American communication styles, relying heavily on use of English, familiarity and access to telephones, and acceptance of Western style conversations. However, English may be understood only to a limited degree, greatly affecting access to health care (Flores, Bauchner, Beinstein, and Nguyen 1999). Some cultures find it unacceptable for male doctors to treat female patients in certain illnesses. While many medical systems have introduced courses in cultural communication and have recruited staff with various language skills, there still are many instances of grave miscommunication. Communication must be examined in terms of words, gestures, use of “things”, tone of voice, space used, formality, and so forth:

An elderly Thai man who immigrated to the United States . . . suffers from migraine headaches. He visits a clinic and, struggling with English, explains his symptoms to the nurse on duty. He notices that the nurse is using a red pen to record his medical history. Suddenly, the patient stiffens and his hands begin to shake. The nurse is unaware that red ink is used in criminal proceedings in Thailand (example from Chapman 1995).

3) *Feelings that one’s own subcultural practices are not understood or respected.* Patients in numerous subcultures rely on traditional folk medicine remedies. In many cases, these use specific food items as part of a cure. They are available, inexpensive, and acceptable. When mentioned to the American medical staff, however, they may be met by disrespect, skepticism, and rejection, rather than by attempts to understand the practices. For instance, it is common for pregnant women to experience cravings for certain types of foods. Some cultures go a step further by relating the foods that are eaten with the gender of the baby in a causal way.

In Turkey, custom has it that women who touch particular objects and eat certain foods are likely to experience cravings for specific foods. The substances that women eat are thought to affect the gender of their unborn child, as seen in the two expressions: “Eat bitter food and give birth to a girl; eat sweet things and give birth to a cavalryman”. Pregnant women are expected to avoid eating fish, rabbit, sheep, or chewing gum, while they are encouraged to eat apples, green plums, and grapes (“Traditions to Do With Birth”, *Ministry of Culture and Tourism, Republic of Turkey online, 2004*).

4) *Trust can be difficult to build.* Health care practices that are learned in one’s country of origin may form a fundamental part of an individual’s belief system. The practices may draw on and intersect with learned gender and family roles. Thus they may form the basis for trust in the familiar health care norms, and skepticism and distrust of American practices because of their unfamiliarity. Subcultural members may also have friends and relatives who have had unsatisfactory experiences from American health care providers, reinforcing the distrust and rejection that is felt.

This paper proposes a framework for analysis built upon the intersection between 1) the assumptions raised by U.S. health care professionals and 2) the components of Penaloza’s assimilation analysis. A central component of this framework is the range of possible responses by subcultural consumers. Such responses can include maintaining their own health practices, changing to and accepting U.S. health care practices, and/or rejecting each in favor of a combination of subcultural with U.S. practices. While such options are likely to be identified in other assimilation decisions, such as adoption of U.S. food and clothing practices, an important consideration is that when health care is considered, choices of rejection and/or hybrids may be dangerous to the patient’s health. Propositions are developed and implications for research are discussed.

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“Strategic Expectation Management and Judgments of Satisfaction”

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The traditional satisfaction paradigm of confirmation-disconfirmation of expectation predicts that confirmation of one’s expectation for an impending outcome should lead to satisfaction with the outcome. We suggest that this prediction may not always hold when one sets a low expectation level in order to minimize regret and disappointment. Specifically, we propose that one’s awareness of having set a low goal, or having followed an insufficient search process is likely to lead to dissatisfaction even when the initial expectation level is met. Preliminary study results are encouraging. Results from two studies show that when people are made aware of having set a low expectation, their satisfaction level is significantly lower than when they set a high expectation, holding the outcome constant.

“Consumption Fantasies: A Phenomenological View”

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In this age of consumerism, consumer fantasies are widely held. Advertisements and marketing media frequently refer to fantasy vacations, dream homes, ultimate sports cars and fairytale weddings. BMW promotes its car as the “ultimate driving machine” and a current Disney advertising campaign shows a dog dreaming of enjoying himself at the amusement park with the copy, “We all have our dreams.” Do we imbue products with the ability to make our non-consumer dreams come true is this all there is to our consumer fantasies, or is there more? Hallmark is currently running a campaign showing cards as having the power to transform their social relationships. Television shows like the classic *Lifestyles of the Rich and Famous* and the more recent MTV version, *Cribs* show the masses how the “other half” lives, giving them fodder to imagine the possibilities of homes. *Extreme Makeover: the Home Edition* brings the fantasy to ordinary people whose homes they transform into dream homes in a week. The tag line for this show explicitly evokes a fantasy stating that they are “Building dreams, changing lives.”

Magazines such *The Robb Report*, *Conde Naste Traveler*, *Outside*, *Modern Bride*, *Road and Track* and the even the classified real estate section of *New York Times Magazine* offer fodder for our fantasies showing the latest and greatest in technologies, ideas for entertainment, exotic locations and luxurious hotels and spas, and mansions and estates. If we can’t afford the 850,000 dollar Bugatti you can buy a poster for your wall. We can go to auto shows, and trade expos to sit in, touch, or try out the products of our dreams. Yet despite the fact that marketers capitalize on the fantasy concept, little of consumer research has attempted to systematically study consumer fantasies.

The word fantasy has its roots in the Greek word “phantasia” regarding the human capacity to imagine (Rook, 1988). Psychologists English and English defined fantasies as, “Imagining a complex object or event in concrete symbols as images, whether or not the object exists; or the symbols or images themselves: for example a daydream.” (Klinger, 1971). And a daydream has been defined as a self-induced shift in consciousness, which is sometimes a way of compensating for a lack of external stimulation or escaping from problems in the real world (Singer, 1966)

This definition of daydreaming relates closely to Klinger’s definition of fantasies. In his book, the *Structure and Functions of Fantasy* (1971) he attempts to arrive at a theory of fantasy that explains its universality, variations, and functions. Klinger considers fantasy as most similar to dreams and play. Play is the motor response to the fantasy ideation and sub vocal processes. Play and fantasy are the same process, but as we age, we repress the motor action of play because it is no longer understood as socially age appropriate behavior and only the fantasy remains (Klinger, 1971).

Freud defines fantasy, along with dreams and play as one of the ‘primary processes’ in which organisms behave without concern over their impact on their environment or feedback with which to correct their actions. These are opposed to “secondary processes, which are governed by rational, instrumental thoughts (Holbrook & Hirschman, 1982). This aspect of fantasies as juxtaposed with rational processes is useful for forming a definition of consumer fantasies.

Fantasies are seen as personal and unrestrained, related to easy solutions, escapism (Apter, 1982; Belk & Costa, 1998) as well as a misguided, selective or distorted view of reality (Apter, 1982; Nofz, 1984; Oettingen, 2002). Bruner believes we understand our world and reality through two modes of thinking: the paradigmatic mode, which is analytical, mathematical and formal versus the fictional or narrative mode, which may violate rules of logic, which opens up alternatives and possibilities. Fantasy on a nonacademic level, has been defined as unrestricted imagination, characterized by its improbability and fictional quality (*The American College Dictionary*, 1985)

In a recent article in *Journal of Consumer Research*, Belk, Ger, and Askegard (Belk, Ger, & Askegaard, 2003) characterize consumer desire as “a passion born between consumption fantasies and social situational contexts.” Clearly consumer fantasies are related to consumer desire, yet important distinctions exist. Consumer desire is described as passionate consumption, explained as, “overpowering, something we give into, takes control of us and dominate our thoughts, feelings and actions.” Fantasies on the other hand are consumer imaginations of and cravings for consumer goods not possessed, and returning to the dictionary definition, defined by their improbable and fictional quality.

A phenomenological approach, using in-depth interviews, is used to examine consumer fantasies as experienced by consumers. The basis of phenomenological research is to discover the structure of the phenomena under study from the perspective of the individual experiencing that phenomena (Sayre, 2001) and the interview is one of the most powerful ways to gain a deep understanding of another person’s perceptions (Thompson, Locander, & Pollio, 1989). The study seeks to learn what consumer fantasies mean to consumers, how they fantasize about products and experiences, what influences their fantasies, how they nourish their fantasies and what happens if the fantasies are achieved.

While research is at its most embryonic stage, preliminary research indicates that consumer fantasies change over time. Fantasies unsurprisingly are characterized by their distinction from the everyday and the easily accessible. And although fantasies are often conceived of in these terms of impossibility or improbability (Apter, 1982), consumer fantasies may involve compromise in order that they fit within situational contexts. This need to relate the fantasy to the reality of one’s circumstances seems to imply that the distinction between fantasy and reality is not entirely clear (Tuan, 1990).

Further research and analysis into the lived experience of consumer fantasies could help us understand how consumption effects are lives and futures.

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“The Genie in the Bottle: How Prize Level and Salience of Odds of Winning Affect Promotion Attractiveness and Consumption Intentions in Instant Monetary Prize Promotions”

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Abstract

The study investigates the effect of making odds of winning salient across three levels of instant monetary prizes. Results indicate for high-level prizes, promotion attractiveness do not vary significantly regardless if odds of winning are made salient or not; for low-level prizes, promotion attractiveness is marginally greater when odds of winning are present than when absent; finally, for medium-level prizes showing odds of winning significantly decreases promotion attractiveness. Consumption intention was not affected by odds of winning in any way, but did vary across prize levels; it was higher at the medium-level prize than at low- or high-level prizes.

Hypotheses Development

Despite widespread use of instant prize promotions in the marketplace, little academic research has been done in this area (Ward and Hill, 1991). We synthesized several concepts and principles for the purpose of hypotheses building such as the scarcity proposition (Brock, 1968), preference reversal (Slovic & Lichtenstein, 1968) and the principle of compatibility (Tversky et al., 1988). Our hypotheses addressed three specific research questions: 1) is the bigger prize always better; 2) what prize level generates the highest consumption intention; and 3) how does salience of odds of winning in a promotion offer (present/absent) affect both attractiveness and consumption intention.

Instant prize promotions can be perceived as ‘free’ lotteries. According to Brock’s (1968) scarcity proposition, any commodity will increase in perceived value as the extent of the availability of the commodity decreases. In other words, less available items are valued higher than more available ones. Larger prizes with lower probability of being won (very unlikely) are expected to be evaluated more favorably than lower prizes with high probabilities (very likely) of being won (Howard and Barry, 1990). However, higher evaluation does not necessarily lead to higher attractiveness. According to the preference reversal concept (Slovic and Lichtenstein, 1968), people typically value a gamble with a large payoff and low odds of winning more than an equivalent gamble with a smaller payoff and higher odds of winning. In a choice context, however, they prefer the gamble with the smaller payoff.

The preference reversal concept relies on the principle of compatibility (Tversky et al., 1988) which states the perceived value of any payoff is enhanced if the cost of participating and the offered prizes are expressed in the same units. In other words, if the cost of participating is stated in dollars (\$1 lottery ticket) and the prize is stated in dollars (\$1 million), the principle of compatibility applies.

In an instant prize promotion context, odds of winning may not be as salient as in a lottery context, or even a choice context, but considering odds of winning is critical for the preference reversal concept. We suggest that prize value will increase as its monetary value increases, but this relation will be moderated by the salience of odds of winning. We expect that when odds are salient consumers will, according to the preference reversal principle, prefer the instant prize promotion with the smaller payoff to the promotion with the higher payoff. Hence, when odds-of-winning is a salient element of the promotion offer, respondents will value lower level prizes more than higher (but almost improbable) level prizes.

Methodology

A between-subjects, 2x3 experiment was conducted to investigate how prize level (low, \$10; medium, \$5,000; high, \$1 million) and salience of odds of winning (present/absent) affect consumers’ evaluations of promotion attractiveness and consumption intention. Levels of prizes and odds used in the study were similar to those commonly offered by soft drink producers during instant prize promotions.

Major Findings

A significant interaction between prize value and salience of odds of winning was found using MANOVA for consumption intention and promotion attractiveness. Upon further investigation, the interaction for consumption intention was not significant while a marginal main effect of prize value was found; the interaction for promotion attractiveness remained significant.

The consumption intention means showed inverted U shape relationships across the three prize levels, indicating that the principle of scarcity does not apply for high value prizes. While the difference between the means (for medium and high value prizes) was significant, it was in the opposite direction than hypothesized by the principle.

Inverted U shape relationships across the three prize values were also observed for promotion attractiveness when odds of winning were not explicitly stated. However, when odds of winning were made salient preference reversal was observed at low and medium prize values but not at the high prize value. That is, when moving from the absent odds condition to the present odds condition, promotion attractiveness increased at the low prize value, decreased at medium prize level, and did not change at high prize level. In the odds present condition, attractiveness of medium- and high-level prizes was not significantly different but both were significantly lower than attractiveness of low-level prizes.

Overall, the study supported the scarcity proposition and preference reversal principle at low and medium prize levels, and failed to support them at high prize levels. One plausible explanation of absence of preference reversal at high prize level is that people always think about odds of winning when they are exposed to high prizes. High prizes encourage people to estimate odds of winning, thereby making salient the low probability of winning and thus discounting the perceived value of the prize. The high-level prize condition can be considered as a boundary condition for the preference reversal principle.

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“The Role of the Consumer’s Attitudes toward Direct-to-Consumer Advertising of Prescription Drugs on Ad Effectiveness and the Behavior of Consumers and Physicians”

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Data from 1081 adults surveyed by the FDA were analyzed to explore consumers’ attitudes toward direct-to-consumer advertising (DTCA) of prescription drugs, and the relation between these attitudes and health related consumption behaviors. We report the favorableness of consumers’ reactions to DTCA, and more importantly, demonstrate that consumers’ attitudes toward DTCA are related to whether they search for more information about a drug that is advertised, and ask their physician about the drug. Finally, we document how consumers’ attitudes towards DTCA relate to the prescription writing behavior of their physicians. Mediation analyses that more fully explicate these findings are discussed.

“Choice versus Judgment: Illustrating Choice as Pre-Decisional Differentiation”

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What is the nature of the process that leads to a decision? Several theoretical works have attempted to address this issue in terms of pre-decisional differentiation. Differentiation and consolidation theory views choice as a result of gradual differentiation between valuations of alternatives (Svenson, 1992; Svenson & Benthorn, 1992). Connectionist models of choice further specified the process, suggesting that the differentiation increases over time until it exceeds a threshold, at which point a decision is made (e. g., Guo and Holyoak, 2002a, 2002b; Thagard and Millgram, 1995). Note that this type of differentiation differs from the post-decisional differentiation predicted by cognitive dissonance theory, according to which people would further discriminate among alternatives *after* a decision has been reached (Festinger, 1957; Heider, 1946; Heider, 1958). For example, one might originally like Lexus just a little more than BMW, but the difference in liking would increase after he or she has decided to purchase a Lexus, as a result of justifying the buying choice.

Despite the existence of a theoretical framework, little empirical work has been done to investigate pre-decisional differentiation as the precursor of choice. This article reports three empirical studies that investigate this issue. The studies were based on the following rationale—If a large enough pre-decisional differentiation is a pre-requisite for reaching a decision, the magnitude of differentiation should be larger in choice than in judgment, as the latter does not involve a decision. In these studies, differentiation was measured by the magnitude of the difference in desirability rating across alternatives. The participants were students at University of California, Los Angeles, who participated as an optional class activity. Respectively, 128, 78, and 179 students participated in Study 1, 2, and 3.

Study 1 consisted of two scenarios, each of which had a choice version, in which a choice was to be made between two alternatives, and a judgment version, in which the same alternatives were to be evaluated without a decision. The dependent measure is desirability rating. The general instruction reads as follows, with differences across versions indicated by parentheses (the first phrase in each pair was from the choice version).

You need to make (a choice between two options/evaluation regarding two items) for the next two scenarios, and indicate your (choice/evaluation) by rating the two (options’/items’) desirability on a 100-point scale (1=Least desirable, 100=Most desirable).

One of the two scenarios is presented below.

Suppose that you want to buy a photo-quality inkjet printer to print out high-quality pictures and documents at home, and you are (*evaluating/choosing* between) the two brands listed below.

(Which one would you *choose*?/How *desirable* are they?)

- Epson ____ (← rating)
- Canon ____ (← rating)

Note that in the choice version participants were asked to indicate their decisions by giving desirability ratings. This means the ratings measured alternative valuations right at the point when decisions were made, and thus any differentiation effect should be due to pre-decisional rather than post-decisional processing. The other scenario used in the study concerned evaluating the type of food for a dinner between Vietnamese and Thai cuisines. The hypothesis of the paper, H1, is formulated as follows. The magnitude of the difference in desirability rating across alternatives (called *differentiation score* hereafter) is larger in choice than in judgment.

In data analysis, one issue concerning experimental validity was addressed. In the choice condition, even if a participant thought both alternatives were equally attractive, he or she would probably still rate the alternatives differently, just to indicate a choice. This would bias the results in favor of H1, which predicts a larger differentiation for the choice condition. To prevent this, in the choice condition very small differences in rating should be treated as reflecting equal valuation for the alternatives. Therefore, differentiation scores smaller than or equal to five (this criterion was arbitrarily determined) were converted to zero in the choice task. After this conversion, a two-way ANOVA with evaluation mode (choice or judgment) and the order of presenting the two scenarios as between-subjects factors was conducted. In both scenarios the mean differentiation score was larger in the choice condition than in the evaluation condition. For the printer scenario, the means were 26.45 and 13.23 for the choice and judgment conditions respectively, $F(1, 116)=9.35, p<.01$. For the dinner scenario, these figures were: 29.98, 14.65, $F(1, 116)=10.37, p<.01$.

Study 2 replicated Study 1 by using another two scenarios, one concerning evaluating colleges to attend, the other concerning evaluating DVD players. Again, the mean differentiation score was larger in the choice condition. For the college scenario, means were 35.03 and 21.92 for the choice and judgment conditions respectively, $F(1, 73)=4.03, p<.05$. For the DVD player scenario, these figures were: 26.32, 13.46, $F(1, 72)=4.52, p<.05$.

To further rule out the possibility that the larger differentiation observed in the choice condition was due to post-decisional justification, Study 3 was conducted, which was identical to Study 1 except that a third alternative was added to the choice set. For each participant, differentiation score was calculated for the 2nd and 3rd ranked (based on desirability rating) alternatives (called 2nd–3rd score) as well as for the 1st and 2nd ranked alternatives (called 1st–2nd score). If cognitive dissonance reduction or decision justification underlay the results from Study 1 and 2, for the 2nd–3rd score no difference should exist between choice and judgment, as evaluating them did not involve justifying a decision. Opposite to this prediction, difference was still obtained for the 2nd–3rd score (no conversion was performed). For the printer scenario, the means were 20.06 and 13.35 for the choice and judgment conditions respectively, $F(1, 166)=5.64, p<.05$. For the dinner scenario, these figures were: 19.74, 12.98, $F(1, 170)=4.63, p<.05$. The results further supported the pre-decisional argument, which views differentiation as a global mechanism that also occurs for the 2nd and 3rd ranked alternatives. Like in Study 1 and 2, difference also existed for the 1st–2nd score (the score conversion used in Study 1 was performed). For the printer scenario, the means were 21.63 and 17.45 for the choice and judgment conditions respectively, $F(1, 166)=6.91, p<.01$. For the dinner scenario, these figures were: 22.42, 14.78, $F(1, 170)=6.14, p<.05$. No effect of presentation order or interaction was found for any analysis in this paper.

These studies showed that deliberation process can be characterized as active differentiation among alternative valuations. In addition, the observed choice/judgment disparity leads to important applications. In studies involving discrimination among products, researchers should frame tasks as choice rather than judgment, because the former would lead to larger difference in valuation and therefore clearer statistical data. When evaluating products, one should be aware of whether there is an intention of choosing (e. g., product judges often give ratings in order to select the best product)—choosing might distort ratings in the direction of creating a large differentiation among products. In contrast, ratings in tasks involving only judging should better reflect the true quality of products.

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“Product Placement Effects: Product-Character Associations (PCAs) in Sitcoms”

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Abstract

The paper presents a new model of product placement effects in television sitcoms—the Product-Character Association model (PCA)—to explain character-driven influences on viewers’ attitudes to placed products. The character-centered model advances our understanding of placement effects by emphasizing the centrality of characters as drivers of consumer response. In this way, it extends prior product placement research on plot, in which findings indicated that a placed product’s high versus low connection to the plot is the driver of persuasion (Russell 2002). We propose that expanding the concept of plot to include characters, which accords with Aristotle’s definition of plot as—“characters in action” (Fergusson 1961, p. 82),—leads to an enriched understanding of attitudes toward placed products. From this perspective, attitudes are formed on the basis of viewer reactions to characters and perceptions of product-character associations.

The paper draws theoretical grounding from two disciplines: literary theory, the source of information about sitcom characters (Esslin 1976; Fowler 1982); and social psychology, the source of research on responses to characters (sources) and products (messages). Dual

sourcing enables the generation of hypotheses that link attributes of the sitcom stimulus to attitudes flowing from product-character associations (PCAs).

Stimulus Attributes

Sitcoms operate in accordance with three formulaic rules—in social science terminology, “attributes”—that govern the plot/character/product relationship: a repetitive cyclical plot pattern (Wolff 1988); recurrent (central) versus temporary (peripheral) characters that viewers can recognize as such (Pfister 1991); and product association with characters to reflect the realistic settings designed to represent a familiar social scene (Feuer 1992; Abrams 1993). The attributes are expressed in three hypotheses that predict the following:

- H1a: Viewers will recognize sitcom characters as temporary vs. recurrent
- H1b: Viewers will develop positive (negative) attitudes toward those characters
- H1c: Viewers will associate characters with products, thereby developing PCAs.

Response Effects: The PCA model predicts that the hypothesized PCAs will influence attitudes toward a placed product. If viewers perceive the association between a character and a product, they are likely to develop attitudes toward a placed product based on that perception. The model posits the following:

- H2: Viewers will make more PCAs with recurrent characters than with temporary ones
- H3: Positive (negative) attitude toward a character (AC) will drive the attitude toward the placed product (AP) associated with that character.

Study

The hypotheses were tested in a controlled exploratory study aimed at testing the influence of PCAs on APs. The stimulus was a taped 27-minute sitcom episode—*Ads R' Us*—made for product placement research, and it included a variety of characters (some recurrent, some temporary) and placed products. The episode is set in an advertising agency in which the employees function as a typical sitcom office family, and their task is to create an ad for *Supreme Ice Cream* and pitch it to the sponsor. The group of six characters is revealed by personality, behavior, and product uses/attitudes toward three main placed products: coffee, a signifier of power; ice cream, a locus of sexuality; and soda, a signal of surprise. Coffee is associated with the permanent characters' status in the group, and actions such as brand choice, preparation, consumption, and serving display the character's role in the power hierarchy. Ice cream has explicitly sexual connotations, and its function is to highlight the ad's “sex sells” theme. Soda signals the transformation of Joanna, the main character, from a nasty but small-minded manager to a full-fledged cutthroat executive.

Sample

The respondents were 106 undergraduate students at a large southwestern university, who were told a cover story about the study's purported aim of gathering reactions to a pilot episode of a TV sitcom developed at their university. After viewing of the episode, respondents completed a computerized questionnaire that collected quantitative attitudinal data (attitudes toward the sitcom episode, products, and characters) and qualitative data regarding respondents' perceptions of character recurrence vs. temporariness and product-character associations.

Findings

The predictions about viewers' perceptions of characters and product-character associations were supported. Viewers distinguished between recurrent versus temporary characters (H1A), developed positive or negative attitudes toward them (H1B), and associated products with characters (H1C). The respondents made significantly more PCAs with recurrent characters than with temporary ones (H2). To test the full PCA model (H3) predicting that attitude to the character (AC) would drive attitude to the product (AP) if it is associated with that character, PCAs were dummy-coded for each of the three products and six characters. A multiple regression analysis of AP was conducted on the ACXPCA interaction terms. All beta coefficients were significant, and the model yielded an adjusted R^2 of 14.7%: attitudes toward characters drove attitudes toward the products associated with them (H3).

Discussion

The study provides support for the role of PCAs in product placement effects. It indicates that viewers do perceive the distinction between recurrent and temporary characters in the sitcom genre, and that this perception influences the number of PCAs. Further, viewers are able to make associations between products and the characters who use them, and these associations mediate the relationships between viewer evaluations of characters and the development of attitudes to placed products.

Limitations and Future Research

The results are limited by the study's reliance on a college student sample and a made-for-research single genre stimulus. To overcome the limitations and enhance the external validity of the PCA model, additional studies are planned using real world television programs, non-student respondents, and other popular television genres such as soap operas and reality shows. The purpose of these future studies is to increase generalizability across program types and populations, including minority audiences in the US and viewers in other countries.

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"A Theory Based Explanation of Differential Consumer Response to Different Promotions"

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Traditionally, research in the sales promotions field has focused on consumer response to price promotions e.g. price offs and coupons (Blattberg and Neslin 1990, Blattberg, Briesch and Fox 1995, Gurumurthy and Winer 1995). In recent years, studies have attempted to compare consumer response to price versus non price promotions (Diamond and Sanyal 1990; Diamond and Campbell 1989; Diamond 1992; Chandon, Wansink and Laurent 2000; Smith and Sinha 2000). Results of the research have shown that consumer response varies as a function of the type of promotion and different promotions evoke differential preferences. However no adequate theoretical explanation provided as to why this differential response occurs.

This paper proposes a theoretical explanation for differential consumer response to different types of promotions. Based on the principle of 'segregation of gains' from mental accounting theory, it is proposed that a promotion that segregates the promotional benefit from the original product will be preferred to a promotion that integrates the promotional benefit with the original product.

Theoretical Discussion

When purchasing a product, a consumer expects an outcome x (i.e. the product) in exchange for the purchase price. However, during a promotion, he not only obtains x but also Δx i.e. the promotional benefit. The promotional benefit represents a surplus outcome to the consumer and creates a perception of a 'gain.'

According to the principle of segregation of gains, (Thaler 1985), segregating a gain, Δx from the original outcome as $v(x) + v(\Delta x)$ will provide greater psychological value rather than integrating it as $v(x+\Delta x)$. Based on this principle, it is expected that consumers will prefer a promotion that segregates the promotional gain, $v(\Delta x)$ from the original product rather than integrates it with the original product. This is discussed in context of three types of promotions—'extra product promotion', 'premium promotion' and 'price off promotion.'

A 'price off promotion' provides the promotion a consumer temporary price reduction from the regular purchase price. This temporary price reduction provides surplus money to the consumer which can be either spent or saved. This promotion segregates Δx in the form of extra money and enhances consumer perception of 'gain.'

An 'extra product promotion' provides the consumer an extra quantity of the product at the same price. As per the law of diminishing marginal utility, the marginal utility of the additional units of the product declines for the consumer. This promotion integrates Δx into the original product and results in lower perception of 'gain.'

A 'premium promotion' provides a separate product complement free¹ along with the original product. Obtaining the free product complement reduces the transaction cost² for the consumer in terms of money, time and effort. This promotion segregates the Δx as a separate product complement and results in higher perception of 'gain' in the consumer's mind.

Hypotheses

Based on above, it is hypothesized that

H1: A 'price off promotion' which segregates the promotional benefit in the form of extra money will be preferred to an 'extra product promotion' which provides the promotional benefit in extra units of the same product

H2: A 'premium promotion' which segregates the promotional benefit in the form of a separate complementary product will be preferred to an 'extra product promotion' which provides the promotional benefit in extra units of the same product

Method

The hypotheses were tested through an experiment with a within subject design. Subjects were exposed to pairs of promotions—'price off promotion' versus 'extra product promotion' and 'premium promotion' versus 'extra product promotion'—and asked to indicate preference between the pairs. The promotions were presented to subjects through concept cards. The order of presentation was counterbalanced across subjects. The testing of the promotions was initially done on burgers. A week later, the promotions were tested on a second product—torches—to see if the results could be extended to another category. The three different types of promotions had the same economic value. For the burger, the price off promotion was presented as a price discount of \$ 0.22, the extra product promotion was presented as an extra quantity of burger (incremental value of \$ 0.22) and the premium promotion was presented as a free cold drink worth \$ 0.22. For the torch, the price off promotion was presented as a price discount of \$ 0.31, the extra product promotion was presented as a larger sized torch (incremental value \$ 0.31) and the premium promotion was presented as free batteries worth \$ 0.31.

¹A premium promotion offers both product complements and non complements free with the original purchase. To control for idiosyncratic consumer preferences, we use the instance of a product complement as it has a known utility for the consumer.

²Transaction cost is the cost incurred in making an economic exchange above and beyond the cost of the good itself and includes the cost of effort, search and information costs involved in purchasing the product complement.

The dependent measure was the preference between the pairs of promotions. A sample of 49 subjects was used for the experiment. The sample was selected through a process of simple random sampling from a sampling frame of 360 students at a management institute.

Results

Results show that hypothesis 1 is supported as subjects prefer the 'price off promotion' to the 'extra product promotion.' ($z: 8.3; p < .05$). Hypothesis 2 is also supported as subjects choose the 'premium promotion' over the 'extra product promotion.' ($z: 14.3; p < .05$). Results for the torch promotion also provide support for hypothesis 1 ($z: 4.5; p < .05$) and hypothesis 2 ($z: 6.6; p < .05$). On the whole, findings support the proposition that consumers prefer the promotional benefit to be segregated from the original product.

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"When Feelings Matter: Determinants of the Use of Cognitive Subjective Feelings"

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Within the realm of social cognition research, two general paths of judgment formation are assumed. First, judgments and decisions are likely to depend on the information available at the time of judgment, i.e. the activated content ('what comes to mind'). Secondly, judgment and decision making may also depend on subjective feelings that individuals experience during information processing. These subjective experiences can be of an emotional, bodily or cognitive quality (Clore, 1992). The current research focuses on the latter ones, specifically the feeling of 'ease of retrieval', which Tversky and Kahneman (1973) initially defined as the "ease with which instances or associations come to mind" (p. 208). During the last decade, the powerful impact this feeling exerts on many different kinds of judgments has repeatedly been shown. In the domain of consumer research, for example, Waenke, Bohner and Jurkowitsch (1997) demonstrated that preferences for brands (here car makes, BMW versus Mercedes) are strongly moderated by the ease with which participants generate product-related information.

Whereas previous research in the domain of cognitive feelings mainly showed that subjective experiences indeed influence judgment formation, our work focuses on situational and dispositional factors determining their use. This is of prime importance, since both paths of judgment formation (on the basis of the activated content versus on the basis of subjective experiences) often yield similar results. For example, Tversky and Kahneman (1973) reported that people generally overestimate the number of words beginning with an 'r' compared to words having the letter 'r' on the third position. At least two explanations may account for this finding. On the one hand, individuals may base their judgment on the experienced ease with which the exemplars come to mind. On the other hand, however, one may assume that individuals based their judgments on the content that came to mind. Given that more exemplars came to mind under the 'r' in first position condition, this explanation also predicts an overestimation of words with 'r' at the first rather than the third position. A third explanation would be the notion that the two mechanisms are contributing jointly. Hence, having a given result, it is difficult to decide upon the relative influence of content versus subjective feelings.

Addressing the ambiguity of the ease versus the content explanation, Schwarz and colleagues (Schwarz et al., 1991) offered a paradigm by means of which the two accounts can be disentangled. By creating conditions under which different effects are expected given either a content or an experienced ease explanation, the authors provided support for the experienced ease assumption (for additional evidence, conceptual replications, and extensions see Dijksterhuis, Macrae, & Haddock, 1999; Rothman & Schwarz, 1998; Stepper & Strack, 1993; Waenke, Bless, & Biller, 1996; Waenke, Bohner, & Jurkowitsch, 1997; for an overview see Schwarz, 1998).

Given the evidence that participants do rely on the ease with which information comes to mind, the question arising next pertains to the conditions under which this process becomes more or less likely. Surprisingly little evidence is available on this question—especially if we accept the need to disentangle the ease versus content confound described above. Building on the few studies available on potential moderating factors (e.g., Rothman & Schwarz, 1998; Tormala, Petty, & Brinol, 2002; Waenke & Bless, 2000) we investigated the role of processing motivation and processing capacity.

In a series of studies we orthogonally crossed processing motivation (or processing capacity) with the methodological paradigm introduced by Schwarz and colleagues (1991). Specifically we asked participants to list either few or many arguments in favour or in opposition to a specified attitude position (e.g., introduction of a quarterly surgery fee). Importantly, through pilot studies it was assured that listing few arguments was perceived as easy whereas enumerating many arguments was experienced as difficult. Following this, attitude judgments towards the position advocated before were assessed. After the argument generation but prior to the assessment of attitudes, participants' processing motivation (Experiment 1) or their processing capacity (Experiment 2) was manipulated. The results confirm the moderating function of processing motivation and capacity. Theoretical and practical implications of these findings will be discussed.

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“Motives for Deception in Consumer Word-of-Mouth Communication”

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This research investigates an understudied facet of consumer word-of-mouth (WOM) communication—the transmission of intentionally deceptive information from one consumer to another. In four studies we examine whether contextual factors, including the relationship type between the sender and recipient and the lie magnitude, can activate a variety of interpersonally-based lying motives that, in turn, lead to deception in WOM. When consumers' self-images were threatened or the opportunity to profit was available, they were motivated to tell self-focused lies. Conversely, when consumers were at risk of hurting the feelings of a relevant other they told other-focused lies.

Consumer word-of-mouth (WOM) communication involves the transmission of product information from one consumer to another. The majority of research in this area has focused on the impact of positive WOM on consumer judgments (Bone 1995), as well as precursors of (Richins 1983) and reactions to negative WOM (Laczniak, DeCarlo, and Ramaswami 2001). However, one facet of WOM communication that has been largely overlooked is the role of deception in consumer-to-consumer interactions.

Defined as “intentionally try to mislead someone” (DePaulo et al. 1996), lying is not an uncommon occurrence. DePaulo and colleagues (1996) discovered that lies were told regularly and were often told for self-benefit. However, we argue that in interpersonal communication one must balance various motives. This research extends previous investigations by studying several motives related to lying in consumption contexts.

Study 1 examined the role of impression-management in deceptive consumer communication. Research suggests that people will tell lies to present positive self-images in consumption contexts (Sengupta et al. 2002). Given that consumers like viewing themselves as smart shoppers (Schindler 1998), we expect they are motivated to present this image to others. We predicted that, under conditions where self-image is threatened, consumers will be motivated to deceive a relevant communication recipient (i.e., one that is familiar and important). Impression-management concerns should be prominent when interacting with relevant others because they often confer valued outcomes (e.g., Bohra and Pandey 1984) and will be involved in future interactions (e.g., Schneider 1969). Because interaction with irrelevant others is often short-lived, consumers may not always be motivated to lie in service of impression-management. Consumers may lie to relevant others regardless of lie significance, but will be more likely to lie to irrelevant others when the significance of the lie is high rather than low.

A scenario depicting a recent car purchase was read by 105 participants. The participant was described as washing his/her new car when another person (a coworker/a stranger) asks about the car. The other person mentions that s/he purchased the same car last week for \$18,000. Unknown to the other person, the participant's car cost either \$200 or \$2,000 *more*. The other person asks how much the participant paid for his/her car. Participants then indicated how likely they would be to misrepresent the price of the car on a 4-item lying index ($\alpha=.94$). The results revealed that participants were willing to lie to relevant others regardless of lie significance. Conversely, participants were more likely to lie to an irrelevant other when the lie was high rather than low in significance.

Study 2 examines other-focused motives for lying. Research suggests that people will lie to manage social relations (DePaulo et al. 1996) and will most often tell other-focused lies to those who are important to them (DePaulo and Kashy 1998). Thus, we predicted that other-focused lies are most likely when the communication recipient is relevant and the lie is significant. When interacting with an irrelevant communication recipient, we do not expect that consumers will tell other-focused lies, regardless of lie significance.

A similar scenario to Study 1 was read by 105 undergraduates. However, the scenario indicated that, unknown to the other person, the participant's car cost \$200 or \$2,000 *less*. Thus, the scenario activates other-focused motives (i.e., to prevent the other person from looking like an inferior shopper). Participants then completed the lying items. As anticipated, participants were more likely to lie when the lie significance was high and the other person was relevant than in any of the other conditions.

Study 3 explored deceptive WOM communication when the participant is a seller. Unlike a buyer, a seller's primary objective is profit maximization. Indeed, research suggests that people will lie to gain or protect material resources (Lippard, 1988). We predicted that, when consumers are presented with an opportunity to maximize their own return, they will lie to irrelevant others regardless of lie significance. When interacting with relevant others, consumers may only lie when the lie is not significant. When the lie is significant and the other person is relevant consumers may be motivated to not appear to be taking advantage of the other person and will avoid lying.

One hundred-seven undergraduates read a scenario in which the participant was selling his/her car and either a coworker/stranger was interested in purchasing it. The other person says that cars of the same model and age initially cost \$18,000. Unbeknownst to the other person, the participant originally purchased the car for either \$200 or \$2,000 *more*. The other person then asks the participant how much s/he paid for his/her car. Participants completed the lying items and also indicated the price they would report. Participants were least likely to lie when the lie was highly significant and the other person was relevant to the self. In addition, the magnitude of the lie exceeded the actual cost in each condition except for the relevant other/ high significance condition.

Study 4 further examined consumer-consumer deception. As noted earlier, consumers have a pervasive desire to be viewed positively. However, when the consumer is a seller, an effort to manage impressions may not only involve a desire to be perceived as a smart-shopper, but also to not appear to be taking advantage of another person. A relevant communication recipient is someone the consumer knows, and the consumer has something to lose if the relationship dissolves (Kelley 1983). Thus, we expected that consumers will be less likely to lie while interacting with a relevant as opposed to irrelevant other.

The scenario from Study 3 was read by 100 undergraduates. The potential buyer indicates that other cars of the same model and age cost \$18,000. In this scenario, the participant originally purchased the car for either \$200 or \$2,000 *less*. As predicted, participants were significantly more inclined to lie to the stranger than to a coworker.

In sum, we demonstrate that consumers' motives for lying are highly dependent on situational factors such as relevance of the communication recipient, significance of the lie, and the communicators' role in the interaction.

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“An Alternative Account for Reference Price Effects: Repeated Transactions in Markets with Common Uncertainty”

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In this work we present an alternative explanation for reference price effects that is consistent with economic assumptions of rationality. To accomplish this, we model a market in which one seller offers one good to multiple consumers across multiple periods. We find situations where consumers with high reservation values fail to purchase the good from a high price seller in early time periods. By exploiting the seller's uncertainty about the market's conditions, such consumers trade small short run surpluses for larger long run surpluses. We find several new behavioral predictions regarding such behavior and test these insights in laboratory experiments.

'Reference prices' (c.f. Thaler, 1985) are described as price thresholds above which consumers fail to purchase goods even though the posted prices fall at or below their reservation prices. Economic theory prescribes that consumers gain from purchasing and consuming goods at any posted price up to their reservation prices, where a consumer's reservation price refers to the consumer's maximum expected worth of consuming the good. Nonetheless, a vast behavioral literature has demonstrated that consumers routinely fail to purchase goods at prices below their reservation values, but above their reference prices. By and large, marketing researchers agree that this behavior falls outside the boundaries of economic rationality. And, indeed, there has been no work showing that, in a multiple consumer context, such behavior is consistent with standard notions of economic rationality. This work shows that the behavior is consistent with standard notions of rational behavior.

In our model, one seller offers one good to multiple consumers across multiple periods. Heterogeneous consumers have either 'low' or 'high' reservation values for the good. Consumers derive utility solely from consumption of the good, i.e., there is no utility derived from the 'fairness' of the terms of the transaction, etc. The structure of the market, i.e., the number of high versus low valuation consumers, is initially unknown to the seller and consumers. Though the market structure is initially unknown, the seller and consumers share a common (fallible) belief about that structure.

We find a first period price threshold above which all prices, even those lower than high valuation consumers' reservation prices, are rejected by high valuation consumers. So, even though high valuation consumers could gain from purchasing at some of these prices, they do not. The reason for this behavior is straightforward. Consumers realize that the seller's uncertainty about the market's structure yields uncertainty about the demand for the good at 'relatively high' prices (i.e., higher than some reference threshold but lower than high valuation consumers' reservation prices). That is, they know that the seller does not know if the market supports more (or less) profit at a high or a low price. They also realize that refusing to accept high prices preserves this uncertainty. On the other hand, accepting a high price reveals to the seller how much profit the market supports at that price. It turns out that by keeping the seller guessing (i.e., by rejecting relatively high prices), consumers can cause the seller to offer lower prices in the future. So, consumers trade some short run surplus for larger long run surplus, and they are better off.

This result provides an alternative account for 'reference price effects' that is consistent with assumptions of rationality. Readers familiar with the bargaining literature will recognize the basic logic of this result, as it is similar to that of one-on-one bargaining under private information. Indeed, the consumer strategy employed in this model is a bargaining strategy. However, this work differs from the existing bargaining literature in an important way. Specifically, consumers' strategies do *not* rely upon exploitation of private information about their types; rather, the seller and the consumers share the same degree of uncertainty about the distribution of consumer valuations. Nonetheless, consumers are able to affect the seller's future pricing behavior by strategically withholding purchases in the current period. Moreover, they are able to affect such outcomes even though they do not explicitly coordinate their actions. In essence, our results say that reference price effects can be described as unannounced boycotts tied together by implicit coordination among intelligent (i.e., able and willing to put themselves in the seller's shoes), rational consumers.

Our model makes several behavioral predictions that may differ from previous work in reference prices. First, while existing work implies that intertemporal considerations play little or no role in reference price effects, our results imply that the behavior will be observed *only* if consumers expect to interact with the seller repeatedly. Second, previous literature suggests that above a certain price threshold, all consumers with the same valuation always withhold their purchases. Our model suggests that above a certain threshold, these consumers play a mixed strategy. Third, previous literature makes no prediction as to how consumers' behaviors change with their beliefs about the structure of the market. Our model predicts that consumers' mixed-strategy, i.e., the likelihood with which they will make a purchase, increases as does their belief that the market consists of many other high valuation consumers. Finally, our results imply that the price threshold above which consumers withhold purchases goes lower as their discount factors increase. Previous work has paid virtually no attention to how rates of time preference might affect reference prices. We subject these theoretical insights to laboratory experiments testing these predictions.

“Further Evidence of Public and Private Meanings: Moving from Possessions to Brands”

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Building on Richins (1994) work, which differentiated between the public and private meanings of possessions, the current study examines these two symbolic elements within the larger framework of the functional, symbolic and experiential brand benefits described in the literature (Park, Jaworski & MacInnis 1986; Keller 1993). A scale developed to measure the functional, symbolic, and experiential benefits of brands uncovered a fourth factor that differentiates between the public and private dimensions of symbolic meaning. This finding provides empirical evidence that public and private meanings extend beyond possessions to brands. Implications and directions for future research are discussed.

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"Positive Implicit Effects for Event Incongruent Sponsorship"

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One of the main research findings on event sponsorship is that the transfer of affect between an event and a sponsoring brand increases when the congruency between the event and the brand increases (Crimmins and Horn 1996; Gwinner and Eaton 1999). In our research congruency is defined as the perceived fit between a brand and the event sponsored by the brand (Speed and Thompson 2000). In practice, however, numerous brands are still sponsoring incongruent events. We attribute this apparent inconsistency to the exclusive use of explicit measures of sponsoring effects in prior research (Cornwell and Maignan 1998). In those past studies, subjects were aware that the brands they had to explicitly evaluate were sponsors hence demand effects could not be ruled out. Moreover, in studies on congruence effects, subjects were often offered the possibility to elaborate on the link between the meanings of the event and the sponsoring brands and this also increased chances of demand effects. In practice such an elaboration is nevertheless very unlikely.

In an experiment we reexamined the effects of event sponsorship on brand attitude. We used implicit measures of attitudes that are not sensitive to demand effects or to social desirability biases (Fazio and Olson 2003; Mitchell, Anderson, and Lovibond 2003). We hypothesized that (1) past findings can be mostly explained in term of demand effects or in term of social desirability biases and, when using implicit measures, (2) incongruent brands are as likely as congruent brands to benefit from event sponsorship, and (3) sponsorship is more effective when viewers process the sponsoring brands with few cognitive resources available. The third hypothesis is consistent with the findings of Walther (2002) who showed that the effects of evaluative conditioning increase when cognitive capacity is occupied by mental load. It appears that when viewers have the opportunity to elaborate on a sponsoring brand this will reactivate the existing memory associations surrounding the brand and this will reduce the likelihood that new associations are formed.

The events retained to test the hypothesis were the four Grand Slam tennis tournaments. The design of the experiment consisted of two between subject factors (sponsorship condition (1,2,3,4) and mental load during the exposition phase (no, yes)) and two within subject factors (congruence between the brand and the event (low, high) and measurement type (explicit, implicit)). Target brands were selected through a pretest. The congruent target brands were Canon and Nikon and the incongruent target brands were Camel and Lucky Strike. Each of the four sponsorship conditions consisted of two sponsoring target brands (one congruent and one incongruent), two non-sponsoring target brands (one congruent and one incongruent), two sponsoring filler brands and two non-sponsoring filler brands. The couple of sponsoring target brands and hence of non-sponsoring target brands, was different in the four conditions. Subjects under mental load had to remember six-digit numbers. Implicit attitudes were measured with the Implicit Association Test (IAT) (Greenwald, McGhee, and Schwartz 1998) and explicit attitudes were measured with self-report scales.

152 undergraduate students participated in the experiment. Students had to learn for each of the four tennis tournaments which brands did and which brands did not sponsor. Six action pictures from each tournament were used to present the sponsorships. Half of the students was under mental load whereas the other half was not. After the brand exposition phase, students had to complete two valence IATs, one for the congruent brands the other for the incongruent brands. Students then completed self-report evaluation scales for the four brands. Finally, students had to recall the brand sponsoring each tournament and had to indicate their familiarity with the target brands.

Scores from the IATs were prepared using the algorithm developed by Greenwald, Nosek, and Banaji (2003). Each IAT provided a relative attitudinal preference between either Canon and Nikon or between Camel and Lucky Strike. Similar differential scores were also computed from the explicit attitudes. We standardized the data to put both implicit and explicit scores on the same metric. To test the hypothesis we analyzed several planned contrasts on the variable sponsorship condition on different levels of the three other variables.

Consistent with past studies we found a transfer of affect at the explicit level for congruent brands. We found this result for subjects recalling the sponsoring brands whatever the level of mental load. For non-congruent brands we found a significant decrease (cancellation) in affect transfer at the explicit level. This was the case for subjects recalling the sponsoring brands whatever the level of mental load. Thus, at the explicit level, the amount of cognitive resources available for the processing of the brands has no direct effect on the transfer of affect. This relation is mediated by brand recall during the evaluation phase. When using implicit measures, we found a significant transfer of affect for both congruent and incongruent brands but only when subjects were under cognitive load. Those results are consistent with our hypotheses. Hence, it seems likely that demand effects or social desirability biases (against cigarettes) can account for certain past findings.

In sum, when demand effects or social desirability biases are ruled out, we showed that brands of cigarettes are as likely as any other brands to benefit from sponsoring. This is consistent with the fact that, in practice, numerous brands are sponsoring events with which they don't necessarily fit. We also showed that a lack of opportunity to process the sponsoring brands doesn't reduce the transfer of affect but actually increases this transfer. This goes clearly against common knowledge in the field of event sponsorship. Finally, our results can also make a good case against the sponsorship of brands of cigarettes that is far from being eradicated at a global level. Indeed, when sponsoring sporting events, those brands generate an automatic (hence not controllable) positive attitude toward them.

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"Is There Any Marketing Value in National Identity?"

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This study draws on the theories of self-concept (Hong et al., 2001; Ip & Bond, 1995; Reed 2002), social identity and intergroup relations (Brewer, 1999, 2000, 2001; Hong et al., 2003; Jones 1997; Tajfel 1978, 1981; Tajfel & Turner 1979) to present a conceptual framework for understanding consumption as expression of consumers' national identity. This framework suggests that certain consumer responses (attitudinal, emotional and behavioral) are associated with different expressions of one's national identity. The framework incorporates the concepts of patriotism, ethnocentrism, animosity and nationalism, shows their interrelationships, develops construct validity for each, and specifies their effect on consumer behavior.

"Predicting Ad Response Over Time: A Comparison of Arousal and Ad-Liking to Outcomes of Explicit Memory"

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How do we know whether or not a consumer will remember seeing a given advertisement? While the literature is full of different scales to assess advertising effectiveness, surprisingly, this issue is not well understood. Psychologists, and now neuroscientists, have explored the relationship between current emotion arousal and later memory. In our study we presented participants with ten commercials which they rated on a number of marketing scales (PAD, SAM, Thayer's AD/ACL, liking) in order to assess which measurement scale would be most likely to predict the participant's memory for the ad a week later. We are in the process of analyzing our results and plan to discuss the implications for advertising research.

Background

The debate over what constitutes the best measurement of advertising effectiveness has gone on ever since someone devised the first measurement technique. From recall to recognition, ad liking to attitude-toward-the-ad, measures have come in and out of favor in the marketing community. No one yet has proposed a paper and pencil measure that can predict later memory for advertising.

Memory is important for researchers to understand because it underlies all consumer decisions. Memory is a process that consists of three basic parts: encoding, storage and retrieval. Psychologists have studied the connection between arousal and memory for some time,

where greater arousal has been said to involve more elaborate encoding. It has been found also that an emotionally arousing stimulus may have a better likelihood of being retrieved at a later time (although the evidence is mixed).

Emotion, Arousal and Memory

Emotion has a strong link to memory. For instance, most people have a vivid recollection of where they were and what they were doing when the airplanes hit the Twin Towers on 9/11. This is a “flashbulb memory”, which represents a long lasting and deep memory in response to a traumatic event, and has a history dating back to the 1890s when a researcher inquired as to what people were doing when they heard that Abraham Lincoln had been shot.

Psychologists have suggested a “now print” mechanism in the brain that records highly emotional events. The emotional activation through neuromodulatory systems involving the amygdaloid complex (AC) are involved in this process (Cahill, Babinsky, Markowitsch and McGaugh 1995). The AC sends a signal to the hippocampus which is involved in memory consolidation. There has been shown to be increased recall when there has been more activation (glucose) in the AC.

Less traumatic emotional events, such as arousing stimuli, tend also to be well remembered. Psychological researchers have found that high arousal leads to benefits both in shorter and longer-term retention. Cordeen (1969) garnered results that suggested high arousal learning (as measured by Galvanic Skin Response) of aurally presented words led to superior shorter- and longer-term recall across testings at immediate, 20 minute and two week delays. Similarly, Maltzman, Kantor, and Langdon (1966) found that high arousal learning led to better recall immediately and 30 minutes after learning.

In their studies of emotion and memory, advertising researchers initially overlooked the arousal dimension and concentrated on message valence. They believed that negative information garnered more resource allocation—attention—and therefore should be better remembered. The literature in that area had been mixed, however, with some finding pleasurable ads better recalled. Lang and Bolls (1995) attempted to solve that inconsistency. They suggested that the researchers had overlooked a dimension of emotion—arousal—and that negative information leads to better memory because it is more arousing. They found when arousal is controlled across message valence there is no difference between memory for negative and positive information, but that in most cases, negative information produces more arousal. Therefore, the conclusion is it is the arousingness of a message’s content (where the messages might be still slides or television messages (Lang, Dhillon and Dong 1995) which improves viewers’ free and cued recall for messages but not necessarily their recognition of the messages.

Implications for Consumer Researchers and Research Questions

Because of the relationship between arousal and memory, it is likely that measures that purport to measure arousal may better predict an advertisement’s effectiveness than typical evaluation measures. Prior studies examining the relationship between ad evaluation and memory have looked retrospectively; for example, only asking liking measures to those ads that are recalled. In our study we look at what makes an ad at encoding memorable later on. As discussed earlier, messages that are emotionally evocative and distinct tend to be remembered better. We believe this type of advertising will be captured via our arousal measures (we use several here—PAD, SAM and AD-ACL). We also measure ad-liking in order to compare its effectiveness in predicting memory and behavior.

Initial Study

For our design we had to weigh realism versus interest on the relationship between our measures of interest. We wanted to compare the arousal and liking measures with one another, so for each commercial we had many scale items which took some time to complete. In addition, because we were interested in later memory, we also knew we needed to have at least ten or so commercials or there would be no challenge in the recall/recognition tests. As this was an initial probe into this area we settled on ten commercials which ranged on level of arousal. For the memory test, we looked at only recall and recognition for eight ads (first/last omitted) a week after exposure. Brand attitudes were also measured at that time.

We had two conditions in which the commercials were run in different orders to roughly two hundred undergraduates. Also, the rating scales appeared in different orders across and within individuals. We are in the process of entering and analyzing the data. Questions of interest will be: how related are the different arousal measures? What best predicts later memory, arousal (and what type of) or liking? Does this vary across commercial type, or generalizations be made across commercials? Can participants predict which ads they will later remember? Can a causal model be built upon these measures?

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“Identifying Advertising Appeals for Targeting Potential Volunteers: An exploratory Study on Volunteering Motives among Seniors”

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This paper examines whether senior volunteers share similar or diverse motives for volunteering. Previous research has often treated senior volunteers as a homogeneous group that is significantly different from other cohorts (Wymer, 1999). This paper argues that the senior segment is far from homogeneous in its motives for, and behavior towards, volunteering which may have a significant impact on the effectiveness of recruitment and promotional campaigns. An exploratory study was conducted and, as expected, interviewees identified a variety of benefits sought from volunteering. There was considerable variability in the importance of these benefits among respondents, suggesting that further clustering would be beneficial. Implications for recruitment and promotion campaigns are discussed.

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“The Perils of Not Knowing What We Don’t Know”

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Thirty years of confidence calibration research have resulted in two dominant findings. The first is that people are overconfident on hard tasks and underconfident on easy tasks. The second is that people are better calibrated on sensory tasks than on cognitive tasks. Both of these rather unintuitive findings have largely been based on *stated* measures of confidence. In this paper, we develop a confidence measure based on *revealed* behavior. The results of four experiments invert the traditional findings. Subjects displayed overconfidence on easy tasks and underconfidence on hard tasks. They were also better calibrated on cognitive rather than sensory tasks.

“When Women are from Mars and Men from Venus: The Effect of Gender Counter-Stereotypical Employees on Consumers’ Perceptions”

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Valerie S. Folkes, University of Southern California, Los Angeles

We compared effects of information about a stereotypical service provider with that about a counter-stereotypical service provider on consumers’ inferences about the service. In two experiments we varied the provider’s gender (stereotypical or counter-stereotypical for an occupation) and investigated (1) the perception of that service provider as compared to other service providers, and (2) the perception of the firm compared to other firms. Information about a counter-stereotypical employee whose behavior violated expectancies decreased the perception of similarity between the individual and other employees compared to when the employee was stereotypical. However, that same information increased the perception that the firm was superior to other firms.

“Toward a Satisfaction Response Taxonomy”

Christian Ioannou, University of Sydney
Iain R. Black, University of Sydney

Work by Oliver (1989, 1997) and Fournier and Mick (1999) proposes a number of satisfaction response “types”. The aim of this study is to develop these into a taxonomy in order to provide the foundation for building a consumer typology and theory of satisfaction responses. Items were developed to tap into Fournier and Mick’s types and these were combined with those previously developed by Oliver (1997). Exploratory factor analysis was conducted on data collected from 143 undergraduate students. Seven meaningful factors were derived, however further analysis suggests that different classes of satisfaction response types may exist. Further research is required.

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“‘Consumption’ of National Identity and Consumers’ Self Identity”

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Prior research has demonstrated that consumers symbolically consume objects in acquiring their individual self-identity. Therefore, objects that consist of multiple meanings should enhance various ways in which consumers construct and maintain their self-concepts. This ethnography research proposes to study products that contain national identity since they represent multi-layered senses of the individuality, history, or culture. The paper focuses on consumption of Thai local products because of their increasing demand and their

multiple implications to diverse customers. An outcome of this research should advance current theoretical understanding of self and symbolic consumption.

In 2002, the government of Thailand initiated the “One Tambon One Product” (OTOP) campaign to promote consumption of Thai local products, both domestically and internationally. The project started with injecting marketing into existing goods divided into three major categories: fashion, spa & health, and decoration. Each ‘tambon’ (or village) proposes one product to be its showcase. The development covers a process ranging from product development to selling and promotion. Within a year, this initiative successfully became a phenomenon. In December 2003, the government organized the exhibition, OTOP City, where almost six thousand products were presented and sold to the public. About 1.4 million people from all over the country visited the event, generating \$25 million revenue in one week.

In the past, the market size of Thai local products has only been about \$5 million. Since the OTOP campaign, however, this market has significantly grown to \$825 million of which 80% is from domestic consumption. Realizing such enthusiastic demand, I have undertaken this research project to help the government find a more suitable marketing strategy. Learning about consumers’ perspectives and experiences of ‘consuming Thai’ should help sustain the success.

Previous research in consumer behavior has illustrated that consumers use the objects they consume to constitute the self-identity (Belk 1988). Hence, goods and services comprised of multiple meanings should enhance various ways in which consumers cultivate their self-concepts. In this case, my interest has been to study products that contain national identity since they represent multi-layered senses of the individuality, community, culture, history, or myths. Prior research examined such products, mostly to the extent of an influence of country of origin on consumers’ decision making. What remains underdeveloped in this area is the study of how consumers utilize national identity embedded in the products to manage their self-identity. Thus, my research aims to explore this topic in light of the ‘consuming Thai’ phenomenon.

My ethnography research has been conducted with diverse consumers of Thai local products. The research site ranges from point of purchase (e.g., OTOP City exhibition, department store) to consumption venue (e.g., office, party, home). The idea is to cover different consumer experiences at different consumption stages. Through observation, participant observation, and interviews, this ethnographic inquiry yields a preliminary finding of consumer perspectives.

Generally, consumers relate to two major elements of national identity embedded in Thai local products: 1) national heritage and 2) cultural characteristics. Many consumers refer to the product heritage and associate their self-identity with the unique history of the nation. One respondent expressed her feeling toward a piece of cloth she saw in the OTOP City exhibition:

“Look at that pattern. They call it, Squirrel’s Tail. I am wondering how they produce this. It’s so beautiful. It looks just like the real pattern of a squirrel’s tail, you know, with these different colors mixing together. The seller told me that it takes months for a skilled weaver to finish this piece and it requires some special techniques known only in that one village. Looking at this cloth makes me feel so proud of our nation’s expertise and I feel grateful to be Thai.”

In this case, the respondent identified herself with the nation’s long-established wisdom. Previous research defined this identification (or conformity) as a means for individuals to create a sense of belonging that helps surviving social change (McCracken 1990). However, in this postmodern world of liberation and individualistic demands, I have found that in order to prevail over the social change, consumers also need to differentiate themselves from others. In my research, some consumers refer to their consumption of cultural characteristics that enhances their self-differentiation. At work, one respondent talked about his silk shirt:

“I like wearing this shirt, not that I care about this national campaign, ‘Thais wear Thai on Friday.’ I just like the fact that silk carries the meanings of refinement and authenticity...like me, like the way I am.”

This respondent utilized the Thai cultural characteristics communicated in silk (i.e., refinement and authenticity) to signify his sense of self apart from the sense of others. His response is congruent with the postmodern ideology which suggests that each individual expresses his or her desire to achieve diverse satisfaction in spite of their common historical and cultural beliefs (Firat and Venkatesh 1995). In a nutshell, both self-identification and self-differentiation come to be important parts of self-identity. Through the consumption of products that contain national identity, consumers employ national heritage in their self-identification, while they emphasize cultural characteristics in their self-differentiation.

In summary, I have demonstrated a preliminary finding in my research that aims to explore the ways in which consumers utilize the national identity embedded in products to cultivate their self-identity. A final outcome of this study will benefit the development of a more comprehensive national marketing strategy in Thailand. Moreover, it should contribute to a better understanding of the interrelationship between the consumption of product identity and consumers’ self concept.

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“Survival of the Fittest: The Multi-faceted Role of Fit in Co-branding”

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This study examines the impact of perceived similarity or “fit” on evaluations of composite brand extensions (CBEs). Building on brand extension and co-branding literature and drawing from categorization theory, we conducted a 2*2*2 experimental study. This experiment addresses the impact of product fit (between the parent brands and the CBE) and brand fit (between the parent brands), as well as the 2- and 3-way interactions between these different types of fit. The results of the study deliver insight into consumers’ evaluation processes of complex branded entities and provide practical recommendations for selecting a co-branding partner.

“Wanting a Bit(e) of Everything, The Role of Hunger on Variety Seeking”

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 Mario Pandelaere, Katholieke Universiteit – Leuven
 Luk Warlop, Katholieke Universiteit – Leuven

We examined whether having hunger during our shopping trip facilitates or inhibits variety seeking. The data show that hunger increases variety seeking when making multiple food choices. In a first study, hungry participants chose a more varied flavor set. Theoretically, we found that increased food attractiveness mediated this effect. Study 2 supported this idea: Presence of stale food increased the food attractiveness of participants low on disgust, and decreased the attractiveness of those high on disgust. Again, this changing attractiveness determined changing variety preference. In Study 3, we increased variety seeking by introducing an appetizing olfactory cue. The results confirm the crucial role of attractiveness shifts.

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“Self-Report and Behavioral Measures in Product Evaluation and Haptic Information: Is What I Say How I Feel?”

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The interest in haptic (touch) information in consumer behavior and marketing is growing. However, the correspondence between a self-report measure of whether touch is important to product evaluation and a behavioral measure of actual touching behavior during product evaluation has not been demonstrated. This paper demonstrates this correspondence and also examines an individual's preference for haptic information (“Need for Touch”) as a moderator of time touching for different types of touch information.

“The Advice Bounceback Effect: When Advice Undermines its Cause”

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Abstract

This paper contributes to the literature on the effectiveness of advice. Specifically, we examine conditions under which advice is not only disregarded, but actually undermines its cause. This *advice bounceback effect* occurs when a low credibility source recommends a product in opposition to the consumer's tentative preference. In other words, a low credibility endorsement of the product that is emerging as less preferred can strengthen the initial preference, resulting in greater selection of the leading product and greater choice confidence.

Introduction

Advice can have a powerful influence on consumer decision making (Duhon et al. 1997; Solomon 1986; West and Broniarczyk 1998), and recent advances in technology have increased this importance (Alba et al. 1997; Fitzsimons and Lehmann 2003). Most research on advice has focused on how it is integrated with well established prior preferences and how increased credibility of the advisor yields greater reliance on the advice (Birnbau and Mellers 1983; Yaniv 2004; Yates et al. 1996; Zarnoth and Sniezek 1997). However, people often

seek advice when they have only a scant trace of a preference. Moreover, recent research suggests that expertise and impact of advice are not always positively related (Fitzsimons and Lehmann 2003).

This article examines the influence of advice on tentative preferences, with particular emphasis on how credibility of the advisor and tentative preference interact to influence the impact of advice. We identify conditions under which advice is not only disregarded, but used to undermine the advisor's case. This *advice bounceback effect* occurs when a low credibility source advocates a product that opposes the consumer's tentative product preference. In other words, a low credibility disconfirming endorsement can strengthen an initial preference, resulting in greater selection of the leading product and greater choice confidence.

Study 1: Tennis Racquet Choice

Overview. Study 1 demonstrated the advice bounceback effect in a binary choice between two tennis racquets. The product information consisted of two attributes that described both racquets (swing feel and power) and the advice of a celebrity spokesperson regarding the durability of the racquets. Participants ($n=237$) were assigned to one of four factorial conditions created by crossing the advisor's expertise level (low versus high) with whether the advice confirmed or disconfirmed the participant's currently preferred racquet, hereafter referred to as the initial leader.

All participants saw the information in the same order (swing feel, advice, power). The swing feel attribute slightly favored one of the racquets, making it the initial leader for all participants. Whether the advice confirmed or disconfirmed participants' initial leader was manipulated by changing which racquet the spokesperson (Sara Michelle Gellar) claimed was durable. Her credibility was manipulated to be either high or low by jointly varying her prior tennis experience (vast or little) and whether she was trustworthy (she promoted select products) or untrustworthy (she promoted any products). After viewing all the information in sequence, participants selected one of the racquets and reported their confidence in their choice on a 100-point scale. Choice of the initial leader and final choice confidence were the main dependent variables.

Results. A binary logistic regression of choice of the initial leader on a credibility indicator, confirmatory nature indicator, and an interaction term yielded a significant interaction ($z=3.34, p<.001$). Not surprisingly, for high credibility advisors, choice of the initial leader was higher when the advice confirmed (92.8%) than when it disconfirmed (67.2%) the initial leader ($z=3.77, p<.001$). The interesting result (i.e., the bounceback effect) appeared in the low credibility condition, where choice of the initial leader was higher for disconfirming (94.6%) than confirming advice (84.4%; $z=1.65, p<.10$). This pattern was replicated with choice confidence, where a reliable credibility by confirmatory nature interaction ($F=23.66, p<.001$) was found. Additionally, confidence was higher for confirming advice (76.8) than disconfirming advice (69.9; $t(128)=3.13, p<.002$) in the high credibility condition, but the reverse was true for those in the low credibility condition (76.1 for disconfirming advice versus 66.7 for confirming; $t(99)=3.72, p<.001$).

Study 2: Wine Choice

Overview. Study 2 replicated study 1, with two exceptions. First, the domain was changed from tennis racquets to wine. Second, the last attribute slightly favored the opposite wine than the first attribute. The second change was that the advisor was a wine store clerk rather than a celebrity endorser. Credibility of the clerk was manipulated by varying experience with wine (extensive versus limited) and trustworthiness (the clerk had or did not have incentive to promote the recommended wine).

Results. The data mirrored those from study 1, with the bounceback effect appearing when the clerk had low credibility. For high credibility advisors, choice of the initial leader was higher when the advice confirmed (95.3%) than when it disconfirmed (63.3%) the initial leader ($z=4.39, p<.001$), but the reverse was true for low credibility advisors. That is, choice of the initial leader was higher for disconfirming (87.0%) than confirming advice (71.4%; $z=1.97, p<.05$). Again, the same pattern obtains for confidence, with high credibility participants indicating greater confidence after receiving confirming advice (73.0) than disconfirming advice (54.3; $t(100)=3.84, p<.001$), but greater confidence for disconfirming advice (69.6) than confirming advice (58.9; $t(101)=2.43, p<.05$) when the advisor had low credibility.

Discussion

Normatively, consumers should adjust their preferences very little in reaction to the low credibility advice. This is what they did when the advice confirmed the initial leader. However, even if participants heed the low credibility advice somewhat, they should not (normatively) reverse it to bolster their preference for the initial leader (i.e., the bounceback effect). This is precisely what happened when the advisor recommended the trailing product.

Additional data (not reported here due to space constraints) traces the bounceback effect to a reinterpretation of disconfirming advice when it comes from a low credibility advisor. The motivation behind this appears to be a defense mechanism that is activated by the disconfirming advice and can only get traction when the advisor's credibility is low.

The bounceback effect has implications for design and implementation of advertising appeals and advice provided by such sources as Internet recommendation agents. Specifically, our data suggests that in the absence of a credible endorser, a company may be better served to raise awareness than to attempt persuasion through comparative appeals. It also suggests that a company might be able to increase the loyalty of its current customer base by hiring a low credibility personality to promote the competition's product.

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“Westernization of Cultural Values in Korean Advertising: A Longitudinal Content Analysis of Magazine Ads from 1968-1998”³

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Studies on the role of culture in advertising have primarily dealt with cross-cultural comparisons (see Maheswaran & Shavitt, 2000, for a review). The main premise of these studies is that advertising themes in different cultures will reflect different cultural values, and that culture-congruent advertisements are generally more likely to be used and to be effective than culture-incongruent advertisements. Zhang & Gelb (1996) showed that U. S. participants responded more favorably to individualistic ad appeals than collectivistic ad appeals, whereas the reverse was true for Chinese respondents. Content analyses of advertising have also demonstrated that culturally matched ad appeals are more commonly used than are mismatched appeals (Han & Shavitt, 1994; Kim & Markus, 1999).

However, cultural values in a society change over time and the content of advertising is sensitive and subject to changes in cultural values (Tse, Belk, & Zhou, 1989). Indeed, research in consumer behavior has shown that advertising as a cultural artifact not only transmits and reflects existing values, but also plays a role in shaping new values (Pollay, 1986). Longitudinal content analysis of a society's ads offers an opportunity to examine the dynamic nature of cultural values and gain insight into the role of culture in advertising. This study examines how cultural values emphasized in Korean advertising changed since the 1960's as Korea evolved from a traditional-agrarian to a modern-industrial society.

Philosophers, sociologists, and anthropologists from Korea maintain that cultural values in the last few decades have changed from collectivism, humanism, authoritarianism, and tradition to individualism, materialism, equalitarianism and modernity (Cha & Chung, 1993; Ko, 1992; Lim, 1986). These shifts make the Korean context an important one for assessing how advertising reflects cultural change.

Korea has undergone dramatic economic growth as well as cultural change in recent years. In the past few decades, the growth of the Korean economy has been regarded as the *Han-river Miracle* (in reference to the river in Seoul). The per capita share of GNP in Korea increased from \$67 in 1953 to \$9,770 in 2000. The main industries in Korea have changed from agriculture in the 1960s to the most modern manufacturing industries currently (Bank of Korea, 2004).

More importantly, and related to these developments, the cultural and advertising environment in Korea has rapidly shifted since the 1960s. First, as noted earlier, Korea's modernization, economic development, and the influence of global marketing have encouraged Korean consumers to accept a new set of modern-western values. Second, multinational advertising agencies have flooded the Korean market since the Korean government opened the advertising market to foreign advertising agencies in the early 1990s. Currently, 8 out of the top ten advertising agencies operating in Korea are multinational agencies, compared to none in 1990. Agencies such as Leo Burnett and McCann-Erickson have had a noticeable influence on Korean advertising themes (Korea Association of Advertising Agencies, 2002). Third, a growing number of multinational advertisers buy advertising time and space in Korean media, and these companies tend to emphasize relatively modern-western values in their advertising. Fourth, the management style of Korean mass media companies has changed over time, and this also mitigates in favor of more westernized advertising appeals. Specifically, unlike in the 1960s and 1970s, the main targets of Korean mass media are the younger generations who are better educated, make more money than their parents, and have come of age in an environment of modernization and global marketing (see Zhang & Shavitt, 2003, for a related analysis in the modern Chinese context).

Our contention is that, fueled by dramatic changes in cultural, economic, and advertising environments, advertising themes in Korea have changed over time to reflect an increased concern with modern-western values. To support this contention, we conducted a longitudinal content analysis of Korean ad appeals. This analysis examined changes in the extent to which advertising content in Korea reflects its indigenous traditional-eastern values (collectivism, humanism, authoritarianism, and tradition) versus modern-western values (individualism, materialism, equalitarianism and modernity). A total of 1,248 magazine ads from the late 1960s to the late 1990s were analyzed every five years (sample years: 1968, '73, '78, '83, '88, '93, and '98). One popular news magazine (Shindonga) and one women's magazine (Jubusangwhal) were chosen for the study. May and November's issues were included in the sample. Approximately 100 product ads from each magazine (200 ads per year) were randomly selected. A manual for coding the ads was developed from factors identified by previous research on the focal cultural values (Han & Shavitt, 1994; Zhang & Shavitt, 2003). Coding was conducted by two independent coders who were unaware of the purposes of the study. Intercoder agreements of at least 85% for each value category were achieved during training.

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Our overall results revealed that, collapsed across time, more Korean ads emphasized modern-western values (53.3%) than traditional-eastern values (29.2%) as ad appeals ($p < .01$). In terms of specific value categories, more ads appealed to materialistic values than humanistic values (63.4% and 25.4%, $p < .01$), and more ads emphasized modernity values than tradition values (69.3% and 18.1%, $p < .001$). Individualistic and collectivistic values (48.6%, 44.4%), and authoritarian and equalitarian values (36.8%, 34.8%) were about equally represented.

More importantly, the data revealed a significant change in the use of modern-western and traditional-eastern values in Korean ads over the period of study. For example, collectivistic appeals were predominant in the late 1960s and 1970s (61.4% in 1968, 62.8% in 1973, 63.8% in 1978), whereas individualistic appeals were predominant in the 1980s and 1990s (51.9% in 1983, 62.2% in 1988, 55.6% in 1993, 69.7% in 1998; $p < .01$). A similar trend (traditional values prevailed in the 1960s and 1970s, but modern values did in the 1980s and 1990s) was also found for all of the other value categories. In all of the four value categories, modern-western appeals were increasingly used and traditional-eastern appeals were decreasingly used from 1968 to 1998. This change in ad content corresponds to the social and cultural changes in Korea during this period.

The present research contributes to the growing base of knowledge regarding the role of cultural shifts reflected in advertising. How culture influences ad content is well researched and recognized. However, longitudinal analysis of advertising content has the potential to uncover cultural dynamics reflected in advertising, a process not captured by traditional cross-cultural comparisons. Our results suggest that convergence toward western values is an increasingly important theme to investigate in the study of culture and advertising (see also Tse, et al., 1989; Zhang & Shavitt, 2003).

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"Self-Enhancing Through Consumption"

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Previous research suggests that possessions are the "extended self" (Belk 1988) and that individuals use various products to enact and confirm their different self-identities (e.g. Kleine et al. 1993; Shavitt and Nelson 2000). This line of research has revealed important insights regarding the issue of person-possession relations, however, questions remain as to: Can consumption be an effective remedy to help resume a positive self-regard when people's identities are temporarily threatened by negative events such as personal or group failures? If the answer is yes, what are the primary strategies people may adopt, through consumption, to self-enhance? Further, it may also be interesting to identify and test some moderators that help specify under what situations one strategy is more likely preferred than the other. Drawing on the self, the subjective well-being, and the possession literature, we attempt to address the above questions in our current study.

Is consumption an effective remedy to help resume a positive self-regard? An intuitive response may be yes. For example, possession studies do imply that various products offer both material and experiential rewards to individuals (Holbrook and Hirschman 1982; McCracken 1988). Some empirical evidence (Oropesa 1995) also demonstrates that the accumulation and even the anticipated accumulation of products can foster subjective well-being. All the findings seem to suggest that people can anticipate and enjoy both private material rewards and social values through their product preference or purchase. Presumably, such anticipation and enjoyment will effectively help restore their temporarily and partially lowered self-esteem. Therefore, we hypothesize that:

H1: When their identities are threatened by failures, people's lowered self-esteem will be boosted through product preference and/or purchase.

From a dynamic self perspective, we suggest that there are two primary strategies individuals may adopt to achieve the goal of maintaining a positive self regard, that is, they may either enhance directly the threatened self-identity or they may shift to other self-domains in order to boost the threatened one. Such dynamic relation between specific identities and the global self-esteem has received increased empirical support from previous studies (e.g. Hirt et al. 1997; Showers et al. 1998). To simplify our theorizing, we focus on two broad self-domains: the personal and the group self, and test how people either stick to one self-domain or shift to the alternative in order to resume a positive global self-regard.

The question left then is how the aforementioned self-enhancing mechanisms are manifested in people's different product preferences and/or purchase choices. We draw on Shavitt and Nelson (2000)'s study, which suggests that products differ in the degree to which they "engage social identity and utilitarian attitude functions." Specifically, some products, such as medicine and instruments, carry dominant utilitarian functions in terms of direct rewards or punishment associated with consumption. By contrast, other products, such as brand perfume and team banners, are more value-expressive. They are used more to reflect and symbolize particular values, styles, or status, that is, individuals' social identities. We thereby argue that when people engage in enhancing personal self, they should show higher preference for functional products, whereas when they engage in boosting group self, they will show higher preference for value-expressive ones.

Individuals' reliance on either self-enhancing strategy may differ due to their personal characteristics and the situation. We propose two such moderators. First, perceived self-control, that is, the extent to which the person perceived that he or his group is able to influence the process and/or outcome of the event. Lower perceived control is closely associated with depression and lowered self-esteem (e.g. Seligman 1975). It is thus plausible to argue that when self-control is low, it may be more difficult for individuals to face straight up to their threatened self-domain, in other words, they are more likely to adopt a shifting strategy, turning to the alternative self-domain in order to resume a positive global self-regard. We therefore propose that,

H2: Individuals in the lower self-control condition are more likely to shift to the alternative self-domain and, as reflected in their product preferences, when their personal identity is threatened, those with lower self-control are more likely to prefer value-expressive products, whereas when their group identity is threatened, they are more likely to prefer functional products.

The second moderator is self-complexity. Initially proposed by Linville (1987), the self-complexity theory suggests that greater self-complexity "entails cognitively organizing self-knowledge in terms of a greater number of self-aspects and maintaining greater distinction among self-aspects" and that it can moderate the adverse impact of stressful events on physical and mental health outcomes. However, so far it is still unclear what is the exact mechanism for such buffering effect. Our research context provides a great opportunity to gain more insights on this issue. This is because individuals' self-enhancing strategies can be unobtrusively and subtly captured through the products they prefer or choose. Specifically, two alternative explanations can be offered. One is called a salience effect, that is, the less self-knowledge people have and the less distinctive their self-aspects are, the more salient the incoming negative information becomes. Therefore, regardless of which self-aspect is threatened, it is more difficult for those lower in self-complexity to face up and effectively enhance that threatened self-aspect. That is,

H3: People lower in self-complexity are more likely to shift to the alternative self-domain when one identity is threatened and as reflected in their product preferences, those in personal failure condition are more likely to prefer value-expressive products, whereas those in group failure conditions are more likely to prefer functional ones.

However, an alternative explanation may argue that people with lower self-complexity may be completely occupied by the negative information of a specific self-domain because their self-aspects are less differentiated and other self-information may be easily colored by the negativity of this particular self-domain. In other words, those lower in self-complexity become more committed to the threatened self-domain. Therefore, we hypothesize that,

H4: People lower in self-complexity are more likely to stick to the threatened self-domain and, as reflected in their product preferences, those in personal failure are more likely to prefer functional products, whereas those in group failure are more likely to prefer value-expressive ones.

The above theorizing is examined in two experiments. Study 1 tests perceived self-control. Sixty subjects are asked to recall and relive sports failure events either of their own or of their favorite sports team. Self-control is manipulated by asking subjects to describe sports events in which they or their groups have either high or no control of the outcome. There is also a control condition, in which subjects simply write down an introduction of the recreation center. We test two dependent variables: a modified version of the Rosenberg (1965) self-esteem measure, and subjects' product preferences for both functional (key chain and vitamins) and value-expressive (perfume and team banners) products. The self-esteem measure is taken twice: after the failure manipulation and after product preference measure. Results from Study 1 show that people's self-esteems are lowered after the failure manipulation, but they are boosted significantly, as compared to those in the control condition, after showing product preferences. Further, when people's identities are threatened by personal failures, those with lower control are more likely to shift to the alternative group self (as reflected by their preference for value-expressive products). However, when their identities are threatened by group failures, those with lower control are more likely to stick to the group identity. That is, they show higher preference for value-expressive than functional products, but there is no preference difference in the high self-control condition. Our H1 is thus partially supported.

Study 2 tests the second moderator: self-complexity. The design is similar to Study 1 except that we include a self-complexity measure (Linville 1987) and different products. Results show that again people's global self-esteems rise significantly after showing product preferences. Moreover, in conditions of personal failure, people lower in self-complexity prefer functional products to value-expressive ones, whereas those higher in self-complexity show relatively higher preference for value-expressive products. By contrast, when their social identities are threatened, those lower in self-complexity show higher preference for value-expressive products, whereas those higher in self-complexity tend to prefer functional ones. In other words, individuals higher in self-complexity are more likely to shift to other self-domains to "buffer" the negative self-regard. H4, or the commitment explanation of the self-complexity buffering hypothesis, is thus supported.

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"Experience Design for Optimal Service Outcome"

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In today's era of super-grocery stores, it is no longer the branded items that bring in store business, but rather the full-service deli, the fresh baked goods, the premium meats, and an elaborate array of produce. Simply stated, perishable products drive grocery store traffic. The growing importance of perishables for store profitability and store image is supported by the following facts: sales of perishable goods rose 4.5% in 1999 and accounted for 69.4%, or about \$305 billion, of all retail food sales that year (*Supermarket Business*, 2000), produce represents 12.7% of total store sales and is the second most profitable category in the store next to frozen foods (Bernier 1999), and meat and produce tend to be the departments upon which consumers make value judgments about the store (Kerin, Jain and Howard 1992).

Managing perishable products is a complex process due to their random weights, the lack of specific UPC codes for different product variations, the different forms of sale (e.g., raw, semi-prepared, fully prepared), and the lack of standardized data to track sales, to name a few. In fact, perishable categories are so complex that many retailers have become paralyzed to implement any type of category management strategies in these categories (Litwak, 1997). According to Blattberg, Chaney and Associates (Chicago), "the key to successful category management is to understand how the consumer makes category decisions" (Litwak, 1997).

A better understanding of the way in which consumers behave in perishable categories is of importance to grocery managers, consumers themselves, and public policy makers alike. Studies have shown that supermarkets lose the most money in fresh-food departments due to shrinkage (waste due to spoilage). Categories such as produce, bakery and meat lose anywhere between 4.1%-4.6% of their goods to spoilage (compared to 2% overall), costing a grocery store anywhere from \$70,000-\$340,000 per year, depending on the size of the store (*Supermarket News*, 1997). A better understanding of consumers' awareness and perceptions of expiration dates, and their behavior as a result, could encourage grocery store managers and consumer advocates to better educate consumers about expiration dates.⁴ It can also help them make more effective managerial decisions in these categories.

A better understanding of behavior in perishable categories can benefit consumers as well. Insights that prompt managers to educate consumers about expiration dates will only help consumers make better, more informed purchasing decisions. Furthermore, managers who discount aging perishables are in fact signaling the age of the product and providing consumers the opportunity to make trade-offs between buying more expensive fresher items versus ones that are discounted and approaching their expiration dates, but are still safe to consume. This type of signaling and concerted effort not to sell a perishable close to its expiration date at full price could go a long way for creating good will and trust with consumers. But it seems that most managers are reluctant to implement such policies without a deeper understanding of consumer behavior in these categories.

Finally, from a public policy perspective, educating consumers about expiration dates and implementing policies that would help sell aging inventory could eliminate millions of dollars a year in waste in these categories—an improvement that should be of interest to food safety and food preservation advocates as well as grocery store managers.

Despite the importance of grocery store perishable goods to consumers, retailer and the public in general, these categories have received little to no attention in the marketing literature (Krider and Weinberg 2000). Hence, the main objective of this paper is to examine 1) consumers' awareness of expiration dates across different categories and 2) their willingness to pay (WTP) for different perishables over the shelf-life of the product. We develop a conceptual framework that suggests behavior in perishable categories is moderated by the perceived risks associated with buying and consuming a perishable good. Using this framework we develop a set of hypotheses that we test empirically via a survey of consumers' perceptions and behaviors in the following important perishable categories; chicken, beef, milk, yogurt, lettuce, and carrots.

Our findings show that risk does in fact play a part in explaining consumers' behavior in perishable categories. To begin, identify two main constructs of risk (via factor analysis) that affect consumers' behavior in perishable categories: "Product Risk", comprised of functional, performance and physical risk, and "Personal Risk", comprised of social, psychological and financial risk. We find that Product Risk and category experience are good predictors of the frequency with which consumers check expiration dates (i.e., salience), with little to no variation across different demographic segments. In examining WTP for a perishable over its shelf-life, we find some interesting differences across categories that are also explained by perceived risks. Our findings support many of our hypotheses and we use them to make recommendations for the management of grocery store perishable goods and to develop a research agenda for future studies in these under-researched, but important categories.

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"Personality Typology and Thinking Styles: Their Role in Framing and Prospect Theory"

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Abstract

The postulates of prospect theory are routinely used to explain an individual's failure to adhere to normative decision-making rules. Studies have shown systematic errors in a subject's attempts to make 'rational' decisions. This research explores the possibility that these 'systematic' errors are the result of an individual's personality type and thinking style, as assessed by the MBTI and the Rationality-Experientiality Index. It is hypothesized that personality and thinking style contribute to the likelihood that an individual adheres to normative decision-making rules. This paper extends Kahneman & Tversky's (1979) theoretical contributions, discusses practical applications, and suggests future research possibilities.

Introduction

This research investigates the relationship between personality type (Marcic *et. al.*, 2001), the Rationality Experientiality Index (Epstein *et. al.*, 1996), and decision-making as described by specific components of prospect theory (Kahneman & Tversky 1979; Tversky & Kahneman, 1986). Bounded rationality and multiple heuristics influence an individual's response to information frames. Prospect theory demonstrates that by manipulating situation frames and simple probabilities, a significant proportion of people will not follow expected utility theory. Prospect theory cannot invariably predict all individuals' behavior. Research has shown that some individuals will follow normative decision-making rules according to the expected utility model. The research proposed here explores the correlation between personality typologies and REI scores, and the likelihood of an individual's adherence to the expected utility model. This extended abstract will review prospect theory, the Myers-Briggs Type Indicator, the Rationality-Experientiality Index, the research methodology utilized, hypotheses, and contributions to the field of consumer behavior.

Prospect Theory

Prospect theory (Kahneman & Tversky, 1979) provides an alternative explanation to expected utility theory that better predicts decision behavior. It suggests that, when making decisions, individuals fail to meet four principles upon which expected utility theory is based: cancellation, transitivity, dominance, and invariance (Tversky & Kahneman, 1986). The latter two principles are the primary focus of this project, as failures of these principles are most easily demonstrated through the manipulation of decision frames, probabilities, and certainty effects. The failures of adherence to these principles are demonstrated through a replication of original research (Kahneman & Tversky 1979; Tversky & Kahneman, 1986). In every decision-making situation where a choice or preference is involved, personality and thinking-style variables are expected to moderate the relationship in some capacity. The outcome of an individual's decision-making task depends upon his or her psychological composition.

⁴Our research shows that 61% of consumers believe that an expiration date represents the last day in which the consumer should *consume* the product, when in most cases it represents the last day the product should be *sold*.

Myers-Briggs Type Indicator (MBTI)

The Myers-Briggs Type Indicator is “based on valuable differences in the ways human beings use their minds...it is based on basic differences in the ways human beings take in information and make decisions” (McCaulley, 2000). The MBTI divides humans into groups based on their attitudes (whether they are primarily extraverted or introverted), and on the functions that classify individuals: intuition, feeling, sensing, and thinking, judging, and perceiving. Jung, whose personality typologies this classification is based upon, believed that we use each of these functions every day, but that we rely primarily on only one of them. A Personality Inventory (PI) originally developed by Marcic & Nutt (Marcic *et. al.*, 2001) was used to categorize subjects’ personality types based on this framework. This inventory was used because it has demonstrated validity and reliability, and it is length-appropriate.

The Rationality Experientiality Index (REI)

The Rationality Experientiality Index (Epstein *et. al.*, 1996; Pacini & Epstein, 1999) provides a measure of rational and experiential thinking styles. The rational system operates by reasoning; it is analytical, slower, and mostly affect-free. The polar opposite of rational thinking is the experiential system, which functions rapidly, is largely automatic, laden with affect, and preconscious (Pacini & Epstein, 1999). Thinking style, as assessed by the REI, is likely to have some predictive validity in determining whether an individual will adhere to the normative model of decision-making.

Method

Two versions of a questionnaire were administered to a convenience sample of undergraduate and graduate students at a public university. A single method was used to demonstrate the shortcomings of expected utility theory; framing was manipulated to achieve this goal. Information provided to subjects was modified to fit negative/loss and positive/gain frames. Consumers’ responses to the frames have been analyzed with respect to their self-reported personality typology and REI scores.

Hypotheses

Because ‘Rationality’ is described by the REI as the slower, analytical, more rational approach to decision-making, and ‘Experientiality’ is associated with rapid automatic decisions, I hypothesize that:

H1a: Individuals scoring high on Rationality are more likely to adhere to the expected utility model.

H1b: Individuals scoring high on Experientiality are more likely to adhere to the prospect theory model.

The Personality Inventory’s classification of extroverts and introverts characterizes individuals based on whether they rely on stimuli from the outside world or the inner psyche.

H2a: Extroverted individuals rely on external cues for behavior and are more likely to adhere to the expected utility model.

H2b: Introverted individuals rely on self-reference and are more likely to adhere to the prospect theory model.

Preliminary Results

Subjects were assigned a Rationality Score and an Experientiality Score based on their responses to the questionnaire. The results partially support H1a and H1b, suggesting differences between Rational and Experiential thinkers with respect to uncertainty of gains and losses and the calculation and processing of information frames. Individuals scoring high on the Experientiality scale are more likely to adhere to prospect theory and be more swayed by the framing of information. The subjects’ responses to decision frames with respect to personality characteristics provided interesting results. The results partially support H2a and H2b. Extroverts are more comfortable with uncertainty with respect to both gain and loss frames. Extroverts and introverts are strongly swayed by the framing of information, but in opposite directions. The relationships between the Thinking, Feeling, Sensing, Intuiting, Judging, and Perceiving functions and adherence to prospect theory were inconclusive and require further analysis.

Contributions

This study will help define the limitations of two theories which purport to explain decision-making and also determine the level of generalizability of these theories among groups of consumers. Consumers can be segmented based on insights provided by this type of research. The results suggest methods of communication that may be more effective for certain personality or learning types. From a social marketing perspective, learning to communicate more effectively with a larger number of consumers is of critical importance. One method of communication does not fit all consumers; the more we learn about which messages are effective for which consumers (tailoring), the more cost effectively we will be able to reach them.

Further Research

Many affective and cognitive components influence choice behavior. This project is investigating only two of several independent variables that moderate and/or influence consumer decision making. The independent variables measured were chosen in part due to existing accurate and validated measurement tools. Additional research in this area of study would enable marketers to develop increasingly cost effective methods of communication.

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"Dragging One's Feet in Bargaining: Effect of Response Time on Perceptions of Bargaining Outcomes"⁵

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Bargainers typically evaluate the quality of a potential bargaining outcome relative to a reference point and the outcome is coded as a gain or a loss based on this reference point. While extant research unambiguously shows that bargainers are reference-dependent, these studies generally use reference points that are clearly specified and easily available. Often, however, bargaining situations are much more complex as they are characterized by uncertainty and asymmetric information. When clearly specified reference points are not available, bargainers may be uncertain regarding the mutual gains from trade. In the absence of a priori, objective, externally specified reference points, bargainers' evaluations of potential bargaining outcomes may be influenced by internal cues that emerge from within the bargaining context.

In bargaining with incomplete information, bargainers may use features of the bargaining process as referents to infer their own and/or opponents' payoffs in at least two ways based on opponents' active or passive behavior. Bargainers may infer some information about payoffs when opponents actively respond to an existing offer positively (i.e., accept) or negatively (i.e., reject and make a counteroffer). Another important cue that may emerge from within the bargaining context, and the focus of this research, is opponent's passive behavior or the time taken by an opponent to respond to an existing offer (positively or negatively). While a few studies have examined bargainers' inferences based on active behavior (e.g., Srivastava 2001), relatively little research has focused on how opponents' passive behavior affects perceptions of bargaining outcomes.

This research explores how internal cues that emerge from the bargaining environment influence perceptions of bargaining outcomes, particularly in incomplete information situations where there are no externally specified reference points. Specifically, this paper examines the role of time taken to respond to an offer in influencing bargainers' perceptions of bargaining outcomes. Since bargainers' perceptions of their opponents' payoffs play an important role in evaluating potential bargaining outcomes (see Loewenstein et al. 1989), internal cues such as the time taken to respond to an offer may be used to infer own and opponents' payoffs and thereby evaluate potential bargaining outcomes. A series of five experiments show that perceptions of bargaining outcomes are significantly influenced by the time taken to accept/reject offers.

Study 1 is a simple two factor (no delay, delay in accepting an offer) scenario based study where subjects are purchasing a Persian rug. In the no delay condition, the Persian rug vendor accepts an offer immediately, whereas in delay condition it is accepted after a 10-minute delay. We find that despite the same objective outcome, participants were significantly more satisfied, more successful and happier when there was a delay in accepting their offer. Study 1 demonstrates that perceptions of bargaining outcomes are susceptible to internal cues such as response time that emerge from within the bargaining environment and often are completely independent of actual outcomes. The basic premise underlying the influence of internal cues such as response time on perceptions of bargaining outcomes is that these cues play a dominant role in information poor conditions where individuals do not have access to reference points on the basis of which outcomes can be evaluated objectively. Studies 2 and 3 therefore test the boundary conditions for the effect of response time on perceptions of bargaining outcomes.

Study 2 employs a 2 (delay, no delay) x 2 (information, no information) between-subjects experimental design where students are negotiating the price of a used car with the owner. In the no delay condition, the owner accepts an offer immediately whereas in the delay condition, the offer is accepted after 2 days. The second factor is manipulated by supplying blue book value in the information condition and not supplying the book value of the car in the no information condition. The results of this study are consistent with those in study 1. Importantly, we find support for the hypothesis that individuals use the time taken by the opponent to respond to make inferences about opponents' bargaining position or payoffs only when there is paucity of information.

While study 2 shed light on the inferences by examining bargaining perceptions in the presence and absence of external referents, study 3 controls for the attributions triggered by the time taken to respond by explicitly providing reasons for the delay, that are unrelated to the bargaining. Subjects participated in a three factor (no delay, delay with no reason, delay with reason) between subjects study where they are negotiating the rent for an apartment sublet. The conditions are manipulated by accepting the offer immediately for no delay condition, asking the buyers to come back the next day for delay condition and asking the buyers to come back the next day as the seller has to attend an important phone call at that time for delay with reason condition. The analysis shows that delay can be attributed to unrelated reasons, the time taken to accept an offer does not influence perceptions of bargaining outcomes.

While studies 1 through 3 examine the influence of response time when an offer is accepted, study 4 extends the inquiry in the negative domain and examines the influence of time taken to respond to an offer on perceptions of bargaining outcomes when the offer is rejected. Subjects participated in a 2 (delay, no delay) x 2 (accept, reject) between subjects design where subjects are negotiating the price of a used

⁵The authors thanks Melissa Calavan, Jennifer Lau, Albert Lee, Jason Manly, Vanessa Tung, Ryan Lowe, Kiran Hemgay and Nevena Koukova for their help in collecting the data. The authors acknowledge the helpful comments and suggestions of Ana Valenzuela.

car. The analysis shows that the time taken to respond to an offer influences perceptions of opponents' reservation price or payoffs even in the reject condition. While estimates of opponents' reservation price were lower when the offer was accepted in the no delay condition (relative to the delay condition), estimates were higher when the offer was rejected.

Although the four studies demonstrate the influence of time taken to respond to an offer, these were all scenario-based studies. To extend our inquiry to an actual bargaining setting, study 5 was conducted within the context of a salary negotiation. In the no delay condition, the subject's salary offer was accepted immediately whereas in the delay condition, the offer was accepted after a delay of about 6 minutes. We find that although there is no significant difference between the final agreed upon salaries in both conditions, subjects were significantly more satisfied, happier and more pleased when their salary offers were accepted after delay rather than immediately.

Together, the results from the five studies demonstrate clearly that internal cues which may emerge from the bargaining environment influence perceptions of bargaining outcomes, particularly in incomplete information situations where there are no externally specified reference points. In the absence of referents, people are highly susceptible to internal cues such as the time taken to respond to an offer.

“Activation of Salesperson Stereotypes Affects Perceptions of Word-of-Mouth Referral”

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Introduction

Friestad and Wright's (1994) Persuasion Knowledge Model proposes that persuasion involves an interaction between a persuasion agent and a persuasion target. In this interaction, targets are not “helpless” victims of the persuasion tactics employed by the agent. Like persuasion agents, targets possess a certain amount of persuasion knowledge, which allows them to “...recognize, analyze, interpret, evaluate and remember persuasion attempts and to select and execute coping tactics believed to be effective and appropriate” (Friestad and Wright, 1994, p.3). The activation of this knowledge affects a persuasion target's perceptions of a persuasion attempt, which in turn influences its impact on (purchase) behavior. Although most research on persuasion has focused on advertising and personal selling, persuasion episodes also occur among consumers (cf., Hamilton, 2003). Applying the persuasion knowledge model to such settings broadens its scope, and helps understanding how marketers might leverage the effectiveness of such consumer-consumer interactions including word-of-mouth (WOM) referral (Verlegh, Peters and Pruyn 2003). One of the reasons behind the effectiveness of WOM is the (perceived) absence of marketing involvement. This might change when marketers try to actively stimulate WOM referral, as in buzz marketing (Dye, 2000). To better understand the effectiveness of stimulated WOM, we examine when a WOM message is no longer perceived as genuine anymore, but rather as an intentional attempt of the source to persuade a target. Our goal is (1) to find out when persuasion knowledge is activated in interpersonal influence situations, and (2) to assess the consequences of such activation.

Conceptualization

Campbell and Kirmani (2000) propose that persuasion knowledge activation depends on the accessibility of ulterior motives and on the availability of cognitive capacity. They confirmed this notion in a series of scenario studies, manipulating for example whether a salesperson recommended a product either before (high accessible ulterior motive) or after (low accessible ulterior motive) the purchase decision had been made. If the ulterior motive was highly accessible, consumers always made inferences of persuasion intentions and (hence) perceive the salesperson as less sincere. If the ulterior motive was less accessible, inferences of persuasion intentions were made only if the persuasion target had ample cognitive capacity available.

We extend this finding by looking at a third variable, agent type. A persuasion agent is not by definition a salesperson, but can also be a fellow consumer. We expect that the kind of influence agent interacts with the perception of ulterior motives. Previous research shows that people have a stereotype of salespersons that includes perceptions of salespersons being pushy, insincere and outgoing (e.g., Babin, Boles and Darden, 1995). Such stereotypes become activated automatically upon the perception of a salesperson, and color the perception of behavior in a way that is consistent with the stereotype (Devine, 1989). This implies that the activation of the salesperson stereotype would facilitate the recognition of ulterior motives, and in turn, the perception of underlying persuasion intentions. Note that cognitive capacity is needed to correct the first, automatic, impression (Gilbert, Pelham and Krull, 1988). Thus, when the salesperson stereotype is activated, but behavior is inconsistent with this stereotype, consumers only correct stereotypical inferences if cognitive capacity is sufficient.

Method

We tested the hypotheses in a 2 x 2 x 2 between subjects design (N=198). We used a lexical decision task to unobtrusively prime half of the respondents with sales related constructs in order to activate the salesperson stereotype. Cognitive capacity was manipulated by making respondents remember eight or one digit(s) during the task. All read an ambiguous scenario in which the description of a fellow student's behavior was varied in order to manipulate the likelihood of ulterior motives underlying his action (i.e., a positive referral regarding a study-related magazine). Dependent measures included the evaluation of the student and of the referred product.

Results

The most interesting result was a significant three-way interaction on a multi-item measure of perceived sincerity. Further analyses reveal partial support for our hypotheses: the persuasion agent is perceived as less sincere when the stereotype is activated, under low capacity and with underlying ulterior motives, in comparison to conditions without stereotype activation or ulterior motives. The agent

is also perceived less sincere when the stereotype is not activated but there is an ulterior motive and enough capacity to process this behavioral information. Contrary to our expectations, stereotype activation without an ulterior motive being present did not lower perceived sincerity. A positive initial impression of a persuasion agent can become less positive when the target perceives an underlying ulterior motive, and has the capacity to integrate this motive in evaluations of the agent. Activation of a salesperson stereotype can reverse this effect: It facilitates the perception of ulterior motives, and makes initial impressions less positive. Additional effort is then required to improve this perception in light of agent behavior that is inconsistent with this stereotype.

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"What Do You Mean I Was Rejected? An Investigation of Consumer Responses to Rejection"

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Consumers are often in the position of being rejected by organizations after applying for credit cards, loans or membership into certain clubs. However, research in consumer behavior has not examined how consumers respond to this rejection. This research aims to address the void in the literature. Results demonstrated that consumers who experienced rejection were less satisfied with their purchase and experienced more negative affect as compared to consumers whose application was accepted. Further, results demonstrated that consumers who were rejected perceived their outcomes as more unfair. Future research directions are also discussed.

"Service Validity and Service Reliability of Search, Experience and Credence Services: A Vignette Study"

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This study investigates the effect of service reliability and validity (*is the 'correct' service produced?*) on satisfaction with search, experience and credence services. A total of 120 consumers participated in a 2x2x3 design. Results support the notion that validity independently affects satisfaction, especially in case of experience services. Therefore, in research on service satisfaction, more attention should be paid to service validity. Prior to consumption, consumers tend to have only a vague idea about the validity of the (experience) service. Once being realized, service specifications take shape and consumers gain insight into the fit between service outcomes and their needs.

"Does Direction of Prediction Impact the Self-Prophecy Effect?"

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Merely making a prediction regarding one's future behavior (i.e., self-prophecy; see Spangenberg & Greenwald, 1999) has been shown to positively affect the performance of normative behaviors (e.g., Sprott, Spangenberg, & Fisher, 2003). Yet to be determined, however, is whether the "direction" of people's predictions has an influence on observed effects. The current research investigates this unexplored question in the context of implicit gender stereotyping behavior. Theoretical expectations were made based on expected gender-based information processing differences (e.g., Meyers-Levy & Maheswaran, 1991). The experimental evidence showed an interaction between participant gender and direction of prediction with regard to implicit gender-biased responses.

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“Building Loyalty in an Online Environment: The Moderating Role of Flow”

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This paper investigates the trust-loyalty relationship in an online environment. Study 1 reveals that trustworthy web sites yield high levels of loyalty due to the strongly held positive beliefs about the web site. Study 2 investigates the moderating role of flow, characterized by the perceived balance between skills and challenges at a website. The results indicate that higher perceptions of flow strengthen the effects of trust on loyalty, as compared to lower perceptions of flow. In Study 3 we propose to investigate the influence of two kinds of flow (task oriented and experiential) on the trust-loyalty relationship.

“The Role of Online Browsing and Prior Knowledge on Pre-purchase Search and Purchase Behavior”

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Abstract

This paper examines the effects of online browsing and prior knowledge on pre-purchase search in an online shopping context. An exploratory study investigated the potential influence of experiential browsing on the extent and patterns of pre-purchase search online. Results suggest that there is an association between these variables for people who browse online for experiential reasons. A follow-up experimental study empirically tested the effects that experiential browsing online and prior knowledge have on future goal-directed search online. We found support for our hypotheses on some of the main and interaction effects. Implications for these findings are discussed.

A significant trend in buying behavior is increased consumer information search online. As information search and e-commerce continue to grow, it seems important to better understand the goals that motivate consumers' online search behavior and the patterns of search that accompany those goals. Although search behavior has long been accepted as a pivotal part of the consumer decision-making process, online search has yet to receive the same level of attention. A more thorough understanding of online search behavior is required to assess the relationship between online search visits that are motivated by different goals. Specifically, this study examines the potential relationship between browsing and goal-directed search online and the role of prior knowledge.

Traditional offline research on search behavior has studied the amount and sources of pre-purchase search (e.g., such as the economics of information and information processing/cognition research streams) as well as the experiential aspects of search behavior (Holbrook and Hirschman, 1982; and Bloch, Sherrell and Ridgway, 1986). It is, however, much more recent that online studies started examining the impact of search behaviors that are motivated by both economic and non-economic goals. Bloch and his colleagues introduced the dual model of search that divides external search type into ongoing and goal-directed search based on search goals and level of involvement. Non-economic goals include fun, recreation/entertainment, play and information. This type of online search is referred to as experiential browsing behavior (Hoffman and Novak, 1996; Wolfinger and Gilly, 2002; Zhou, 2002; Novak, Hoffman and Duhachek, 2003). In this study, we posit that experiential browsing is likely to influence the extent and patterns of goal-directed search that consumers conduct online.

In an online environment, the influence of browsing behavior is likely to be more important due, in part, to the frequency with which consumers can browse. Compared to traditional shopping mediums the ease, access and convenience with which consumers can search online is vastly superior (Bakos, 2001; Alba et al., 1997). We contend that the same arguments apply to browsing behavior online. Patterns of online search behavior are also more transparent online as consumer click-stream studies show that the type of search that consumers conduct, either browsing or goal-directed search, can be readily identified through their click-stream paths (Moe and Fader, 2001). Further, Bucklin and Sismeiro (2003) developed a click-stream model of search that takes into account page views and duration of page views. This ability to track consumers' click-stream paths allows for more extensive study of search behaviors, even those motivated by different goals. However, neither of the online studies discussed takes into account the role of different types of prior knowledge, the inter-relationships between different types of search and purchase behavior, and patterns of search across Web sites.

To gauge the level of influence that experiential browsing could have on goal-directed search and, ultimately, purchase behavior, we consider the interactive effects of browsing and consumers assessment of what they think they know (i.e., prior subjective knowledge). Definitions of subjective knowledge appear to vary according to researcher. Park, Mothersbaugh and Frieck, (1994) contend that it is “what people think they know;” while, Reinecke-Flynn and Goldsmith (1999) refer to it as “a feeling of knowing.” A number of studies have also investigated the effects of subjective knowledge on search; however, the results of these studies have been equivocal. A positive relationship was found by Brucks (1985), Srinivasan and Ratchford (1991) and Raju, Lonial and Mangold (1995). Whereas, a negative relationship was found by Selnes and Gronhaug (1986), Radecki and Jacard, (1995) and Klein and Ford (2003).

Similar to Park, Gardner and Thuskal's (1998) experiment, regarding the effects of subjective knowledge on consumers' acceptance of additional and conflictual information, we examine the interaction effects of subjective knowledge (i.e., prior to online browsing) and experiential browsing online on extent of goal-directed search online.

Two research studies were conducted—Study 1 was exploratory in nature and utilized focus groups; and Study 2 was an experimental study, with a factorial design. Study 1 seeks to explore the notion suggested by several researchers (Bloch, Sherrell and Ridgway, 1986; Hoffman and Novak, 1996; Moe and Fader, 2001; and Moe, 2003) that a relationship exists between ongoing search or experiential browsing and goal-directed search behavior. Results from Study 1 support the notion that experiential browsing and goal-directed search are in fact related behaviors. Respondents' self scripts also revealed that the motivations for online browsing were exploration, information seeking, fantasy/fun escapism/boredom and inspiration. These findings are consistent with the results of more recent qualitative research studies online (Wolfenbarger and Gilly, 2002). However, utilitarian motives for browsing were also found that related to the ease or convenience with which consumers can browse online and the extended access to store sites compared with traditional mediums. Importantly, focus group results showed that online browsing influences later external search when consumers have a planned purchase in mind. Self scripts indicated that even when browsing was for fun, versus for information, consumers would remember information or save it for later (e.g. in favorite places). Thus, information could be recalled or reactivated for use in future purchase related decisions. The primary drivers for experiential browsing online, followed by goal-directed search (i.e., sequential search), were to be better informed, to confirm information discovered and for reassurance.

Consistent with Study 1, Study 2 shows that a relationship exists between browsing and extent of goal-directed search online. Moreover, two-way interaction effects between prior subjective knowledge and experiential browsing were found with regard to the extent of goal-directed search online in the vacation travel category. Specifically, high levels of prior subjective knowledge at high levels of experiential browsing online resulted in extended goal-directed search activity online.

Study 2, demonstrates the effects of type and level of knowledge (i.e., prior subjective, knowledge, high and low) and the interrelationships between different measures of search online. Indeed, Klein and Ford (2003) state that further research is required to determine the effects of type and level of prior knowledge on online search. This research addresses this notion in the context of online search motivated by different goals.

The results from our study suggest that for heavy browsers, consumers may reassess their feeling of knowing (i.e., when they have high prior subjective knowledge) because high browsing activity highlights that they could learn more. Implications from these findings are: 1) consumers search further in goal-directed search to maintain their previous subjective knowledge assessment, and 2) turning browsers into buyers may not be as simple as identifying the type and amount of search that consumers conduct through their online click-stream behavior.

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"The Differential Effects of Guilt Appeals in Persuasive Marketing Communications"

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Limited research in the persuasive effects of negative affective appeals indicate that some negative emotions, such as guilt, have a strong motivational quality. In particular, anticipatory and reactive guilt have fundamentally different characteristics and correspondingly are likely to have differential effects on attitudes and behavior. As hypothesized, felt guilt, negative emotions, and unintended emotions were reported to be higher in the reactive guilt condition, and positive emotions, positive attitudes, and intentions (to try product) were all reported to be higher in the anticipatory guilt condition. Several interactions suggested that reactive guilt ads led participants who were lower in self control to feel more unintended emotions and feel more negatively toward the firm relative to other participants.

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"Male Body Image and the Fear Appeal"

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Extensive research in marketing and social sciences has been conducted which addressed body image. The subject of the vast majority of these studies has been the female body with focuses on self-esteem, media and race (Richins 1991; Martin and Kennedy 1994; Richins 1995, Milkie 1999). Multiple studies have pinpointed the media's use of an idealized image as a cause of significant body image problems (Richins 1996). The theoretical base for the majority of the research has relied upon Festinger's social comparison theory (1954) whereby individuals have a natural response to compare themselves to others. Recently, other theoretical themes have been discussed in the context of body image including Rosenberg's (1979) self-esteem scale and Thompson's and Hirschman's (1995) poststructuralist analysis.

Until recently, limited research had been conducted that focused on male body image. With the increased reporting of steroid use among athletes (Barry Bonds, Lance Armstrong), unparalleled growth in muscle supplement sales and the extensive use of the male body in advertisements, male body dissatisfaction has risen. The male body image problem has permeated all groups of men. According to surveys in *Psychology Today* from 1972 to 1985 and 1997, males have increased their body dissatisfaction at similar rates to women. When asked about muscle tone, 45% of men in 1997 were dissatisfied, compared to 25% in 1972. Male disappointment in their overall appearance

has grown at a faster pace than females between 1972 to 1997: 187% for men as compared to 124% for women. The gap between female and male body dissatisfaction has decreased dramatically (McCaulay, Mintz and Glenn 1988).

The work of Pope, Phillips and Oliverdia (2000) has addressed male body image problems and coined one such extreme behavior as the *Adonis Complex*. A trend in advertisements has contributed to the image of the male as strong, muscular and upscale (Kolbe and Albanese 1996). Given the influx of the muscular male body in advertisements, men now have a multitude of images to evaluate themselves against as women have in the past (Riccardelli and McCabe 2001) reinforcing social comparison theory. However, how these images are displayed in advertising and in what context has not been adequately researched.

Since the central theme of advertising is persuasion and the male body is prominently displayed in these ads, both an intentional and unintentional consequence of advertising has developed (Pollay 1986). In some cases, there has been an overt message of a new norm for body image (Pope, Phillips and Oliverdia 2000) frequently seen in specialized magazines (fitness and weight lifting) and television advertising (health clubs, diet ads). Problematic is the covert representation or unintended display as seen in television programs and non-health related advertising. Although not directly a part of advertising, these actors function as “informal advertisements persuading consumers to adopt a particular lifestyle” (Hirschman and Thompson 1997). The ability to adequately measure overt and covert representations is significant in the study of male body image.

More recently, the overt representation of the muscular male body has become even more rampant not only in advertising but also in television content. Programs such as NBC’s *Average Joe*, MTV’s *Real World*, and daytime network soap operas continually display the male physique, shirtless and muscular, in their programs. For instance, recent episodes of *Average Joe* on NBC had multiple shots of shirtless muscular men throughout each episode. An adequate study of programming content’s use of the male physique has not been completed as was done by Kolbe and Albanese (1996) in advertising.

Advertising messages utilize several persuasive techniques in order to achieve a goal whether awareness or attitude change. While consumer attitude toward the advertisement has been a central topic in most literature (MacKenzie, Lutz and Belch 1986), the analysis of persuasive attempts has not concluded consistent results (LaTour and Tanner 2003).

One persuasive technique used consistently is the fear appeal. Currently, the fear appeal is being employed in the context of male body image. Unfortunately, the study of the fear appeal has been misunderstood in advertising and marketing (LaTour and Rotfeld 1997). Within the fear appeal, there exists both a threat and an individual arousal (LaTour and Pitts 1989). The threat is the communication mechanism that attempts to evoke the fear response or arousal (LaTour and Rotfield 1997). With body image ads, the fear is manifested in the feelings of “embarrassment” and “non-masculinity” if the body representation is not muscular or toned (Kearney-Cooke and Steichen-Asch 1990). According to several researchers including Michael Signorile (1997), advertising creates a cult of masculinity with its constant display of the male physique originally targeting gay men and now pinpointing teenaged males. These advertisements both indirectly and directly have diffused into the heterosexual population causing the body image to become more idealized across all segments of the male population. This subculture of heterosexual men concerned with body and “looks” has recently been coined *metrosexual*.

Discussion and analysis of the fear appeal has been explained using several theories including the protection motivation theory (Rogers 1975), activation theory (Thayer 1986; LaTour and Pitts 1989; LaTour and Rotfield 1997), and the extended parallel process model (EPPM) (Witte 1992). Recent advances by Nabi (1999, 2002) using the cognitive functional model (CFM) has been gaining increased acceptance.

The basis of the protection motivation theory is a cognitive appraisal process whereby an individual follows a step-by-step process that involves coping and coping behavior (Rogers 1975). Tanner, Hunt and Eppright (1991) refined the model by incorporating social and emotional elements into the motivation model as well as the ordered presentation of the threat. When the body image is activated, in what context, and how the receiver responds to the threat in order to protect him is the central component of the theory. If coping, the male may activate another role in his self-schema putting salience on an alternate identity (i.e. father, businessman) or he may activate the body as a major component of his self-esteem by engaging in muscle building (Markus 1977; Laverie, Kleine and Kleine 2002; Forehand Deshpande and Reed 2002). Hargreaves and Tiggeman (2002) found the self-schema activation pronounced among males when body image became more prominent in advertising.

The activation theory approach to fear appeals involves the level of arousal, tension and energy that is produced from the appeal (Thayer 1986; LaTour and Pitts 1989; LaTour and Rotfield 1997). The recipient of the fear appeal is threatened and subsequently generates energy. If the fear appeal is too strong, the energy is converted into anxiety and then the appeal is rejected. While the protection motivation theory includes coping mechanisms, the activation theory limits itself to the message itself and whether it primes the body as the central core of self-esteem.

Two current theories utilized to explain the fear appeal are Witte’s extended parallel process model (EPPM) (1992) and Nabi’s cognitive functional model (1999). In the EPPM, two processes occur. In one path, the viewer of a fear appeal sees the advertisement and responds to it by controlling the danger using adaptive behavior. The adaptive behavior is following what is recommended in the advertisement. For body image fear appeals, it may include diet, exercise, or the use of supplements. The alternative path is to control the fear by engaging in maladaptive behavior including a defensive avoidance strategy like the rejection of the message, the rejection of the source, and the shifting of the focus. Both adaptive and maladaptive strategies can result in deviant behavior.

For a body image fear appeal, a male may take issue with the appearance of the hyper muscular male believing the model is a steroid user or gay (if the viewer is heterosexual). Another common maladaptive behavior for body image fear appeals is the surrender. The subject believes he can never achieve the idealized image and becomes dissatisfied with his body resulting in depression, lower self-esteem and possible over-eating (McCarthy 1990).

Unfortunately, most research neglected to include the impact of attitude formation. Many researchers believe attitude formation should be incorporated into the fear appeal model (Roskos-Ewoldsen, Arpan-Ralstin, and St. Pierre 2002). The question being posed is “does the fear change the long-term behavior of the subject” directly impacting the efficacy?

Nabi’s CFM incorporates a long-term impact of the fear appeal with an information processing context. The core of her model is that the fear appeal acts as a catalyst for change in attitude. The message is reflective of the person and the environment causing one of two actions: motivation to attend or motivation to avoid. A major difference is seen in the depth of processing of information and it does not

rely totally on efficacy. When an individual in fear control response suppresses the thought of the threat, the subject can continue to reflect upon the image (Wegner, Schneider, Carter, and White 1987; Wenzlaff, Wegner, and Reger 1988). The reflection on the advertisement and the image results in significant cognitive processing resulting in an attitude change.

This study analyzed the impact of diverse fear appeals on self-esteem and body image. The study compared how a male interprets the advertised fear appeal verses other body image appeals. Male subjects, from a local health club, were divided into two groups. Group one was shown print advertisements that included various body image fear appeals (punishment) while group two was shown alternative appeals (positive). Both groups were surveyed and measured on self-esteem, attitude toward the ad, fear arousal (Mewborn and Rogers 1979) and role identification.

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"Think It's Good, but Feel It's Bad: Country-of-Origin Effect on Cognition, Affect, and Behavior"⁶

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The country of origin of products has substantial influence on consumers' judgment about the product and the perception of advertising claims (Hong and Wyer 1989; Verlegh and Steenkamp 1999). The country of origin effect (COE) is primarily rooted in cognitive aspects of information processing such that country of origin sometimes signals product quality (Johansson 1989), or other times it is viewed as a product attribute (Hong and Wyer 1990). Accordingly, the COE is often considered a type of schema-based stereotype in that consumers classify products into categories (i.e., country of origin) and apply prior knowledge about the categories (Maheswaran 1994). This view presumes that COE is context-dependent and may vary across situations (e.g., product type) and culture-specific factors (Gurhan-Canli and Maheswaran 2000; Han and Shavitt 1994; Klein, Ettenson, and Morris 1998). For example, the same country can bring about cognitively positive associations (e.g., Russian caviar) or negative associations (e.g., a Russian automobile) depending on the product category under consideration. Further, it is generally assumed that consumers are capable of factoring out country of origin information if it is perceived to be irrelevant to product evaluation. However, in this paper we argue that COE can exert its influence on consumer behaviors via affect without influencing one's cognition. That is, even when an advertised product's country of origin does not have a negative impact on the cognitive component of attitudes, it can still result in negative consequences for affect, and hence, behavior.

The national image of South Korea among Americans tends to be negative (Han 2001; Shin 1999). For example, Shin (1999) reported the ratio of positive to negative US news reports dealing with South Korea to be 4:1. However, in certain product domains such as consumer electronics and automobiles, American consumers do not seem to view Korean brands as low-quality. For example, Samsung, a major South Korean brand in consumer electronics, is known as one of the fastest growing brands (Corstjens and Merrihue 2003) and ranked 25th in Interbrand's ranking of the best global brand (Doonar 2003).⁷ This presumed discrepancy (i.e., overall negative image but positive image in certain product domains) leads us to the following hypotheses: An advertisement featuring an automobile or a computer monitor manufactured in South Korea (i.e., a positive product category), compared to US-manufactured counterparts, will arouse 1) a more negative overall response (H1), 2) a similar cognitive response (H2), 3) a more negative affective response (H3), and 4) a more negative behavioral response (H4), from the American consumers. These were tested in Experiment 1 (conducted in 1998), Experiment 2 (conducted in 1998), and Experiments (conducted in 2000).

In Experiment 1, two magazine advertisements for South Korean-manufactured automobiles and computer monitors were selected from *Sports Illustrated* and *Business Week*, and the original brand names were replaced with fictitious brands. Country of origin was manipulated by inserting either "Made in Korea" or "Made in USA". The study has a 2 x 2 (South Korean/American brand; Automobile/Computer monitor) between-subject design. 120 participants were recruited from a major shopping mall and a major electronics store in mid-sized town in the Midwest. Participants were randomly assigned to one of the four conditions, viewed the ad, and completed the questionnaire for dependent measures and manipulation check.

11 nine-point scale items were used to measure cognitive (believable, informative, clear), affective (interesting, appealing, impressive, attractive, eye-catching), and behavioral components ("buy/seek out/intend to buy the product") of attitudes (Baker and Churchill 1977). The scale was reliable: alphas were .72, .80, and .80 for cognitive, affective, and behavioral components, respectively.

The manipulation was successful: most people had not seen the ads before the experiment (87%), and correctly identified the country of origin (89%). The data were first analyzed using a 2 x 2 MANOVA (Country x Product) to compare participants' overall attitudes. As predicted in Hypothesis 1, there was a significant main effect for Country ($F(3, 114)=6.04, p<.001$). Three separate 2 x 2 ANOVAs supported the remaining hypotheses: cognitive ($M_{US}=5.84, M_{Kor}=5.78; F(1, 116)=.05, n.s.$), affective ($M_{US}=3.64, M_{Kor}=2.74; F(1, 116)=6.61, p<.01$), and behavioral ($M_{US}=5.02, M_{Kor}=3.95; F(1, 116)=16.02, p<.001$). Findings suggest that when American consumers

⁶This Work was supported by the research fund of Brain Hanyang21 of Hanyang University (BH21-2000).

⁷Sony, the leading brand in electronics, was ranked 20th.

are exposed to the ads featuring positive Korean products, the overall negative image of the country does not influence the cognitive components of attitude, but does influence affective and behavioral components of attitude.

Experiment 2 was a replication of Experiment 1 except that the original advertisements used as stimuli were Japanese and European brands, which were replaced with two other fictitious brands. The manipulation was successful: most people had not seen the advertisements before the experiment (94%), and correctly identified the country of origin (89%). The scale was reliable: alphas were .62, .71, and .76 for the cognitive, affective, and behavioral components, respectively. All hypotheses were supported: overall attitudes differed ($F(3, 114)=4.64, p<.001$), cognitive attitudes did not differ ($M_{US}=5.83, M_{Kor}=6.00; F(1, 116)=.52, n.s.$), affective attitudes differed ($M_{US}=4.91, M_{Kor}=4.56; F(1, 116)=3.43, p<.05$), and behavioral intentions differed ($M_{US}=3.76, M_{Kor}=3.02; F(1, 116)=4.67, p<.05$). Participants showed an overall preference for the advertisements featuring American brands over the advertisements featuring South Korean brands, and this was primarily rooted in affect and behavioral intentions. Yet participants did not show such a preference in the cognitive variable.

Experiment 3 was a replication of Experiment 1 except that 120 participants were recruited from a shopping mall and a major electronics store in a major city, and the study was conducted in 2000. Contrary to Experiments 1 and 2, non-significant effects were observed between two countries for overall attitudes (H1), affect (H3), and behavioral intention (H4), although the mean differences were in the expected direction. This may reflect South Korean brands' aggressive marketing activities in recent years. American consumers in 2000 have less negative attitudes toward, and more intend to purchase, South Korean brands than consumers in 1998. Although without clear evidence, this imbalance is presumed to arise from the fact that American consumers are becoming more exposed to, and more familiar with South Korean brands. Future research may look into a moderating effect of familiarity of South Korean brands.

We attempted to demonstrate that the COE can guide consumer behaviors through affect. Consumers may rationally think that a certain country is expert at some product categories, but overall negative feelings associated with the country may lead to negative behavioral consequences. Leading advertisers from developing countries should strive to elevate not only its company's image but also the overall image of the country. On the surface, consumers seem to sufficiently rational to partial out irrelevant country images when making a purchase decision for a foreign product, but the results reported in this paper present a different picture: consumers may be still guided by their feelings even when they do not acknowledge it. Implications for advertisers and policy makers in developing countries are very clear in order to improve the results of their advertising efforts in developed countries: more attention should be given to 1) "consumer feeling" at the company level, and 2) improvement of overall national image at the country level.

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“Effects of Positive Versus Negative Word-of-Mouth”

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An experiment was conducted to determine the effectiveness of positive versus negative WOM on intended future behavior. This experiment was designed to test prior research findings that suggest negative information is more influential—perhaps even more prolific—than its positive counterpart. Results suggest that positive WOM is at least as prolific and has as strong an effect as negative WOM, calling into question the historically cited yet unproven disproportionate influence of negative WOM.

“Why Fads Fade: The Abandonment of Cultural Tastes”

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Abstract

Many cultural practices, products, or styles become widely popular only to later decline or disappear. While conformity provides some suggestion about taste adoption, we know much less about divergence or what may cause people to abandon tastes they once liked. Building on research in psychology, sociology, and marketing we suggest individuals prefer greater divergence in taste domains that signal social identity. We test this notion in several studies and go on to show how adoption by various social groups may influence individual taste abandonment. Finally, we use these findings to provide insight into the behavior of macro phenomena such as trends.

“It seemed only yesterday that Von Dutch trucker hats were worn by half the aggressively stylish people in the world. Now they are scorned in the hipster circles that only recently flaunted them.” (Lindgren, 2004)

Cultural history is littered with practices, products, and styles that were once widely popular then declined (or disappeared): page boy and beehive hairdos, swing, disco, Tickle-Me-Elmo, wide ties, skinny ties. Some practices become popular, then wane, then wax again: short hair / long hair; short skirts / long skirts, martinis, red meat.

These facts about social life are so obvious they hardly need stating save for one important observation: social science theories are generally unable to account for them. While conformity is widely documented (Sherif, 1936; Asch, 1955), it predicts people will converge, and is much less useful in predicting divergence or understanding when a cultural practice will decline. Indeed, models of the diffusion of innovations and cultural practices, which are based implicitly on conformity dynamics (Rogers, 1983; Bass, 1969), are well equipped to explain adoption, but poorly equipped to account for almost anything else. We know that people abandon cultural practices but why?

While lay theories of fads and fashion might suggest people abandon cultural practices because they “get tired” of them, this does not explain why certain practices get abandoned faster than others, or why certain domains of cultural practices (e.g. high fashion clothing or teenage slang) tend to see greater turnover than other domains.

Considering what we do know about divergence raises just as many questions as it answers. Research on uniqueness (Snyder & Fromkin, 1980) suggests people are motivated to seek difference relative to others but says nothing about domains in which this drive should be greater. Additionally, if uniqueness is such a strong drive, why have previous studies so easily found conformity? Taken together, these two literatures present an interesting puzzle: if people experience opposing pressures towards convergence and divergence, how do they resolve the conflict?

Optimal distinctiveness theory proposes that people reconcile opposing needs for assimilation and differentiation by defining “themselves in terms of distinctive category memberships” (Brewer, 1991, p. 475). Similarly, uniqueness researchers suggest people desire a state of moderate similarity. But, while these notions suggests why there isn’t total convergence or divergence in cultural practices, they still don’t explain how people go about the process of trying to be moderately similar or why certain domains of cultural practices seem to induce more divergence than others. There are certain domains of choice where people care more about being different than others, but why? Why are people more upset when they wear the same dress to a party than when they bring the same toothbrush to a camping trip?

We suggest that divergence and abandonment are driven by a desire to self-express a unique identity; (H1) *people should be more likely to diverge from the actions and choices of others in more self-expressive domains*. Importantly, however, identities are not arbitrarily defined by individuals, they come pre-packaged by the social environment; while individuals may adopt aspects of various social identities, the meaning of the identities and the tastes that constitute them are specified by the culture at large (Bourdieu, 1979; Douglas & Isherwood, 1978). Thus we suggest (H2) *certain domains will be particularly important for expressing identity because others look at these domains as signals of identity*. While these two hypotheses are important in understanding why divergence may occur in certain domains, it provokes an additional question: why are certain domains in particular used in self-expression?

We suggest that some domains operate more effectively as signals of identity because their interpretation is more straightforward. Standard theories of psychological discounting (Kelly, 1973) predict that people will have greater difficulty identifying the self-expressive component of a cultural practice when the functional component is higher. Thus we suggest (H3) *a domain’s signaling value will depend on how much behavior in that domain can be given a functional interpretation; people should draw more inferences about others in domains that are less functional*.

In our first study, we find support for these three hypotheses using questionnaires and a variety of preference domains (e.g. dish soap, stereos, hairstyles, favorite CD, etc.). People chose to diverge more from others in choice domains that are rated as being more self-expressive (hairstyle or favorite CD as opposed to stereo or sunglasses) or more likely to be used to make inferences about others (these

are highly correlated and were collapsed to form one item). Additionally this effect holds even controlling for how visible choice in a domain is to others (which is not significant). Finally, there was a significant negative relationship between functionality and self-expression, such that the less choice was seen as based on function, the more it was seen as expressing the self.

We next move our focus from divergence to taste abandonment. The signaling value of a taste relies on its ability to carry information, but if a taste becomes too popular, or enough people from another social group adopt it, it may dilute its value, both as a signal of identity and as a unique attribute. If individuals desire distinctive identities and if identities are compromised when others outside their preferred group adopt a particular taste, then we suggest (H4) *individuals should abandon cultural tastes when other social groups adopt them*. But is adoption by all others the same, or does adoption by certain social groups lead to more abandonment? One could conjecture that people might abandon a taste if people they don't like start adopting it, but in addition, as adoption by very dissimilar others may dilute the signaling value of tastes, we suggest (H5) *abandonment should increase with the dissimilarity of the adopting group*.

Our second study examined change in tastes based on adoption by other groups and using various questionnaires and university undergraduates. For a variety of social groups (suburban teenagers, janitors, 40 year old business executives, etc.), one set of respondents rated how their usage of a catchphrase they and their friend liked saying would be influenced if they found out members of a given social group started using it. Other set of respondents rated these groups on liking, similarity to the average student, and status (as some previous literature suggests this, rather than the other factors, should drive taste loss). Supporting our hypotheses, we found that the more disliked or dissimilar a given group was rated, the more likely adoption by that group would lead people to abandon that taste. Status did not influence abandonment.

We expect to have at least one additional study to present at the conference.

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"Situational, Contextual, and Personality Variables that Increase Consumer Focus on Non-Alignable Attributes"

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Introduction

Consumer preferences are often determined by comparing products on similar (alignable) and dissimilar (non-alignable) features. Many researchers theorize that consumers engage in an attribute-based approach (cf Tversky 1969; 1977) in which they compare attributes one-by-one in a choice task. Findings consistently show that consumers tend to choose the product that is superior on alignable attributes and justify those choices by focusing on the alignable features in the choice task (Markman and Medin 1995).

The impetus for this project was the belief that consumers do not ignore non-alignable attributes (cf. Zhang and Markman 2001), and thus, we sought to examine the conditions under which consumers will increase their focus on non-alignable features. We first replicate and extend previous research manipulating the contextual descriptions of the product features, such as whether tradeoffs are present among the alignable features and the degree of variability between products on the alignable attributes. We also examine whether situational variables, such as anticipated regret and anticipated satisfaction, and personality variables, such as risk-seeking tendencies and need for cognition, also increase the use of non-alignable product information during choice.

General Research Design

All participants in each study were presented with a choice between two microwave popcorn products (A and B). Each product was described on five attributes: two common attributes (Cost per serving and sodium level), two alignable attributes (crunchiness and calories), and one non-alignable attribute (flavor or ease of swallowing). Our product descriptions were modified from Zhang and Markman (2001).

The primary design for the studies was a 2 (Tradeoff: Absent vs. Present) by 2 (Variance: Low vs. High) between-subjects design. When tradeoff was absent, Product A was always superior to Product B on the alignable attributes; in the tradeoff present condition, A was superior to B on alignable attribute #1, but inferior to B on alignable attribute #2 (B was always superior to A on the non-alignable attribute). In the low variance condition, the difference between A and B on the alignable attributes was small (e.g., Prod A: "crunchiness lasts 3.5 hours" vs. Prod. B: "crunchiness lasts 3 hours"); in the high variance condition, the difference between A and B was larger (e.g., Prod A: "calories equal to a slice of bread" vs. Prod. B: "calories equal to a spoonful of sugar"). The "baseline" condition is the condition

in which tradeoff is absent (A is better than B on both alignable attributes) and variance is high (the difference between A's and B's alignable features is large).

Hypotheses

Increasing consumers' focus on the non-alignable better brand (B) should occur as we (1) reduce variance on the alignable attributes, (2) introduce a tradeoff on the alignable attributes, (3) encourage non-comparison based processing, and/or (4) see lower levels of risk avoidance and higher levels of need for cognition.

Study 1

One hundred and twenty-six participants were randomly assigned to one of four conditions. They read both product descriptions, made a choice between Products A and B, listed their thoughts about the choice, and rated the importance of all product attributes.

Results: All analyses examined the choice shares for Product A versus Product B among the four between-subjects conditions. In the baseline condition (tradeoff absent, variance high), 61% of participants preferred A to B. As hypothesized, when we reduced the variance on the alignable features, the choice shares of B increased to 65% in the tradeoff absent, variance low condition, $t(60)=2.11$, $p<.05$. Also as predicted, when we introduced a tradeoff among alignable attributes, choice shares of B increased to 60% in the tradeoff present, variance high condition, $t(56)=1.64$, $p<.05$. These findings are also confirmed with a significant tradeoff by variance interaction in a logistic regression, $B=2.322$, $p<.003$.

Study 2

Study 2 was a 2 (Tradeoff: Absent vs. Present) by 2 (Variance: Low vs. High) by 3 (Situational Manipulation: None, Anticipated Regret, vs Anticipated Satisfaction) between-subjects design. Sixty-eight participants received no situational manipulation, replicating Study 1's design.

Prior to making their product choice, sixty-five participants in the Anticipated Regret manipulation were asked to think about how much regret they would feel if they chose one brand and later found out that the other brand was better. Participants were told to pick whichever of the two brands would minimize their future regret. Prior to making the product choice, sixty-four participants in the Anticipated Satisfaction manipulation first rated how satisfied, how happy, and how good they would feel with each brand. After making their product choices, participants in all conditions completed the thought listing and attribute importance rating tasks. Based on parallels between our stimuli and the evaluability hypothesis (Hsee 1996; Hsee and Leclerc 1998), we hypothesized that the regret and satisfaction manipulations would cause subjects to engage in non-comparison based decision-making, thereby enhancing the choice shares of Product B in the baseline condition (tradeoff absent, variance high), compared to this same baseline condition with no situational manipulation.

Results: Choice shares in the baseline condition (tradeoff absent, variance high) for the "no situational manipulation" replicate Study 1 with 72% of participants choosing A to B. As predicted, these choice shares reversed in both the anticipated regret manipulation, baseline condition (62% choose B) and the anticipated satisfaction manipulation, baseline condition (73% choose B). In addition, encouraging non-comparison based processing reduces the effect of presenting tradeoffs and lowering variance seen in Study 1.

Study 3

Study 3 is a 2 (Tradeoff) by 2 (Variance) between-subjects design with the same stimuli as Study 1. Participants are asked to complete several personality measures after reporting their product choice, thought listing, and attribute importance rating tasks. We hypothesize that consumers who are: *high* in need for cognition (Cacioppo, Petty, and Kao 1984), *high* in need for cognitive closure (Webster and Kruglanski 1994), or *low* in risk aversion (Burton, Lichtenstein, Netemeyer and Garretson 1998) should focus more on the non-alignable attributes within the choice task, thereby preferring Brand B to a greater extent than those consumers who are opposite on these dimensions. Study 3 results are not available yet, as data collection is on-going.

Conclusions

Our manipulations of tradeoff and variance in Study 1 demonstrate that we can focus consumers' attention on non-alignable attributes in a choice task within the context of the brand description. Our manipulations in Study 2 show that, if we can engage participants in non-comparison based decision-making prior to the choice decision, we can increase their focus on the non-alignable attributes. Taken together, these contextual and situational manipulations result in a higher preference for Product B, which was superior on the non-alignable attribute. The results of Study 3 will hopefully speak to the effect of different personality characteristics which focus a consumer on non-alignable features in a choice task. Thus, we can show that evaluation of alternatives is not as dominated by alignability as is current believed.

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"Social Norms and Shelf Space Strategies: Influencing Consumer Purchase Decisions at the Retail Shelf"

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Retail shelf management is considered an essential component of in-store merchandising for both retailers and manufacturers. As an industry rule-of-thumb, approximately 80% of all sales are attributed to products sold off the shelf. Additional shelf space is typically given to a product with more sales (Campo, Gijsbrechts, Goossens, and Verhetsel, 2000; Curhan, 1972; Desmet and Renaudin, 1998; Lee and Brown, 2001; Mulhern, 1997). However, research on the impact of changes in shelf space on sales has been mixed. Curhan (1972) and Drèze, Hoch, and Purk (1994) found that an increase in shelf space minimally effects sales, relative to the effects of other retail variables (Curhan, 1972; Dreze, Hoch, and Purk, 1994). However, a positive relationship was still found to exist between shelf space and sales. Drèze, Hoch, and Purk (1994) found that when a less frequently purchased product was moved to a more prominent position on the shelf near a more frequently purchased product, sales increased for the less frequently purchased product. Although shelf reorganization was credited for the increase in sales, it is still unclear *why* the less frequently purchased product benefited more from the change in shelf position. Kahn and McAlister (1997) suggest that this increase may be attributed to a novel display. The less frequently purchased product was now a more prominent feature on the shelf.

Shelf space allocated to different types of brands may account for some of the discrepancies in past studies. Curhan (1972) found that private labels were more space elastic versus a national brand. Shelf space is considered to be a less important component of the merchandising mix for national brands than for private labels. Premium brands are more salient on the shelf than low tier brands (Kahn and McAlister, 1997). Thus, an increase in shelf space for a premium brand may not have a significant effect on purchases, whereas a low tier brand may benefit more from an increase in shelf space.

One important element that proposed shelf space allocation models (Borin and Farris, 1995; Campo et al., 2000; Desmet and Renaudin, 1998; Dreze et al., 1994; Lee and Brown, 2001; Urban, 1998; Yang and Chen, 1999) ignore is the effect of social influence on purchase decisions. For instance, shelf space may be an indicator of how others shop that category. In order to reduce cognitive effort, consumers may simply choose the brand that they perceive most others are buying. Thus, the *perceived* purchase decisions of other consumers may be influencing purchase decisions.

Without direct interaction with other consumers, social influence may take the form of perceived behavior of others, or social norms. Social norms are defined as what is commonly done or what is approved by others (Cialdini, 2003; Cialdini, Kallgren, and Reno, 1991). By activating a norm, or making it more salient, people are more likely to conform to the behaviors of others (Cialdini et al., 1991). If consumers perceive shelf space as a representation of others' purchasing behavior, then significant changes to the shelf layout may activate the norm. Venkatesan (1966) demonstrated that subjects defaulted to the group norm when it was difficult to objectively evaluate products. Surprisingly, even when confronted with two options that are unequal in quality or performance, consumers may choose the inferior product based on the purchase behavior of others. Social norms are more influential when decision making is done under spontaneous processing (Terry, Hogg, and White, 2000). With approximately two-thirds of purchases characterized as unplanned (Kahn and McAlister, 1997), it is imperative for marketers to understand the presence of social norms in a retail environment.

We hypothesized that a low tier brand will benefit from an increase in space because the social norm of shelf space is made more salient and is an indication that most other consumers are purchasing this product. Conversely, a premium brand will not benefit from an increase in shelf space because consumers already perceive this brand as being commonly purchased.

An empirical study was conducted to test these hypotheses. Subjects were shown a picture of a grocery store shelf and presented with two options, a premium and low tier brand. Subjects were asked to indicate their willingness to buy each brand and then choose one brand to buy. An analysis of variance was conducted and as hypothesized, willingness to buy increased for a low tier brand when it had the majority of shelf space. Additionally, willingness to buy did not increase for the premium brand when it had the majority of shelf. As hypothesized, choice for a premium brand did not significantly increase when it had the majority of shelf space. However, choice for the low tier brand increased when it had the majority of shelf space.

A pretest indicated that quality rating, price impression, and product familiarity were not moderators for willingness to buy and choice based upon shelf space. A second study is proposed to investigate the influence of social norms, as well as other potential moderators, on purchase decisions at the retail shelf. Social norms are stronger when a person identifies with the particular reference group (Bearden and Etzel, 1982; Campbell, Tesser, and Fairry, 1986; Fisher and Ackerman, 1998; Knight, Alpert, and Witt, 1976; Park and Lessig, 1977; Terry et al., 2000; Venkatesan, 1966). Thus, the level of identification to other consumers will be investigated. Involvement may also indicate when a consumer is more likely to be influenced by social norms. Susceptibility to social norms is increased when category involvement is low (Crawford, 1974).

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SPECIAL SESSION SUMMARY
Self-Generated Validity Effects in Consumer Research

Pierre Chandon, INSEAD
Vicki G. Morwitz, New York University

SESSION SUMMARY

In 1988, Feldman and Lynch proposed the self-generated validity effect, namely that the act of measuring beliefs, attitudes, intentions, and behaviors can change the strength of the relationship between them. This seminal paper has had a large influence on consumer research in a wide variety of domains. The purpose of this session was to present recent research on self-generated validity effects in consumer research. Together these papers demonstrate the scope and consequences of self-generated validity effects, posit and provide evidence for different psychological processes underlying these effects, and outline the limiting conditions for these effects.

In this special session, we had three papers that addressed different aspects, and provided distinct perspectives reflecting on self-generated validity effects in consumer behavior. The session also brought together studies employing various empirical and methodological techniques. The first paper by Chandon *et al* analyzed data from three large field studies and demonstrated that measuring purchase intentions not only changes behavior, but also increases the strength of the relationship between latent intentions (i.e., intentions respondents would have whether or not they are surveyed) and subsequent behavior. This paper also proposed a new methodology for detecting self-generated validity effects. The second paper by Dholakia *et al* examined self-generated validity effects in a different domain, namely satisfaction surveys. Past research on measurement effects suggested that these effects are caused by increased attitude accessibility induced by the measurement task. In contrast, using a field experiment, this paper posits and finds evidence for a new, competing explanation for self-generated validity effects, namely that responding to a firm-sponsored satisfaction survey increases the positivity of respondent cognitions, leading to more positive behavior, even for respondents with low reported satisfaction levels. Further this paper shows that firm-related experience moderates this positivity effect, with the effect being greatest for less experienced consumers. The third paper by Levav and Fitzsimons investigated the role of representation in behavioral intent questions. The authors presented evidence suggesting that intent questions may affect behavior through an additional mechanism: mental representation and simulation of the behavior. This was shown by varying the extent to which the intent question facilitates a mental representation, while holding attitude accessibility constant.

By including research that used large-scale field studies involving real consumers in the market place over relatively long-time horizons, and research that used laboratory experiments to test rigorously competing theoretical explanations, this session provided a broad perspective on self-generated validity effects. The session also demonstrated that self-generated validity effects have important consequences for academic researchers, firms that design marketing research surveys, and managers who utilize them.

John Lynch was the discussion leader for this session. John pioneered research on self-generated validity effects (Feldman and Lynch 1988), and thus had a unique perspective for discussing these papers and leading a discussion about an appropriate research agenda for continued work in this area. John was one of the winners of the prestigious American Marketing Association Paul D. Converse Award for Outstanding Contributions to the Science of

Marketing in 2004. His self-generated validity paper (with Feldman) was one of two papers especially mentioned in the award.

LONG ABSTRACTS

“The Self-Generated Validity of Measured Purchase Intentions”

Pierre Chandon, INSEAD
Vicki G. Morwitz, New York University
Werner J. Reinartz, INSEAD

Because they are an easy-to-collect proxy of behavior, consumers' self-reported intentions have been widely used in academic and commercial research. Because purchase intentions are only an imperfect and biased indicator of actual purchasing, a large body of research has been devoted to improving their predictive accuracy by modeling response biases, the stochastic nature of intentions and behavior, and nonlinearities in the functional forms linking them (Bemmaor 1995; Hsiao, Sun, and Morwitz 2002; Jamieson and Bass 1989; Juster 1966; Kalwani and Silk 1982; Manski 1990; Mittal and Kamakura 2001; Morrison 1979). Yet, these studies have focused on *internal* accuracy—the ability to forecast the behavior of consumers whose intentions were previously measured—rather than *external* accuracy—the ability to forecast the behavior of consumers whose intentions were not measured. In doing so, they have ignored the potentially important problem that some of the association between the intentions and behavior of the same consumer might be caused by the measurement of intentions itself, a phenomenon called self-generated validity (Feldman and Lynch 1988).

Research in psychology and in marketing has already shown that measuring purchase intentions for a product category increases purchase incidence, influences brand choice, and leads to persisting gains in terms of customer profitability for the firm (Chandon, Morwitz, and Reinartz 2004; 2005; Dholakia and Morwitz 2002; Fitzsimons and Morwitz 1996; Morwitz, Johnson, and Schmittlein 1993; Sherman 1980; Spangenberg *et al.* 2003). However, these studies have all focused on the direct effect of measuring intentions on future behavior, a set of related phenomena that have been called mere-measurement, the self-erasing error of prediction, or self-prophecy. None of these studies has directly examined the interactive effect of measuring purchase intentions on the association between (latent) intentions and behavior—the self-generated validity effects.

The objectives of this research were (1) to offer a method for simultaneously measuring mere-measurement and self-generated validity effects and (2) to apply this method to test Feldman and Lynch's prediction that measuring purchase intentions increases the association between latent intention and behavior. To achieve these goals, we developed a latent model relating measured intent, latent intent, intent measurement, and future behavior and showed that it could be estimated via two-stage least squares. We used this method to empirically test for self-generated validity effects using data from three large-scale studies of three different products and services: online grocery purchases, automobiles, and personal computers. Each study contained information on purchasing and/or customer profitability for a group of consumers whose purchase intentions were measured as well as for a group of similar consum-

ers whose purchased intentions were not measured. The first study relies on data from a field study where customers are randomly assigned to the survey or no-survey control group, and the latter two use data from two field quasi-experiments, where because random assignment was not used, other methods are used to ensure comparability between the survey and control groups.

The results demonstrate that, as has been shown in past studies, measuring intent increases purchase incidence. Further, measuring purchase intentions does not simply slightly increase future purchasing behavior; it reduces the variance in purchasing behavior and, more importantly, it strongly influences the association between latent intent and future purchasing behavior. Specifically the results show that purchasing and customer profitability are *higher* in the survey group than in the control group for high or moderate intenders but are *lower* in the survey group than in the control group for low intenders.

Overall, these results show that analyses measuring intentions and behavior on the same sample of consumers not only overstate purchase probabilities, but also overstate the strength of the association between intentions and behavior. These results have implications for measurement reactivity research and for survey research in general. The method offered in this research can be used to help measure and correct for self-generated validity effects in survey research. For example, this method could be applied to shed light on areas showing inconsistencies between survey results and the behavior of the general population, such as contingent valuation surveys for environmental policies or products (Irwin 1999). This method could also be used to examine the consequences and antecedents of latent, as opposed to measured satisfaction. In particular, estimating the association between latent satisfaction and customer lifetime value for non-surveyed consumers as well as for surveyed consumers would contribute to the debate on the value of improving customer satisfaction (Bolton 1998; Kamakura et al. 2002). More generally, we believe that any surveys that go beyond pure descriptions but intend to examine the association between constructs might benefit from testing for both mere-measurement and self-generated validity effects using the method described in this research.

“Survey Participation Effects on Customer Purchase Behavior: Increased Judgment Accessibility or Positivity?”

Utpal M. Dholakia, Rice University

Vicki G. Morwitz, New York University

Robert A. Westbrook, Rice University

Self-generated validity theory suggests that survey participation and measurement may itself trigger changes in the attitudes, intentions and behavior being studied. Furthermore, recent research has observed its impact on behavior to be pervasive and long-lasting (Dholakia and Morwitz 2002). The question remains, from a theoretical perspective, how can such persistent and broad-based changes occur in customer behavior following such transient stimulus exposure, i.e. a single instance of participation in a relatively short firm-sponsored customer satisfaction survey? Past research (Morwitz and Fitzsimons 2004; Fitzsimons and Williams 2000) suggests the explanation lies in increased accessibility. That is, expressing one’s judgment increases its accessibility in memory afterward, leading to behavior that is consistent with the expressed judgment. However, these investigations have been limited to laboratory settings where the mere measurement effect occurs within minutes of judgment elicitation. Furthermore, these studies have not been undertaken with a particular firm’s existing customers, nor have they considered the impact of firm sponsorship of the survey.

A second explanation consistent with self-generated validity theory but yet unconsidered by mere-measurement researchers is that participation in a firm-sponsored survey itself conveys favorable information about the firm to the customer. Such information may lead the customer to form positive cognitions regarding the firm, e.g. the firm values my opinions, is making a bona fide effort to please me, is caring and concerned about customers in general, etc., which may then have a directive influence on the participant’s behaviors. Such an explanation seems especially plausible for marketing research surveys where the firm first identifies itself as the survey’s sponsor before obtaining customers’ judgments, as is the case with most satisfaction surveys.

In this research we tested whether and when mere measurement effects are due to accessibility or positivity effects. To do so, we relied on observed behavioral differences between an experimental group of customers whose satisfaction was measured, and a control group of customers whose satisfaction was not measured. Both the increased judgment accessibility and the positivity effects predict that respondents in the experimental group who have high satisfaction ratings should engage in a greater extent as well as more forms of customer purchasing behavior, compared to customers in the control group. The increased judgment accessibility explanation makes this prediction since the high satisfaction levels of participants will become more accessible to them, directing their behavior relative to the firm accordingly. The positivity effect makes a similar prediction by suggesting that these survey participants will form even greater positive cognitions regarding the firm based on the survey, which in turn will have a positive influence their subsequent purchase behaviors.

However, the predictions made by the two explanations for customers expressing low satisfaction levels in the survey differ. The increased judgment accessibility explanation predicts that survey participants with low satisfaction levels should engage in less intense as well as fewer forms of purchase behavior, compared to the control group. This is because the negative judgment expressed in the survey should become more accessible to such low-satisfaction respondents, directing their subsequent behaviors. In contrast, the positivity effect predicts the opposite, namely, more behaviors toward the firm when compared to the control group, because the survey leads them to create positive firm related cognitions.

We used data from a longitudinal field experiment conducted by an automotive services industry firm, within the context of its ongoing customer satisfaction measurement program. We explicitly studied the behavioral differences between a group of survey participants and an equivalent control group of non-participants over the course of a year following survey participation. In addition to measures of service purchase and use, we examined the influence of survey participation on customers’ responsiveness to an important firm-initiated sales initiative, namely coupon-based promotions. Finally, we examined the moderating role played by customer experience level in the subsequent behaviors of survey participants.

The findings from this study provided consistent evidence across a number of measures of purchase behavior for a positivity effect in the aggregate. The findings also indicated that whether increased judgment accessibility or the positivity effect explains the influence of survey participation on purchase behavior depends on the level of firm-specific experience possessed by the customer. When customers have high levels of firm-specific experience, our results indicate that the influence of survey participation on purchase behavior appears to occur primarily because of enhanced accessibility of their expressed judgments. In contrast, for customers with low levels of firm-specific experience, the effect appears

to be driven primarily by positive cognitions resulting from survey participation. These differences imply that devising effective means to mitigate such influences will depend on the extent of firm-specific experience of the customers participating in the survey.

“The Role of Representation in Behavioral Intent Questions”

Jonathan Levav, Columbia University

Gavan Fitzsimons, Duke University

Past research on the “mere-measurement effect” has demonstrated that simply assessing people’s intention to engage in a positively- (negatively-) viewed behavior increases (decreases) the probability of the behavior taking place. This phenomenon has been explained by desire for consistency (Sherman 1980) and attitude accessibility (Feldman and Lynch 1988; Morwitz and Fitzsimons 2004). In this paper we tested the role of representation in the mere-measurement effect, and found that the ease with which respondents are able to simulate the behavior in question may play an important role.

In multiple experiments we designed treatment conditions in which either attitude accessibility or need for consistency were held constant (or both), but mental representation was manipulated. In experiment 1 we compared three conditions: control, intent-of-self, and intent-of-other. The target behavior was flossing, and participants were executive MBA students enrolled in a marketing course. In the control condition participants were asked their likelihood of reading for pleasure in the next two weeks. In the intent-of-self condition they were asked their likelihood of flossing in the next weeks. Finally, in the intent-of-other condition they were asked to report an average classmate’s likelihood to floss his or her teeth. Both experimental conditions held attitude accessibility constant. However, we conjectured that the intent-of-self condition would facilitate a mental representation of the participant flossing. This mental representation would appear less self-relevant and more difficult—after all, flossing is a private behavior—in the intent-of-other question. Two weeks following the intent question participants were asked to recall the number of times they had flossed in the past fourteen days. As expected, participants in the intent-of-self condition flossed more times in the intervening fourteen days than either participants in the control condition or intent-of-other condition (the latter were slightly higher than controls).

In experiment 2 we manipulated ease of representation using negations, as well as obtain actual behavioral data rather than self reports. Undergraduate students participated in this experiment as part of a series of unrelated experiments. In the beginning of the session they were asked to complete a seemingly innocuous market research questionnaire that asked them about various shopping habits and store preferences. At the end of the questionnaire they were asked about the target behavior, eating fatty foods. The question was asked in one of three ways. The intent condition asked participants for their likelihood of consuming fatty foods in the coming week. The unnatural negation condition asked participants how likely they were *not* eat fatty foods. Finally, the natural negation condition asked participants how likely they were to *avoid* fatty foods. After a one hour unrelated filler task, participants were instructed to participate in a taste test. They entered a separate room, and were shown two products: mini-rice cakes, and mini-chocolate chip cookies. They were told to taste and evaluate one of the products. Williams, Fitzsimons and Block (2004) show that when participants are asked a question about a negative behavior, the intent question leads to a *decrease* in the behavior. Therefore, we expected participants in the intent condition to be less likely to eat cookies than control condition participants. In the unnatural negation condition we expected participants to exhibit the same likeli-

hood to eat cookies as their intent condition counterparts. Johnson-Laird *et al.* (1999) argue that people’s perceptions of the world or “imagined states of affairs” are represented in mental models that comprise of what is true in a possibility (“the truth principle”), but not its negation—people simply do not mentally construe negations. Therefore, we conjectured that the unnatural negation condition would not facilitate a representation and mental simulation of avoidant behavior because the intentions question would either be spontaneously re-coded into a true statement or simply serve to increase the accessibility of attitudes about fatty foods, just as in the intent condition. In contrast, the natural negation was expected to lead to a strong avoidant tendency, and a steep decrease in cookie consumption. Our results confirmed our expectations. Whereas nearly all (92%) participants in the control condition chose to eat the cookies, this dropped equally in both the intent (68%) and unnatural negation conditions (65%). In the natural negation condition, where a representation of avoidant behavior was facilitated by the problem wording, this propensity fell much more dramatically (38%).

In sum, our findings thus far suggest that the mere measurement effect is due, at least in part, to people’s ability to form a mental representation and simulation of the behavior in question. In conditions where the ability to form such a representation is hampered, the mere-measurement effect is attenuated. Note that we do not suggest this simulation be elaborative; rather, it may be the case that this representation and simulation occurs virtually automatically. Further research into the effect of personality variables and regularity of the behavior in question is currently being conducted.

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Rumors, Refutations, and Conflicts of Interest: Problems in Dealing With Unreliable Information

Ian Skurnik, University of Toronto

SESSION OVERVIEW

Every day consumers see information that is outdated, untrustworthy, or deceitful. It seems reasonable to assume that giving consumers adequate warning about the questionable nature of such information is the best way to help them avoid its influence. After all, our belief in information should weaken once we learn that the information is, for example, an unverifiable rumor, or a piece of advice given by someone with a clear conflict of interest. But as this research shows, warning people that information may be false does not always have the intended effect, and can actually increase the unwanted effects of questionable information.

Ian Skurnik showed that repeated warnings about false information (e.g., consumer claims about health and medicine, financial rumors) have the desired effect immediately, and decrease people's belief in such information. But after a week has passed, the more often people were initially told that information was false, the more likely they are to believe that the information is true. This backfire of repetition over time happens because after a delay people can remember the information but not the truth-specifying context in which they learned it.

Gita Johar (reporting research with Anne Roggeveen) continued with the issue of discrediting false information and investigates how best to design refutations of, for example, misleading advertising claims. When refutations of a claim are perceptually similar to the format of the original claim, the refutations are less effective in changing people's beliefs. The reason for this effect is that perceptual similarity is likely to cue the original form of the claim in memory, making people more resistant to the refutation. This research nicely shows the subtle difficulty of trying to help consumers update or change their beliefs.

Daylian Cain (with Don Moore and George Loewenstein) discussed how disclosing a conflict of interest can backfire and increase the probability of both giving and receiving biased advice. Disclosing a conflict of interest reduces inhibitions for advice givers, who go on to give more biased advice than they would without the disclosure. The effects of the same disclosure are likely to be underestimated by the advice recipient, who fails to adjust properly for the bias, and ends up making worse choices than if the advice-giver had kept the conflict of interest a secret.

“Making False Information Seem True: A Paradox of Repetition”

Ian Skurnik, University of Toronto

Every day we encounter false information. Advertisements, rumors, politicians' promises, works of fiction, and tabloids routinely make claims that we mistrust. It seems obvious to say that we will not believe a piece of information that we think is false. But as this research demonstrates, it is one thing to notice that information is false when we first encode it, and quite another thing to remember that it is false later on.

When people try to remember the truth of a consumer claim, their memory for the original context of the claim can be as important as memory for the claim itself. For example, suppose the claim “shark cartilage will help your arthritis” feels familiar to consumers because they have encountered it recently. They might trust it less if they remember reading it in a tabloid headline than if they remember hearing it as advice from their physician. A weakness of this strategy is that memory for prior exposure to a claim is

often much better than, and can be wholly independent of, memory for the context in which the claim appeared. And, when people find a claim familiar because of prior exposure, but do not recall the original context or source of the claim, they tend to think that the claim is true. This tendency to call familiar information true is probably normatively appropriate, but backfires when familiar information is false.

Three experiments document a paradoxical “illusion of truth” effect where repeatedly showing people false information (compared to showing it once) makes the information seem more false immediately, but more true after a week's delay. In the experiments, undergraduate participants read claims about health and medicine (e.g., “Aspirin destroys tooth enamel”) or financial headlines and rumors (e.g., “OPEC is planning a per-barrel price cut next month”). All statements had been pretested to make sure that participants would not spontaneously think they must be true or false.

In Experiment 1, participants read a list of claims half of which were explicitly identified as true and half false. In addition, half the claims were presented once and half 3 times. After either 1/2 hour or 1 week, participants tried to remember whether each statement was true or false, and to distinguish old claims from new ones. Hence the design was a 2(true or false) X 2(1 or 3 exposures) X 2(short or long delay) factorial, with the last factor between subjects. The resulting 3-way interaction ($F(1,66)=5.89, p=.02$) shows that after a short delay, people made a few mistakes in remembering the original truth of claims, but there was no bias in these mistakes, and repetition helped people avoid errors. In contrast, after a week, people showed a tendency to misremember false claims as true (vs. misremembering true claims as false), and repetition *increased* this tendency. Experiment 2 replicated this procedure and asked participants to make confidence ratings as they tried to remember whether claims were true or false. The same 3-way interaction emerged as in Experiment 1, but only at the highest levels of confidence. In other words, the illusion of truth effects in these studies, and the backfire of repetition, are not experienced as guesses at poorly remembered information. People were just as confident of their mistaken memories of false claims as they were of their correct memories of true claims.

Experiment 3 examined participant's memory for the sources of information as well as their personal belief in the information. In this study, participants read financial statements ostensibly in preparation for a stock trading game. Statements were depicted as drawn from the Wall Street Journal Front Page (likely to be true) or the Heard on the Street rumor column (likely to be false). This study also manipulated repetition and delay as in the first two studies. After the delay, participants first rated how true/false they personally thought each statement was on 7-point scale, along with new statements, and then tried to remember the original source of each statement. Belief ratings showed the same backfire of repetition (3-way interaction $F(1,110)=13.43, p<.001$) over time. The overall pattern of ratings resembles a strong absolute sleeper effect in persuasion literature, in this case where after a week rumors seen 3 times are believed *more* than news items read once. In addition, source memory data revealed that unverified rumors were increasingly misremembered as credible news stories over time.

For all studies, measures of old-new memory such as A-prime were relatively intact over the delay, while measures of source memory such as ACSIM declined sharply. Taken together, the

evidence supports a constructive memory explanation, according to which people tend to judge a piece of information true when they know that they have seen it before, but cannot remember the truth-specifying context in which they encoded it. In contrast, alternative theoretical accounts such as the “Spinozan processing” explanation have a harder time fitting the data. According to the Spinozan explanation, people automatically encode information as true when they first comprehend it, and can re-represent the information as false only by attaching a mental tag to the memory trace. If people fail to attach the tag, then the information survives in memory in its default true form. This explanation does not predict a backfire of repetition over time: if repetition has increased the probability of tagging of false claims, as suggested by the short delay results, then those claims cannot also be less likely to have a tag, as suggested by the long delay results.

The finding that false information eventually seemed true—not in spite of, but *because of* repeated warnings about its falseness—has a number of applied implications. For example, presenting false information to people in order to discredit it, as when fighting a rumor, risks raising eventual belief in the information, even if attempts to discredit appear successful at first. Such warnings about false information should emphasize what is true much more than what is false.

“Designing Effective Refutations: Perceptual Similarity and Belief Change”

Gita Venkataramani Johar, New York University

Anne L. Roggeveen, Babson College

This research addresses how to most effectively design refutations to change false beliefs that may be created by advertising. Previous research has demonstrated the difficulties inherent in correcting false beliefs. Disclaimers and disclosures are often ineffective (Johar and Simmons 2000); corrective advertising does not always reduce false beliefs (Johar 1996), and in general, consumers resist changing beliefs as is evidenced by the fact that beliefs in contradictions are lower than beliefs in the same claim seen for the first time (Bacon 1979; Brown and Nix 1996).

This research examines if the perceptual format of the refutation affects belief in the refutation. More specifically, we compare the effectiveness of two refutation strategies—refutations that are perceptually similar versus different to the original claim—in changing consumers’ brand beliefs. A likely prediction is that refutations that are similar to the original claim will more effectively change beliefs because the refutation cues the original claim in memory. However, we predict that such memorial cueing will have the opposite effect, such that perceptually similar refutations will cue the original claim in memory and result in resistance to belief updating. We use the truth effect paradigm to derive and test this proposition. The truth effect refers to the finding that repeated claims are believed more than new claims (Hawkins and Hoch 1992). Without specific knowledge about the claim, consumers depend on cues (such as how familiar the claim feels) to judge the veracity of the claim; hence, repeated claims are judged to be truer than new claims. We design two experiments to test whether repetition-enhanced beliefs are more likely to be changed by perceptually dissimilar (versus similar) refutations.

Past research on the truth effect has shown that messages which are an exact repetition, and hence, perceptually similar to a previously viewed message, enhance belief to a greater extent than topic repetition (i.e., exposure to topic information at time 1 and detail information at time 2; see Arkes et al 1991; Begg et al 1985). Thus, the perceptual format of a message affects belief. Research also suggests that refutations of previously viewed claims are rated more false than the same refutation presented for the first time when

the originally repeated claim is remembered in detail (Begg and Armour 1991). Based on these findings, we suggest that a refutation that is perceptually similar (vs. dissimilar) to the original claim is more likely to cue the original claim and hence result in resistance to the refutational message. In two experiments, we manipulate perceptual similarity via type of claim (assertion vs. implication) and via surface similarity (look of the two ads) and examine the preceding hypothesis.

Experiment 1 used a 2 x 2 between-subjects design where the perceptual similarity of the message was manipulated as high/low and claim type was manipulated as refutation/completion. Perceptual similarity was manipulated by creating matched inferred and asserted claims. These two claim types were shown to different groups of subjects at exposure. Refutations (stating the opposite of the implied or stated conclusion) or completions (stating the conclusion of the implication or repeating the conclusion) of the claims, all in assertion form, were then shown at test. Hence, the refutations or completions were perceptually different when the original claim had been inferred and perceptually similar when the original claim had been asserted. Belief in the refutation/completion served as the dependent variable. Findings indicate that regardless of perceptual similarity all refutations were believed less than completions. But findings also indicate that as predicted, belief in the refutation was lower when the original claim was perceptually similar (assertion) versus perceptually different (inference). Further, recall data provides support for the underlying memorial process.

Experiment 2 provides more direct evidence for the role of perceptual similarity. Perceptual similarity and claim type were again manipulated between subjects in this 2 x 2 between subjects design. In this study, however, perceptual similarity was manipulated using the similarity in the background page (picture, color and font) of the claims at exposure and test. Claims that had high perceptual similarity had the same background at exposure and test. Claims that had low perceptual similarity had different backgrounds at exposure and test. Results demonstrate that refutations that are perceptually similar are believed less than perceptually similar completions, but that perceptually different refutations are believed to the same extent as perceptually different completions. Further, results support the hypothesis that perceptually similar refutations are believed less than perceptually different refutations. Results replicated across two sets of claims. Recall data again provided support for the underlying memorial process.

“The Dirt on Coming Clean: Perverse Effects of Disclosing Conflicts of Interest”

Daylian Cain, Carnegie Mellon University

Don Moore, Carnegie Mellon University

George Loewenstein, Carnegie Mellon University

Conflicts of interest have been at the heart of many recent business scandals. While some reformers have called for full disclosure of these conflicts, we argue that disclosure does not solve—and in some cases may even *enhance*—the problems associated with conflicts of interest. We focus on situations in which people must rely on experts (such as investment advisors, physicians, real estate agents, retailers, or attorneys) who have superior information but who also may have a conflict of interest that may produce an incentive for them to give biased advice. For instance, investment managers get paid more when their clients trade more; and attorneys get paid more when their clients have more legal disputes. Disclosing conflicts of interest is thought to arm the advice receiver with better information. We examine the extent that this information allows advice receivers to counteract any biases in the advice and we examine how the disclosure affects the advice given.

The first experiment examines the effects of manipulative advice on those getting the advice. Participants (N=112) were each asked to make judgments after receiving advice that was either biased high (relative to the actual answer) or biased low. Along with this biased advice came a warning that the advice had been provided with directive intent: either to bias them upward, bias them downward, bias them “one way or another,” or get them to answer accurately. These two factors were crossed in a 2 (advice) X 4 (warning) factorial design. The results show an effect of advice, but no main or interaction effects of warnings. In other words, people ignored the warning and paid attention to the advice, even when they were warned that it was suspect. This effect is consistent with the assimilative effect of anchors: Subsequent judgments adjust insufficiently from the anchor (Tversky & Kahneman, 1974; Epley & Gilovich, 2001; Strack & Mussweiler, 1997). One might have thought that a disclosure that some advice had *manipulative intent* would put advisees on high-alert (perhaps in contrast with much of the classic anchoring research which uses anchors disclosed as having been “randomly generated”), but no such warnings were sufficient. This is consistent with a growing body of research on manipulative suggestions (e.g., Hastie, Schkade, & Payne, 1999; Galinsky and Mussweiler, 2001).

The second experiment (N=147) examines the effects of conflicts of interest on advice giver and receiver. One group of participants (estimators) was quickly shown several jars of coins from a distance and was asked to estimate the value of the coins in each jar. The more accurate their estimates, the more they were paid. Another group of people (advisers) inspected the jars more closely and gave the estimators advice. The first group of these advisers also got paid more when their advisees answered accurately. The second group of advisers, however, was paid according to how *high* the estimators’ guesses were. So, these advisers had an incentive to give misleading advice. Not surprisingly, those with this incentive did indeed give higher advice than those without. More interesting was the effect of disclosure on advice. A third group of advisers with the high incentive knew that their advice would come with a disclosure that told of their high incentives. Advisers in this condition gave significantly higher advice than did those who got paid the same way but whose advice did not come with the disclosure. And, although those receiving the disclosure did discount the advice given, it was not sufficient to offset the increased bias found in the advice. In fact, those advisees in the disclosure condition were left worse off (made worse estimates, made less money) compared to any other group, including those whose advisers had the same conflicts of interest left undisclosed. Several rounds of feedback did not undo this effect, and in fact appeared to increase it: disclosure seemed to have increasingly deleterious effects in later rounds. We speculate that while feedback can help consumers of information and advice to become more sophisticated, it can also help expert-advisors who are trying to manipulate these consumers. To the extent that disclosure allowed advisers to focus more on manipulating their audience, feedback may have only heightened this.

Follow-up studies examine the reasons why disclosure might increase distortion by advisers. The results suggest two distinct reasons. The first is *moral licensing*. When their conflict of interest is disclosed, people feel less of an obligation to protect the advice recipient. The recipient is, after all, fully informed. The second reason why disclosure increases distortion is *strategic exaggeration*. Advisers profess the belief that the disclosure of their conflict of interest will lead to substantial discounting by the advice recipient. To counteract the effect of this discounting, they provide even more biased advice. We conclude that full disclosure, by itself, may

have the perverse effect of making analysts, auditors, marketers and such people give even *worse* advice. To the extent that this advice impacts subsequent judgment, and to the extent that people do not typically understand this, disclosure might not only fail to solve the problems of conflict of interest, it may exacerbate them.

This paper is part of a larger body of research which examines how trying to trying to protect consumers (or trying to regulate ethical behavior more generally) can potentially backfire.

SPECIAL SESSION SUMMARY

The Role of Goal-Related Associations in Judgment and Behavior

Aparna A. Labroo, University of Chicago

Angela Y. Lee, Northwestern University

SESSION OVERVIEW

Research on goals and motivation shows that distinct higher order goals such as life values and self regulatory focus often have important implications for the processing of information, which in turn affects the pursuit of lower order consumption goals (e.g., Aaker and Lee 2001; Huffman, Ratneshwar and Mick 2000). Several findings of interest have emerged from this stream of research. For instance, goals are cognitive structures that help people regulate their behavior; goals may be chronically active or be situationally activated (e.g., Huffman and Houston 1993; Hutchins 1995); people pay more attention to information relevant (vs. irrelevant) to their goals (see Markman and Brendl 2000); and goals influence judgment (e.g., Brendl 2000; Lee and Aaker 2004) and behavior (e.g., Gollwitzer and Bargh 1996). The research discussed in this session contributes to the literature by examining the link between goals and mental associations. In particular, the three papers in this session provide a more in-depth look into how goals activate different concepts in memory, and how these mental associations in turn affect judgment and behavior.

The first paper by Fishbach examines how valence of goal-related associations affects goal pursuit when people have conflicting goals. Across four studies, the author demonstrates that people may have positive or negative associations related to their long-term goal as well as to temptations that distract them from attaining their goals. The results show that when people have positive associations toward their goal and negative associations toward temptations, they are more likely to be successful in their goal pursuit. In contrast, people are likely to fail in their goal pursuit when they have negative associations toward their goal and positive associations toward temptations. She also shows that dieters, but not non-dieters, had implicit positive associations to dieting and negative associations to culinary delights. Similarly, among student participants striving toward academic excellence, goal-related targets (e.g., “study”) primed the recognition of positive material (e.g., “love”) whereas temptation-related targets (e.g., “television”) primed the recognition of negative material (e.g., “cancer”). The implications of formation of such associations towards effective self-regulation were discussed.

In the second paper, Herzenstein, Posavac, and Brakus provide further evidence that negative associations related to regulatory goals can inhibit behavioral intent. They report that people with distinct regulatory goals take very different approaches when judging new products—when a new product is considered in a context that does not specify the potential liabilities of the product, prevention focused participants were more likely than promotion focused participants to generate concerns regarding purchase and use of the product. However, when the judgmental context made the risks associated with buying a new product salient, participants in prevention and promotion focus were equally likely to state concerns. Furthermore, prevention focus, more than promotion focus, activates negative associations towards new but not existing products. Those with a prevention focus generated more fears related to purchasing and using the new product compared to those with a promotion focus. These thoughts in turn mediated their intention to try the new product.

While both these papers suggest that negative associations are inhibitory in nature, the third paper by Labroo and Lee suggested

that negative associations may be facilitative under some conditions. Across three studies, Labroo and Lee show that negative associations brought to mind by a prime suppress liking of the target brand (study 1). However, this effect of decreased liking of the brand is reversed when the associations brought to mind are compatible with the individual’s regulatory goal that is active at that time (study 2). Thus, whereas regulatory goal compatibility between a prime and the target brand enhances individuals’ affective response toward the brand, goal-incompatibility hurts persuasion. For instance, priming participants with a shampoo formulated to kill lice (i.e., negative associations) decreases liking of a hair conditioner (i.e., product with an approach goal). However, the same prime increased liking and purchase intent toward an insect repellent (i.e., product with an avoidance goal). Enhanced fluency of the target as the result of goal compatibility is hypothesized to underlie this effect.

EXTENDED ABSTRACTS

“The Role of Implicit Associations Between Motivation and Affect in Goal Pursuit”

Ayelet Fishbach, University of Chicago

In many life situations, pursuing momentary pleasures come at the expense of attaining long-term objectives. For example, the pleasure that is associated with consuming culinary delights, drinking, or smoking comes with the price of failing to pursue general health goals and shopping for luxuries often interferes with one’s saving goals. A considerable amount of research attests that momentary allurements sometimes tempt people to act against their long-term objectives and in response to temptations, people may engage in self-control efforts designed to protect their long-term interests (e.g., Baumeister, Heatherton and Tice, 1994; Dhar and Wertenbroch, 2000; Fishbach and Trope, 2003).

Whereas previous research mainly focused on explicit (i.e., conscious and effortful) self-control operations, the current research was set to demonstrate some of the most basic and automatic processes that govern the implementation of self-control. We assumed that over the course of exercising self-control people develop implicit links between momentary temptations and negative stimuli, and between overriding goal-related concepts and positive stimuli. As a result, the mere presentation of cues related to goal and temptation triggers the activation of the appropriate affective response. These implicit associations between motivational states and affective evaluations are automatic, in the sense that they are independent of conscious awareness of the goal and temptation stimuli. Furthermore, these implicit associations may then play a role in overcoming temptation.

The mental association between motivational concepts and affective evaluations takes the form of an implicit attitude and was assessed by applying procedures for attitude assessment to the domain of self-control. Specifically, using an affective priming procedure, we tested whether subliminal goal-related primes facilitate the activation of positive attributes (e.g., “study”) facilitates the recognition of “love”) whereas subliminal temptation-related primes facilitate the activation of negative attributes (e.g., “television”) facilitates the recognition of “cancer”). Using this procedure, Study 1 found that successful, rather than unsuccessful, self-regulators

associate goals with positive evaluations and temptations with negative evaluations. Study 2 provided a conceptual replication for this effect with respect to the goal of weight-watching. It showed that dieters, rather than non-dieters, associate dieting with positive attribute and culinary delights with negative attributes. These implicit associations are not demonstrated by individuals who are not trying to lose weight. Our next studies tested for implicit associations between academic goals and positive evaluations and between nonacademic temptations and negative evaluations. Accordingly, Study 3 found that to the extent that individuals associate nonacademic temptations with negative attributes, presenting tempting activities would ironically facilitate the pursuit of overriding academic objectives. Another study was then conducted to address the causal role that implicit self-control processes may play in advancing people's self-regulatory interests. Thus, in Study 4, associating healthy lifestyle with positive attributes (e.g., "fit-flower", "chocolate-evil") facilitated the pursuit of healthy lifestyle.

Taken together, these studies explore some of the most basic mechanisms that encourage the formation of implicit associations between personal goals and affective evaluations and demonstrate their role in self-regulation. These studies explore the role of implicit associations across a variety of personal goals, including the pursuit of healthy lifestyle, academic objectives, saving objectives and more. The results are interpreted as suggesting that low-level associative patterns between motivational and affective concepts may give rise to successful goal pursuit.

"Prevention, Promotion, and the Adoption of New Products"

Michal Herzstein, University of Rochester

Steven S. Posavac, University of Rochester

J. Josko Brakus, University of Rochester

Investigating determinants of new product adoption is extremely important because developing new products is costly, and failure may be devastating to the firm. This research aims to investigate how consumer goals and the self-regulation inclinations they activate may be related to purchase intentions for new products.

Purchasing a really new product is often perceived to be risky, and as the level of perceived risk increases, the diffusion rate and the adoption level decrease (Ostlund, 1974). Early adopters have been described in the literature as having favorable attitudes toward risk, whereas followers tend to be conformist and more dependent on normative influence (Robertson, Zielinski and Ward, 1984). Regulatory focus theory suggests that individuals in promotion focus prefer the use of eagerness means for goal attainment and thus exhibit a risky bias, while individuals in prevention focus prefer the use of vigilance means and thus exhibit a conservative bias (Crowe and Higgins, 1997). Liberman et al. (1999) found that individuals in promotion focus were more willing than those in prevention focus to change their original course of action when the new alternative was advancement over the original one. Those in prevention focus demonstrated a conservative preference for stability.

In this research we show that consumers in promotion focus are more likely to adopt a new product than consumers in prevention focus. In the first study we manipulated regulatory focus and risk salience in the decision context. We selected a highly innovative product that was not sold in the USA at the time. We demonstrate that in the default judgmental context in which the risks of purchasing and using a new product were not explicitly made salient, consumers' regulatory focus affected their willingness to purchase new products such that promotion focused consumers were much more likely to buy a new product than were prevention focused consumers. When new product risk was contextually

salient (e.g., consumer magazines often caution readers regarding some problems when reviewing new products), consumers were equally unlikely to purchase a new product regardless of their regulatory focus. We define consumers' fear of new product consumption as any reason for underperformance of the product, and show that this construct drove the effect of regulatory focus on purchase intentions. Specifically, fear was low only among promotion focused consumers who made product judgments in a context that did not make new product risk salient.

In the second experiment we wanted to demonstrate that the effects we documented in the first experiment are specific to *new* (versus existing) products. Another purpose of experiment 2 was to address the generality of our findings by using a completely different product type. We manipulated regulatory focus and product newness. We created two advertisements for the same digital camera, one portrayed the camera as new and one as similar to other available cameras. We replicated our main result for the new product, and show that the purchase intentions of promotion and prevention focused consumers are equivalent when the target product was portrayed as an existing one. Consistent with experiment 1, mediation analyses show that the effect of regulatory focus on willingness to purchase new products is driven by the differential fear that people in prevention versus promotion focus associate with the consumption and usage of new products.

The data from our experiments provide a clear picture of the role of regulatory focus in new product adoption. When a new product was considered in the typical consumer context in which the potential liabilities of the product are not specified, prevention focused participants were much more likely than promotion focused participants to generate concerns regarding purchase and use of the product. We further isolated the effects of regulatory focus on purchase intentions regarding new products: promotion focused participants reported purchase intentions similar to those in prevention focus when the product under consideration was described as existing. Mediation analyses in both experiments provide compelling evidence that regulatory focus affects new product choice likelihood because consumers' regulatory focus affects the extent to which they generate fears related to purchasing and using the new product.

"The Effects of Goal-compatible Associations on Brand Evaluation"

Aparna A. Labroo, University of Chicago

Angela Y. Lee, Northwestern University

The processing fluency model posits that advertising exposures enhance the ease with which a brand can be recognized and/or retrieved from memory. Moreover, ease of processing is positively valenced, which in turn enhances brand attitude. Recent research suggests that processing fluency can be perceptual (feature-based) or conceptual (meaning-based) in nature (e.g., Lee and Labroo 2004). Furthermore, people may experience fluent processing of a target (e.g., ketchup) as the result of direct priming (i.e., repeated exposures to the target such as mayonnaise), or indirect priming (i.e., repeated exposures to objects that are related to the target).

In this research, we present evidence that when conceptual fluency is associated with negative materials, liking of the target may decrease. In the first study, we show that prior exposure to a shampoo formulated to kill lice lead to less favorable attitudes for a related product (hair conditioner), presumably because conceptual fluency was associated with negative concepts in memory. However, we show in study 2 that negative associations that prompt an avoidance goal (kill lice) lead to more favorable attitudes toward

a target when the target is intended to also achieve an avoidance goal (repel insects). Thus, it appears that goal-compatibility fluency can reverse the effects of negative associations of a prime on evaluation of a target brand. Study 3 replicates and extends this result by showing that the goal-compatibility fluency effect is moderated by argument strength. Specifically, we show that liking for an insect repellent (i.e., a target with an avoidance goal) increases when participants previously saw an ad for acne treatment that relieves skin dryness (i.e., a prime with an avoidance goal) as compared with when the treatment is framed as providing radiant skin (i.e., a prime with an approach goal). However, this increase in goal-compatibility based liking is observed only when the ad for the insect repellent contains strong arguments for the product. When the target ad contains a strong argument, goal-compatibility between the prime and the target enhances participants' attitudes toward the target whereas goal-incompatibility leads to less favorable attitudes. In contrast, goal-incompatibility of the prime has no effect on the liking of a target when weak arguments are presented. Further, participants in the goal compatible condition demonstrated better performance in a word identification task than those in the incompatible condition. These results cannot be accounted for by differences in participants' involvement, their attitudes toward the prime, or by global positive affect. Rather, the results are consistent with a processing fluency account (e.g., Lee and Aaker 2004).

The current research thus presents evidence in support of a processing fluency account of the goal compatibility effect on judgment. Our results indicate that the effect of negative associations on a target brand can be mitigated or even reversed under certain conditions when goal-compatibility fluency exists. When a prime brings negative associations to mind, a target that focuses on negative outcomes (i.e., serves an avoidance goal) will be evaluated more favorably, whereas a target that focuses on positive outcomes (i.e., serves an approach goal) will be evaluated less favorably.

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SPECIAL SESSION SUMMARY

Motivational Influences of Social Context on Consumer Behavior

Stefano Puntoni, London Business School
Nader Tavassoli, London Business School

SESSION OVERVIEW

There is a growing body of consumer research on the influence of social context. This includes research on embarrassment during purchase (Dahl, Manchanda, and Argo 2001), emotional contagion on product attitudes (Howard and Gengler 2001), the impact of public consumption on variety seeking (Ratner and Khan 2002), and sequential choice in group settings (Ariely and Levav 2000). However, much of consumer research still tends to focus exclusively on the individual, without consideration of the social surroundings. For example, advertising research has been accused of solely focusing on the “solitary subject” (Ritson and Elliott 1999). Similar claims have appeared in other areas of consumer research, such as adoption of innovations (Fisher and Price 1992).

Paradoxically, research in social psychology mirrors this under-investigation of the effect of social context. Eagly and Chaiken (1993) argue that “psychologists’ paradigm for studying attitudes have become decreasingly attentive to social context over the years ... This increasingly psychological focus is not unusual for social psychology” (p. 628). Social psychologists are used to think about social behavior in individual terms and they may therefore have troubles conceptualizing and measuring group phenomena (Levine and Moreland 1998, p. 418). As a result, “psychology ordinarily deals with individual processes and structures, without much systematic consideration of social context” (Eagly and Chaiken 1993, p. 627).

The aim of this special session is to highlight the relevance of social context in a variety of consumption settings and to provide a forum for discussion with the goal of generating further interest in the area. The three papers outline a potential taxonomy of social context effects. Social situations can be categorized around three levels. The first category includes social settings in which the influence of social context is carried out via direct social interactions. The paper by Ferraro, Bettman and Chartrand shows how interaction with a confederate leads to mimicry of preferences. Moreover, they propose a framework to explain how social context can non-consciously shape brand associations.

The second category is that of “mere presence” effects and includes situations in which the influence of social context is exerted in the absence of direct interactions. For example, Levine, Resnick and Higgins (1993) point out that “even when their responses are neither observed nor cognitively represented and there is no opportunity for interaction, the fact that others are physically present can affect a person’s cognitive activity” (p. 588). The paper by Puntoni and Tavassoli shows how the simple presence of a confederate can affect cognitions and memory for lexical cues and ads.

The third category of effects represents circumstances in which the audience is not present but only imagined. Evidence supports the contention that priming a mental representation of others can affect cognition (e.g., Fitzsimons and Bargh 2003). The paper by Hamilton and Biehal shows how making people think about others can affect their self-view and how this effect of imagined social context on self-construal can have important effects on choice between financial products characterized by different levels of risk.

The thread linking the three papers is a common view on the motivational determinants of individual behavior. We believe that

one of the most important drivers of people’s behavior can be found in humans’ inherently social nature. The three papers show how the effect of social context, conceptualized using the three categories mentioned above, has important motivational determinants.

ABSTRACTS

“Nonconscious Influences of the Social Environment on Consumer Preferences”

Rosellina Ferraro, Duke University

James R. Bettman, Duke University

Tanya Chartrand, Duke University

Consumers acquire much of their knowledge about products, product users, and their own preferences from the world around them, especially the social context. In our research, we combine the important area of social influence with emerging research on nonconscious processing. Research on nonconscious processing and influence examines the activation of knowledge structures and their subsequent influence on attitudes and behavior, all without the individual being aware of or intending such influence. Examples of such research include nonconscious stereotype activation with subsequent behavior influenced to be in-line with the stereotype, and nonconscious goal pursuit, where once a goal is nonconsciously activated it will continue to completion without awareness. We explore the impact of nonconscious processing of social context information on subsequent consumer behavior by examining the effects of mimicry on preferences and of nonconsciously formed brand-user associations on choice and self-definition.

Brand and product choices act as a means of communicating information about ourselves to others. We may choose particular products and brands which others use to show similarity and liking for those others. The mimicry literature in social psychology has shown that individuals nonconsciously mimic facial expressions and behaviors such as foot-shaking and face-touching. This suggests that consumption choices that model others may be made without conscious awareness. We examine whether consumption behavior is mimicked and the subsequent implications for choice and preference. This work expands on prior findings by examining the impact of mimicking behavior on product preferences. In the study, we utilize a confederate who only eats one of two available snacks during a 15-20 minute interaction with a participant. We propose that the participant will, without awareness, mimic that behavior by predominately choosing the same snack option, and, in turn, rate the selected snack higher in terms of preference. Evidence indicates that this is the case for those individuals who are accurate in identifying the confederate’s snacking behavior. In the condition where the confederate ate only goldfish crackers, participants selected more goldfish crackers than animal crackers. Conversely, in the condition where the confederate ate only animal crackers, participants selected more animal crackers than goldfish crackers. The results indicate that relative preference for goldfish crackers is higher in the condition where the confederate ate only goldfish crackers than in the condition where the confederate ate only animal crackers. In support of our contention that this occurs without awareness, participants report in a funneled debriefing that the confederate’s behavior had no impact on their own behavior or preferences.

Consumers also may nonconsciously use information from their social environment to determine how popular products are as well as who the users of a product are. Although consumers may be consciously aware of marketing-activity related cues (e.g., attractive spokespersons), consumers are repeatedly exposed to information on products and brands that are not a result of marketing-activity related actions, and some of these exposures may be processed in a non-conscious fashion. For example, people one passes while walking through a mall may be wearing Nike sneakers or buying Juicy Fruit gum. Given the sheer amount of information that consumers are bombarded with, much of this information is likely to be processed without conscious awareness. Evidence suggests that people encode information about the frequency of occurrence of events and that this is done automatically (Hasher and Zacks 1984). We propose that each time a person is exposed to a product or brand, with or without awareness, s/he will register that information. This frequency information will subsequently influence preference. In addition to coding frequency information, we propose that consumers register information about the social context in which they encounter the brands. If a particular type of individual is repeatedly seen using a particular brand, a perceiver will make an implicit assessment about the typical user of that product. Consumers then utilize that social information nonconsciously to understand what products are appropriate for their own use. In a first study, participants viewed 20 photographs of college students engaged in various activities (e.g., eating, waiting for the bus), where 0, 4, or 12 of the photos contained a Dasani brand of bottled water placed inconspicuously next to the individual in the photo. As a “thank you” for their participation, participants were given a choice between four bottled waters. The results indicated that choice of Dasani increased with increased frequency of exposure to Dasani. Importantly, the results were driven by those participants who were not aware of having seen the Dasani brand in any of the photos. The follow up study investigates whether this effect is moderated by whether the individuals displayed in the photos with the Dasani are in-group or out-group members for the participant. It is expected that choice of the brand will increase with frequency of exposure when the users are members of an in-group and decrease with frequency of exposure when the users are members of an out-group.

“The Influence of Social Context on Advertising Reception”

Stefano Puntoni, London Business School

Nader Tavassoli, London Business School

We are often in presence of other people when we come into contact with advertising: when we are watching television at home or in a bar; surfing the web in an Internet café; noticing a poster while walking on a street; waiting inside a movie theater for the film to start; and so on.

Compared with the amount of research devoted to the effect of program context on advertising reception, social context has predominantly been ignored by advertising researchers (Ritson and Elliott 1999). As a result, research provides only a partial understanding of how advertising works. Our research is aimed at an experimental investigation of the effect of social context on advertising reception. Taking a social psychological perspective, we propose a framework for explaining how the presence of others might affect advertising reception.

In this article, we propose that one effect of social context on advertising reception is motivational in nature. Individuals are motivated to make a good impression on others (Goffman 1959) and we broadly define social desirability as a concern with the impression others are forming of us. A concern with social desirability has consequences for the way we attend at our social

environment. For example, Leary and Kowalski (1990) claim that people scan the social environment for information concerning how others regard them most, if not all, of the time, even though often at a nonconscious level.

A primary theme in our research is that the presence of others primes the goal of social desirability. Accordingly, the presence of others leads to an internal readiness toward the goal of self-presentation. In this sense, we do not merely treat social desirability as a test-taking response bias, but as reflecting a more pervasive motivational determinant of individual behavior. In a series of three experiments we assessed the influence of social context on cognitive processes by asking participants to complete the study either alone or in presence of a confederate.

In two studies we used a lexical decision task in which female participants were asked to judge as quickly as possible whether a series of words were real or invented. To measure whether the presence of the male confederate primed a concern with social desirability we measured response latencies to words with either high or low applicability to this goal. These two studies provide support for the theoretical framework. Relative to words such as “shelf” that have low applicability to social desirability, words such as “beauty” that are instead related to social desirability were recognized faster in the presence of a confederate. These studies also show the consequences of mere social presence for memory. Relative to neutral words, participants tended to recall more words related to social desirability in the social condition. In study 1 the male confederate was presented as a research assistant who was trying to learn more about the experimental procedure. It could be argued that the cover story invested the confederate with a sense of authority, an important determinant of social influence (Milgram 1974). In study 2 we decided to replicate study 1 with a less intrusive manipulation of social context, one where the confederate was a fellow participant. In study 1 social context had an inhibitory effect on speed of response whereas in study 2 it had a facilitating effect. For both reaction times and free recall the interaction between social context and word type was not affected by this shift in the main effect of viewing context on reaction times.

In a third study we used ads as stimuli to assess whether the memory results obtained in study 1 and 2 could be replicated in an advertising setting. Using male participants and a female confederate, we found that, relative to ads unrelated to social desirability, ads related to social desirability (e.g., ad for a perfume) were remembered better in the presence of the confederate.

“How Consumers’ Self-View Influences Their Goals, Information Processing, and Choices”

Rebecca W. Hamilton, University of Maryland

Gabriel J. Biehal, University of Maryland

We demonstrate that changes in consumers’ self-view influence their goals, information processing, and choices among alternatives. Our research builds on recent findings showing that different goals can be activated by inducing an independent or an interdependent self-view (Aaker and Lee 2001). Consumers whose independent self-view is salient view themselves as distinct from others, defined by unique characteristics (Fiske et al. 1998). They tend to be promotion oriented, focusing on gains rather than losses. In contrast, consumers whose interdependent self-view is salient see themselves as defined by and connected with others (Fiske et al. 1998). They tend to be prevention oriented, focusing on losses rather than gains.

In three studies, we show that consumers rate product benefits consistent with their self-view as more important, that product benefits consistent with the activated self-view are better recalled, and that choices differ systematically based on consumers’ self-

view. We use two manipulations to influence consumers' self-view. One is exposure to an advertising appeal that emphasizes either an independent or an interdependent self-view. The other is a situational prime where social context is primed by asking participants to imagine they are making choices for either themselves or both themselves and others. In all three studies, participants made hypothetical financial investment decisions.

The first study was designed to demonstrate that advertising appeals influence consumers' self-view, their goals (expressed via the product benefits sought) and their choices. Consistent with our expectations, we found that participants expressed greater interest in promotion-oriented product benefits after seeing an advertisement that activated an independent self-view rather than an interdependent self-view. They also chose a higher proportion of high risk/high return mutual funds than participants whose interdependent self-view had been activated by the advertisement.

To further investigate the process by which choices are influenced by self-view, the second study examined encoding of product-relevant information. Participants read a scenario designed to manipulate self-view using an imagined social context, an investment club. Next, they saw a mutual fund "prospectus" that included a pretested set of promotion-oriented, prevention-oriented and neutral statements. When they subsequently performed an unexpected free recall task, those with an independent (interdependent) self-view were more likely to remember promotion-oriented (prevention-oriented) statements from the prospectus. Recall was significantly correlated with participants' expressed interest in promotion-oriented (prevention-oriented) product benefits.

Our third study showed that the effect of the activated self-view on consumers' choices is moderated by information about the status quo. Consumers often make a series of choices in the same domain, each of which can be viewed as continuing an existing pattern of choices (i.e., maintaining the status quo), or starting on a new course. The activated self-view is likely to influence such decisions, because prevention-oriented consumers tend to be more concerned with stability and security than promotion-oriented consumers (Liberman et al. 1999), showing a stronger preference for the status quo (Chernev 2004). Self-view was manipulated as in study 2. Status quo was manipulated using information about an existing portfolio that was either risky or conservative. As predicted, the status quo effect was stronger for interdependent than for independent self-view consumers. While independent self-view participants' choices did not vary based on status quo information, interdependent self-view participants chose riskier funds when status quo was risky rather than conservative. As a result, the choices of interdependent participants were more consistent with existing portfolios than those of independent participants, but less consistent with their goals.

Taken together, these studies demonstrate the theoretical importance of situationally-activated goals at several stages in consumers' choice processes. Our self-view manipulations affected participants' encoding of product information, the importance weights assigned to product benefits, and consumers' choices. From a managerial perspective, our results demonstrate the importance—and the malleability—of consumers' goals in financial decision making. While most previous research on financial choices conceptualizes risk preferences as a function of individual differences among consumers and their financial status, our studies demonstrate that the goals made salient prior to choice via a situational prime can influence consumers' risk preferences and their subsequent financial decisions.

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SPECIAL SESSION SUMMARY

You (Still) Can't Always Get What You Want—Why Greater Choice is Demotivating

Kristin Diehl, University of South Carolina

SESSION SUMMARY

This session featured three papers that were part of the MSI-JCP Research Competition on “Product Assortment and Variety-Seeking in Consumer Choice”. The paper by White and Schlosser was the winner of that competition, while the other two papers received honorable mentions. As a whole this session offered a targeted look at assortment size issues, approaching the topic from a diverse set of perspectives.

Recently, there has been a lot of renewed interest in the area of assortment size and selection (e.g. Iyengar and Lepper 2000; Chernev 2003; Sood, Rottenstreich and Brenner 2004). Researchers have challenged the idea that greater choice always is a desirable state, focusing on choice overload as a major driver of negative consequences of larger assortments. The three papers presented in this session offer additional and novel mechanisms that can explain why and under what conditions more choice may not be desirable. Specifically, the three papers find:

How larger assortments affect purchase intentions for unfamiliar products depends on whether consumers focus on the benefits or risks of adopting new products as well as on whether search or experience attributes are emphasized (White and Schlosser).

Larger assortments reduce willingness to pay for and satisfaction with a product due to heightened expectations causing negative disconfirmation (Diehl and Poynor).

Objective decision quality is diminished when choosing from larger selections, while decision makers expect higher financial performance from portfolios generated from a larger set (Morris, Broniarczyk, Inman, and Broussard).

Rebecca Ratner, as the discussant, integrated the diverse research presented in this session as addressing the questions of “Why are larger choice sets demotivating?”, “For whom are larger choice sets demotivating?”, and “What situational factors attenuate the aversiveness of large choice sets?”. She also proposed additional explanations and manipulations to be included in future research. Subsequently, the audience engaged in a lively discussion of challenges researchers face when studying assortment size issues.

“The Effects of Assortment Size, Product Description and Innovativeness on Intentions to try New Products”

Tiffany B. White, University of Illinois

Ann E. Schlosser, University of Washington

Fueled by advances in technology and distribution, companies can more easily expand existing product lines than ever before. In addition to broadening product lines in order to satisfy and retain current customers, marketers may also do so to increase the likelihood that current non-users will find an enticing option among their relatively large product assortments. Though such a strategy has intuitive appeal, the traditional economic notion that larger product assortments lead to better choices and greater choice satisfaction has more recently been updated to incorporate the possibility that large assortments are not always superior to small assortments (Chernev 2003, Huffman and Kahn 1998, Iyengar and Lepper 2000, Lehmann 1998).

Prior research has focused largely upon product categories with which individuals are highly familiar (see Chernev 2003, and van Herpen and Pieters 2002 for exceptions). In this research, we focus on the extent to which assortment size may influence consum-

ers' intentions towards trying new products—those with which they have a low level of familiarity. While recent research suggests that the strategy of increasing product assortment size may be less effective for tempting novices (e.g., van Herpen and Pieters 2002), relatively little is known about factors that may moderate the extent to which this is true. The convergence of findings related to the negative aspects of negotiating larger assortments begs an investigation of factors that might offset these effects. For example, if apprehension over making the wrong choice underlies the negative impact of large assortments on choice, to what extent might encouraging consumers to consider the positive aspects of adopting new products mitigate these negative effects? Similarly, how might characteristics of product descriptions, specifically whether products in a given assortment are described using search versus experiential descriptions, influence the effect of assortment size on intentions?

We address these questions in this research and explore conditions under which having more options can positively influence purchase intentions. We propose that consumers' intentions to try low familiarity product categories can be influenced by assortment size as well as the congruence between consumers' beliefs about being innovative and the nature of product descriptions. Specifically, we show that consumers primed to think about the favorable aspects of adopting new products have higher intentions for large (versus small) product assortments, especially when the products in the assortment are described in a manner that supports an enjoyable, exploratory experience (i.e., when products are described in terms of their experiential qualities). However, when consumers are primed to think about the negative aspects of adopting new products, they appear to seek objective information to help them make a good decision. Accordingly, when the risks of adoption are made salient, individuals' intentions will be higher when the assortment is large (versus small), but only when the products in the assortment are described in objective terms (i.e., when products are described in terms of their search qualities).

To test these hypotheses, we conducted a study in which 165 undergraduates participated. The experiment was a 2 (adoption: favorable versus unfavorable) x 2 (assortment: large vs. small) x 2 (attributes: search versus experiential) between-subjects design. The adoption manipulation involved a priming procedure similar to that used in prior research (Campbell and Kirmani 2000). Participants received two booklets for two purportedly separate studies. The first was the adoption manipulation masked as a reading comprehension task during which participants read two business articles. The article serving as the favorable/unfavorable adoption prime discussed the observed gains/risks of adopting e-logistics for the ocean container industry. Participants then completed six comprehension questions, were thanked for their participation, and then began the second study, in which they were instructed that they would be evaluating a new tea shop. Participants then received a menu with either 5 types of teas (small assortment) or 25 (large assortment) and were instructed to choose a tea from the menu. Each tea was described in terms of its ingredients (search attributes) or the experience of drinking the tea (experiential attributes). After reading the menu, participants recorded the tea that they would order and then completed a series of judgment measures on the pages that followed.

All manipulation checks were successful. Further, in line with our expectations, intentions were higher when the assortment size was large rather than small. This effect was qualified by adoption and attributes. That is, the large assortment led to higher purchase intentions only when the description of the products within the assortment were consistent with individuals' primed views of adoption—otherwise there was no appreciable advantage to having a large than small assortment. Specifically, among those primed to think of the favorable aspects of adoption, their intentions were higher when they received the large/experiential menu than the small/experiential menu, whereas their intentions did not differ between the large/search and small/search menu. For those primed to think about the risks of adoption, their intentions were higher when they received the large/search menu than the small/search menu, whereas their intentions did not differ across assortment when the products were described experientially.

These findings support our predictions that both salient beliefs about adoption and how the products within an assortment are described influence whether the large assortment is superior to the small assortment in affecting consumers' intentions to try an unfamiliar product. Our research advances the existing literature in at least two ways. Consistent with prior research (Chernev 2003), we propose that the superiority of a large versus small product assortment is moderated by individual differences. We contribute to this prior research by proposing that the effect of product assortment on consumers' intentions to try an unfamiliar product will depend upon their beliefs about adoption—that is, whether the benefits or risks of adoption are top-of-mind. Secondly, we propose that an additional critical variable to consider is how the products within the assortment are described. An interesting future research direction that we intend to pursue is how perceived risk, risk mitigation, frustration and enjoyment account for the effects discussed above.

“Great Expectations?! Assortment Size, Expectations and Purchase Likelihood”

Kristin Diehl, University of South Carolina

Cait Poynor, University of South Carolina

A long line of research in psychology has demonstrated the benefits of choice over no choice (e.g. Brehm 1966). In marketing, many studies have shown that consumers value greater selection (e.g. Kahn 1995; McAlister and Pessemier 1982) and that they react negatively to restrictions imposed on their selection (e.g. Clew and Wicklund 1980; Fitzsimons 2000).

Recently, however, researchers have demonstrated that consumers can experience too much choice. Consumers are less likely to actually purchase when faced with a larger as opposed to smaller selections (Iyengar and Lepper 2000; Iyengar and Jiang 2003) and are less satisfied with their choice when choosing from larger, more varied assortments (Wood, Swain and Wadden 2004). Finally, Chernev (2003) shows a decrease in choice confidence, if preferences are not well articulated. This stream of research suggests that greater selection can be 'demotivating' because exposure to too many options can create choice overload. More options may overwhelm decision makers, heighten decision difficulty, and increase choice deferral (Huffman and Kahn 1998, Gourville and Soman 2000).

We propose an additional mechanism that, alongside the effect of cognitive load, may explain lower purchase likelihood from larger assortments. This mechanism is based on the effect of assortment size on consumers' expectations. Consumers' expectations play a vital role in determining customer choice (e.g. Oliver 1987). We expect the size of the assortment to affect consumers' predictions of how well they can match their preferences when

choosing from a given assortment. Specifically, we predict larger assortments will *raise* expectations about the preference match that can be achieved. Higher expectations may give rise to negative disconfirmation when searching a particular assortment thus leading to fewer purchases.

We note two reasons why consumers may not be able to find their ideal option in larger as opposed to smaller sets. First, consumers may overestimate how much better the match will be. Even in very large assortments they may not be able to find their ideal option, either because the ideal product does not exist (i.e. the ideal is an 'absolute phantom option', (Pratkanis and Farquhar 1992), or, because the consumer does not search enough to encounter the ideal option even if it exists (i.e. a conditional phantom).

Second, larger assortments may also lead to negative disconfirmation through range-frequency effects. In more densely-populated distributions, any deviation from the ideal will be perceived as larger, due to the intervening number of points between the chosen option and the ideal (Wedell 1996). Therefore, in large assortments, negative expectations-disconfirmation effects may be exacerbated by perceptions of a larger distance between the next-closest option and the ideal.

We predict that assortment size will have a significant impact on consumers' expectations. As a result of these heightened expectations, we expect that consumers choosing from large sets are more likely to experience disconfirmed expectations, which will lead to lower levels of satisfaction and purchase intentions. In order to test these predictions, we have collected data from two studies. Note that in the first study, willingness-to-pay is used as the measure of purchase intention, whereas in the second study, a behavioral measure is employed to gauge choice satisfaction.

Study 1 followed a 2 (menu size, 10 or 30 items) by 2 (expectations measure, yes or no) between-subjects design. Participants were given the task of reviewing a local restaurant for a diet club, specifically, to assign a star to the dish that came closest to the goal of 10 carbohydrates or less. In this case, participants were looking for a phantom option, as no option perfectly matched the goal. Across the large and small menus the best and second best option as well as the worst option were identical; however, the larger menu contained a more densely-populated set, allowing us to test for range-frequency effects.

Our analysis is based on 92 of 106 participants from a large insurance company that assigned the star correctly. We control for gender, age, and prior experience with low-carb diets. As expected, larger menus significantly increased participants expectations of finding at least one menu item that fits the goal. Most importantly, participants choosing from the small set expressed higher overall levels of satisfaction with their choice. Also consistent with our predictions, participants in the small-set condition expressed a higher willingness-to-pay for the chosen option. Finally, participants who were not asked about their expectations perceived the difference between the ideal and chosen option as larger than participants choosing from the smaller set, as predicted by range-frequency theory.

Study 2 followed a 2 (assortment size) by 2 (preference elicitation: before or after) between-subjects design. Participants chose a pen from a small (5) or large (35) catalog and subsequently used this pen to answer an unrelated survey. We use number of words written on this unrelated task as a behavioral measure of satisfaction. All participants reported expectations prior to searching the catalog. Half of our participants indicated their preference along four pen attributes prior to search and choice; the rest answered these questions post-choice. This factor was included in the analysis but did not affect the results. Controlling for decision difficulty and variety-seeking tendencies, we found that catalog

size did indeed significantly impact expectations of finding an ideal or just a good pen in this catalog. Most interestingly, participants who chose a pen from the smaller assortment actually used the pen more (i.e. wrote significantly more words) than did participants who chose a pen from the large assortment, supporting our hypothesis.

These two studies affirm that the size of an assortment increases expectations and that larger-assortment choices yielded lower satisfaction and willingness to pay. We also find some evidence that the assortment-size expectation mechanism exists over and above the effect of decision difficulty and complexity proposed by prior research. As such, this research contributes an additional mechanism to the current discussion regarding assortment size and choice overload, suggesting that increasing consumers' expectations of what *should* be available and therefore what will be considered acceptable products can decrease purchase likelihood.

“When Less Is More: The Impact of Fund Assortment, Decision Alternatives, and Decision Maker Style on Retirement Investing Behavior”

Maureen Morrin, Rutgers University – Camden

Jeff Inman, University of Pittsburgh

Susan Broniarczyk, University of Texas at Austin

John Broussard, Rutgers University – Camden

In recent years, employers have been increasing the number of mutual fund options they offer in their defined contribution retirement plans, such as 401k's. The Vanguard Center for Retirement Research notes the average number of funds offered in their plans has risen from twelve to fifteen in just four years. The goal of this research is to investigate whether larger fund assortments have negative consequences for consumers, and whether there are ways to mitigate such effects, such as by structuring plans with decision flexibility or offering allocation default options. We also explore whether an individual's decision-making style affects the extent of negative consequences resulting from larger fund assortments.

Offering more choice options can cause feelings of stress, uncertainty, anxiety, and regret, can add to the burden of gathering information, create feelings of missed opportunities, and result in self-blame when decision outcomes do not meet expectations (Schwartz 2004). Recent research by Iyengar and Lepper (2000) found that larger assortments also tend to result in decision deferral. Iyengar and her colleagues have recently begun to investigate the impact of assortment size on consumers' participation in retirement plans (Huberman, Iyengar and Jiang, 2003). These researchers examined data from Vanguard on participation in 401k plans as a function of the number of funds offered. They found that every ten funds added to an assortment led to a 1.5% to 2.0% drop in participation. For example, when just two funds were offered, 75% of employees participated, but when 59 funds were offered, just 60% of employees participated.

The current project seeks to extend this line of research, but our primary interest is not in the effects of fund assortment on employee participation rates (i.e., the decision deferral issue). Instead, we are interested in the impact of fund assortment on decision quality, actual portfolio diversification, perceived diversification, performance expectations, and choice satisfaction levels.

In Study 1 we look at whether providing consumers with greater decision flexibility might mitigate the negative fund assortment effects. That is, we investigate some potential solutions to the fund proliferation problem. Prior research on decision reversibility suggests that providing consumers with the ability to later change (Gilbert and Ebert 2002) or un-do their decisions (Tsiros and Mittal 2000) may alter their choice behavior and the level of satisfaction

with their choices. We examine these potential moderating effects by manipulating whether or not the 401k participants can later change or opt out of their initial investment decisions.

The findings from Study 1 (n=188, 59% male, age range: 18 to 70+) indicate that investors like 401k plans more when they are offered a larger fund assortment. However, their decision quality (as measured by Sharpe ratios=return/volatility) falls when a larger assortment of funds is provided, unless a form of decision flexibility is also provided. We also found that investors making choices from the larger assortment believed they had constructed more diversified portfolios, when in fact they had constructed less diversified portfolios. Investors choosing from the larger assortment also were more likely to believe their portfolio would outperform the market, suggesting larger assortments may create unrealistic performance expectations.

In Study 2 we investigate the impact of default options on investor behavior. Prior research suggests there is less regret associated with the choice of default options (e.g., Simonson 1992). Thus, offering an allocation default option that removes the responsibility from the decision maker of having to decide how to allocate his investment across a number of mutual funds may reduce the mental cost involved with larger assortments, and possibly mitigate other negative consequences of large fund assortments. We examine the effect of offering 401k participants an allocation default option in the form of targeted retirement funds. These funds automatically allocate dollars across stocks and bonds in a proportion appropriate to one's expected retirement date. Thus, as one nears retirement, the asset mix is automatically adjusted to a more conservative portfolio structure.

We also seek to understand the impact of individual differences on the behavior patterns of 401k investors in Study 2. Specifically, we measure the extent to which an individual is a decision maximizer versus satisficer (Simon 1956, Schwartz 2002). Schwartz (2004) suggests that satisficers, or those who, when making decisions, tend to settle for an option that is 'good enough' rather than worrying about the possibility that there might be a better alternative, are less subject to the mental costs and decision dissonance involved in choosing from larger assortments. Maximizers, on the other hand, typically spend excessive amounts of time conducting information search prior to a choice, and then are plagued by doubts after the choice has been made. We expect that it is decision maximizers who are more likely to be paralyzed by the arrays of large fund assortments and who will be more likely to exhibit the negative consequences associated with large assortments. (Study 2 status: In progress.)

The present research thus explores the myriad effects of assortment size on investor psychology and decision-making behavior, and tests several moderators. We hope to provide insight and direction to fiduciaries responsible for designing and implementing retirement plans in the best interest of their employees. And, by uncovering the effects of decision-making style on this process, we hope to provide insight and direction to individual consumers intent on understanding why they do what they do, and what they can do to enhance their decision quality and choice satisfaction levels.

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“I” versus “They” and “East” versus “West”: Cross-Cultural Differences in Perceived Impact of Source Expertise

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ABSTRACT

People often think that they are different from others and that Easterners are different from Westerners. Easterners and Westerners may differ in various aspects, but do people exaggerate this difference in their thinking? In this paper, we argue that East-West cultural differences are perceived to be greater than they actually are (Study 1), and these perceived between-nation differences are more influential than actual between-nation differences on the perceived impact of source expertise (Study 2). However, within-nation individual variations in both perceived and actual cultural differences equally influence the perceived impact of source expertise (Study 3).

INTRODUCTION

People often think that they are different from others and that Easterners are different from Westerners. The latter is noted by a vast body of literature in cross-cultural psychology. For example, in the domain of self-perception, it has been found that Eastern society emphasizes an interdependent perspective of the self while Western society emphasizes an independent perspective of the self (e.g., Triandis 1995). The former view (i.e., self-other discrepancy) has been discussed in many different literatures (e.g., self-serving bias, third-person effect). For example, the third-person effect predicts that individuals perceive the media to wield greater influence on others than themselves (Perloff 1993). Combining these two lines of thought (i.e., self-other difference and East-West difference) leads us to the following question: Easterners and Westerners may differ in various aspects, but do people exaggerate this difference in their thinking? In this paper, we argue that East-West cultural differences are perceived to be greater than they actually are (Study 1). Further, we provide evidence of a cross-cultural third-person effect wherein Korean respondents believe other Koreans (i.e., interdependents) will be more affected by source expertise than themselves; Americans (i.e., independents) do not show the same difference (Study 2). However, a within-nation assessment of individual variation in culture revealed similar effects for first and third person responses—collectivists reported greater effects of source expertise than individualists, for both first and third person questions (Study 3).

DUAL PROCESS MODELS OF PERSUASION

Dual process models of persuasion such as the ELM (Petty and Cacioppo 1979) and HSM (Chaiken 1980) suggest that there are two modes of information processing by which persuasion may occur. Central route (systematic) processing is effortful information processing in which individuals scrutinize and elaborate on issue-relevant information, whereas peripheral route (heuristic) processing is low-effort, and persuasion occurs via a reliance on peripheral cues such as source attractiveness and the number of arguments presented in a persuasive communication. When motivation and ability are high, central route processing is more likely; when motivation or ability is low, peripheral route processing is more likely. Source expertise is a type of heuristic cue that is often used when an individual is not willing or able to process the ad message carefully. Accordingly, an expert endorser exerts a greater impact

on persuasion under the peripheral processing mode than the central processing mode (Petty, Cacioppo, and Goldman 1981).

“I” VERSUS “THEY”: THIRD-PERSON EFFECT

The third-person effect refers to individuals' tendency to perceive a persuasive media message to have a greater effect on others than on themselves (e.g., Davison 1996). Numerous studies have yielded robust empirical findings on the third-person effect, but researchers do not agree on how and why consumers perceive themselves as less resistant to advertising messages. Although a variety of psychological theories have been adopted to explain the third-person effect, the two most popular theories are attribution theory and biased optimism (Paul, Salwen, and Dupagne 2000). According to attribution theory, a person may think he or she understands the underlying persuasive aspects of the message, whereas others' dispositional flaws such as lack of intelligence make them incapable of perceiving message persuasiveness. As Gunther (1991) pointed out, the third-person effect and attribution theory alike assume that observers see others as less responsive to the situation. Applying this to the context of advertising, the persuasive nature of advertising is a situational factor that must be taken into account when one evaluates an advertising message, but he or she may think that others are less capable of seeing through this persuasive nature of the ad. On the other hand, biased optimism (e.g., Gunther 1995) also provides a theoretical framework for the self-other difference: Individuals may judge themselves less likely than others to experience negative consequences. People may reinforce their self-esteem by estimating themselves to be smart enough to disbelieve advertising messages, whereas others believe the messages. Although these two explanations are quite similar, a distinction should be made because the focus of attribution theory is on cognitive aspects of information processing, whereas the biased optimism places more emphasis on affective factors. That others are thought to be more vulnerable to ad messages is generally true since the persuasive nature of most advertising messages is usually viewed as negative intent (e.g., leading a consumer to buy more products), but when advertising messages clearly advocate beneficial outcomes (e.g., anti-drug ads), individuals may view others as less susceptible to the ads (i.e., first-person effect). Along these lines, Neuwirth, Frederick, and Mayo (2002) argued that people tend to view others as not processing advertising as thoroughly as they do. That is, others are perceived to rely more on heuristic cues when processing an ad message. According to the explanations offered by attribution theory and biased optimism, it seems that others are perceived to be less able and/or less motivated to distinguish between relevant and irrelevant information for accurate evaluation of the advertising message.

“EAST” VERSUS “WEST”: COLLECTIVISM AND INDIVIDUALISM

The individualism-collectivism distinction has generated a great deal of research over the decades. Hofstede (1980) found that most European and North American countries emerged as high in individualism, whereas most Latin American and Asian countries emerged as low in individualism. Accordingly, most cross-cultural

studies have been carried out by contrasting European American and East Asian cultures (e.g. Kitayama, Markus, Matsumoto, and Norasakkunkit 1997). In a recent meta-analysis, Oyserman, Coon, and Kimmelmeier (2002) reviewed over eighty studies and concluded that Americans differ in individualism and collectivism from other countries, and that individualism and collectivism influence basic psychological processes such as self concept, well-being, and attribution style. Also, a variety of measurement scales that directly and indirectly assess the construct of individualism/collectivism have been developed (e.g. Triandis, Bontempo, Villareal, Asai, and Lucca 1988).

Although controversy remains over whether the two dimensions of culture (i.e., individualism and collectivism) are independent constructs or a single construct conceptualizing individualism as the opposite of collectivism, researchers have often, but not always, agreed to the latter since in most situations the construct of individualism and collectivism is believed to reflect contrasting worldviews. Consistent with this view, it has been assumed that individualism and collectivism form a single continuum, with low individualism isomorphic with high collectivism (e.g., Hofstede 1980). This bipolar single dimension approach has received a great deal of attention from researchers studying psychological implications of individualism and collectivism (see Oyserman et al. 2002). In the studies presented in this paper, we follow this conventional assumption of unidimensionality of the construct.

The focus of the majority of past studies has been on cultural values at the aggregate level (e.g., nations), emphasizing differences between cultural units (Oyserman et al. 2002). However, it is important to note that development of measures for individualism and collectivism is based on a model of individual differences assessment. It is presumed that there is variation among individuals' tendency toward different cultural orientations. Thus, even within the same national boundary, some people may behave in a more collectivistic way while others behave in a more individualistic way. To illustrate, a cultural difference between an individualistic nation and a collectivistic nation simply refers to a mean difference between two nations in the cultural scores measured with a given cultural measurement scale. It is not that collectivists do not exist in an individualistic nation, nor that individualists do not exist in a collectivistic nation, but both types of cultures exist, normally distributed, in each nation to a different extent. A national difference between two populations (i.e., mean difference) and within-nation variation reflecting cultural differences among individuals within each nation is shown in Figure 1.

CULTURAL DIFFERENCES IN PERCEPTION OF SOURCE EXPERTISE UNDER HEURISTIC PROCESSING MODE

It may be a universal phenomenon that a highly expert source is more effective than a low-expert source, but previous research suggests that collectivistic cultures seem to put more emphasis on source expertise than individualistic cultures do (Pornpitakpan & Francis, 2001). In a similar vein, Aaker and Maheswaran (1997) view consensus cues (i.e., the opinions of others) as highly diagnostic in collectivist cultures, but relatively low in individualist cultures. This line of research implies that source expertise should play a more important role among collectivists than individualists in processing persuasive arguments. However, since source expertise is a type of heuristic cue, this cross-culturally differential effect of source expertise should be present particularly when an individual is under the heuristic mode of processing, but should be minimized under the systematic processing mode.

STUDY 1

Previous research in stereotyping suggests that characteristics of the group tend to be over-generalized to apply to each member of the group, and they are also taken to have some exaggerated negative or positive value (Scollon & Scollon, 2001). Thus, it is likely that a person views others within the same culture as more conforming to their cultural norms. In Study 1, it is hypothesized that East-West cultural differences are perceived to be greater than they actually are. That is, cross-cultural differences are expected to be greater in third-person perception than in first-person perception (Figure 2).

H1: East-West cross-cultural differences will be greater in third-person perception than in first-person perception.

Method

290 American and 243 Korean undergraduate students were recruited from a large university in the midwestern United States and two large universities in Seoul, Korea, respectively. Participants completed Triandis' INDCOL scale (Triandis et al. 1988), in which the questions are phrased from two different points of view: first-person versus third-person perspectives (e.g., "How much do you/other Americans/Koreans agree with the following sentence?"). The scale consists of three sub-dimensions: self-reliance with competition (12 items), concern for the in-group (10 items), and distance from the in-group (7 items). The English version of the 9-item INDCOL scale questionnaire was translated into Korean by a bilingual translator, back-translated into English by another bilingual translator, and adjusted by another bilingual translator.

The reliability indices ranged from .60 to .83. Alpha values for both samples are given in Table 1. The study employed a 2 x 2 mixed design, with nations (Koreans, Americans) serving as a between-subjects factor and point of view (1st, 3rd) as a within-subjects factor. The order of the 1st and 3rd point of view was counterbalanced to help control for order effects.

Results

All the items on the INDCOL scale were averaged for the 1st- and 3rd-person dependent measures and subjected to a 2 x 2 (between: Koreans/Americans; within: 1st/3rd person point of view) mixed ANOVA that confirmed the hypotheses (Figure 3). There was a significant interaction effect between nation and 1st/3rd person perception ($F(1, 530)=34.18, p<.01$). The difference between the two national groups emerged only in third-person perception, ($M_{Kor}=4.55, M_{US}=4.95; F(1, 530)=43.02, p<.01$); there was no effect for the first-person perception, ($M_{Kor}=4.29, M_{US}=4.24; F(1, 530)=.61, p=.44$). This suggests that Koreans and Americans differ along the individualism-collectivism cultural dimension more in their perception than in their actual status.

STUDY 2

In Study 2, we examined cross-cultural differences in the metaperception of source expertise (i.e., the perception of how they and others perceive source expertise in ads). We argued earlier that 1) source expertise is a heuristic cue that is more diagnostic in collectivistic cultures than in individualistic cultures, 2) source expertise becomes more influential under the heuristic processing mode, 3) others are perceived to process advertising messages more heuristically but less accurately, and 4) perceived East-West cultural differences are greater than actual differences (Study 1). These four points jointly lead to the following hypothesis: When people are asked to evaluate the effectiveness of advertising that is aimed at the general public (who are thought to rely more on heuristic cues),

FIGURE 1
Between- and within-nation cultural differences

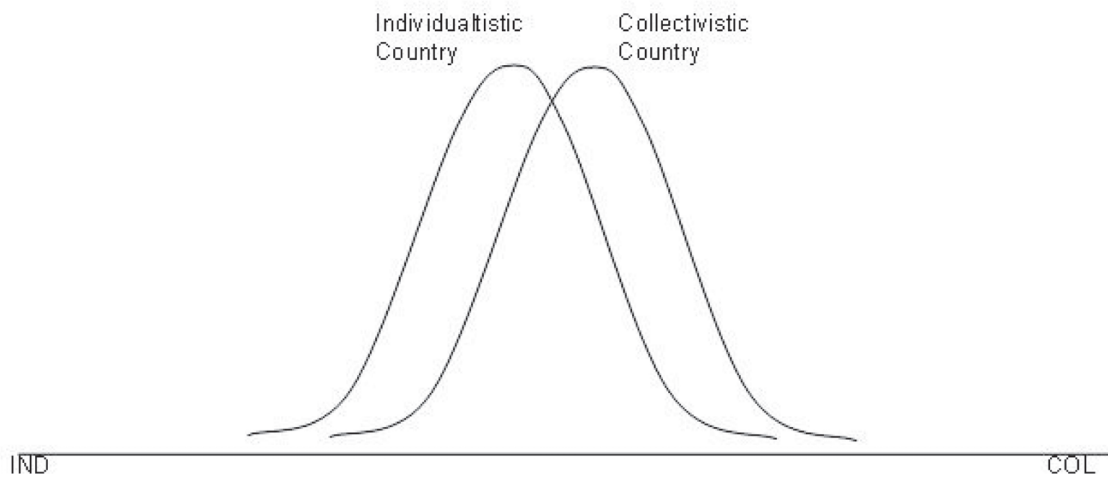


FIGURE 2
Between-nation differences in 1st person versus 3rd person perception

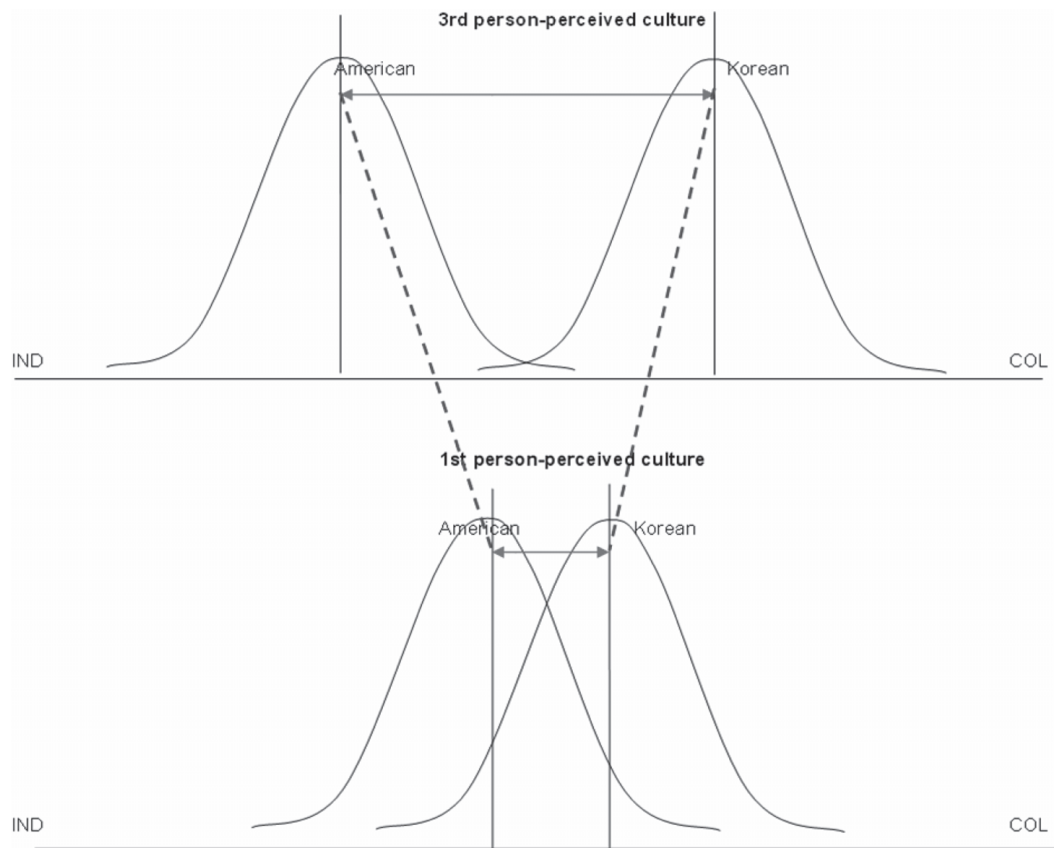
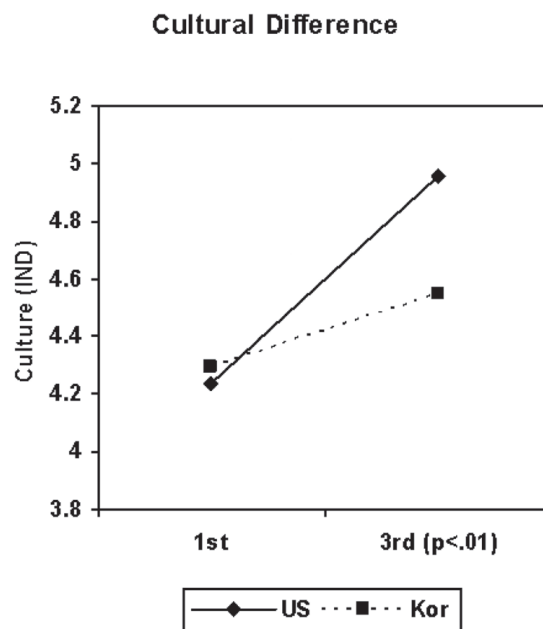


TABLE 1
Reliability Indices (alpha's) for INDCOL scales: 1st (3rd)

	Americans	Koreans	Both samples
Self-Reliance with Competition (12 items)	.83 (.83)	.78 (.78)	.80 (.81)
Concern for Ingroup (10 items)	.66 (.68)	.65 (.65)	.67 (.66)
Distance from Ingroup (7 items)	.60 (.61)	.72 (.68)	.66 (.72)
Total (29 items)	.79 (.80)	.82 (.79)	.79 (.80)

FIGURE 3
Cultural differences in 1st versus 3rd person perception



people in collectivistic cultures, compared to those in individualistic cultures, will believe that source expertise will greatly influence the degree of persuasion. However, when the advertising is directed at them (individuals who seem to believe that they use more issue-relevant information), this perceived cross-cultural difference should be reduced, if not eliminated altogether.

H2: An interaction between national cultures and source expertise (i.e., the extent to which Koreans compared to Americans view non-expert sources as less persuasive than expert sources) will emerge only in perceived ad effectiveness, but not in actual behavioral intention.

In the context of advertising effects, perceived ad effectiveness and behavioral intention in Study 2 are conceptually parallel to first- and third-person perception in Study 1, respectively.

Procedure

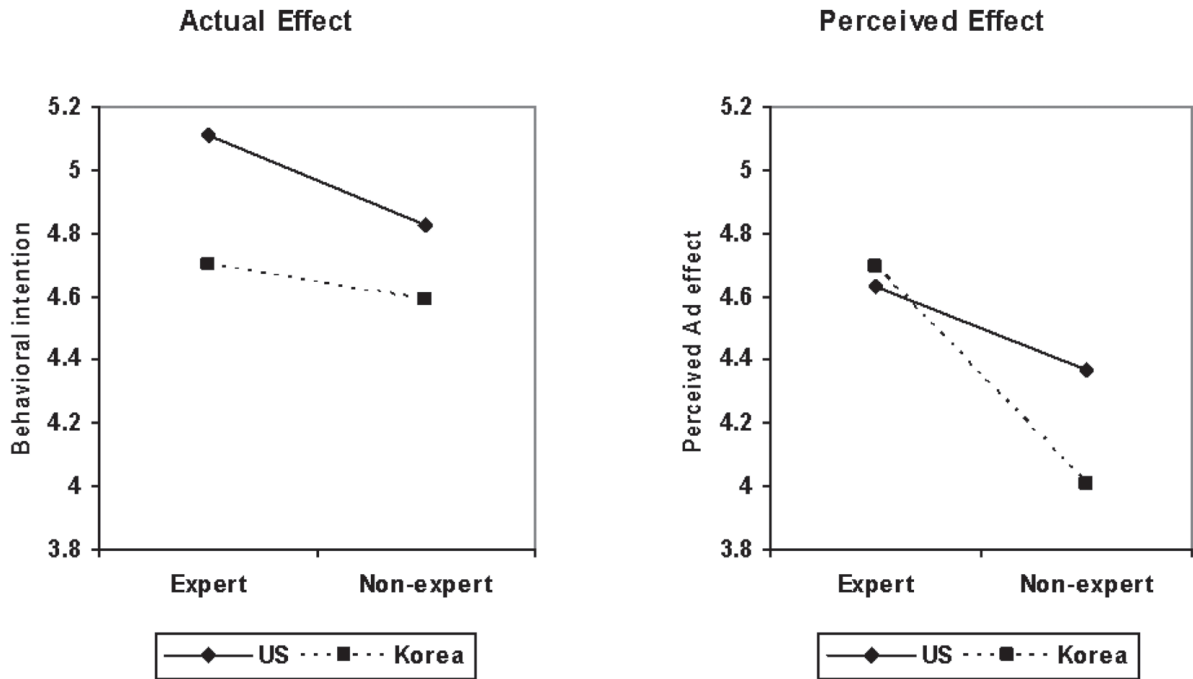
177 American and 187 Korean undergraduates were randomly assigned to read a copy contest scenario in which they viewed a series of mock advertisements featuring either expert or non-expert

spokespersons. In the scenario, subjects were first led to believe that a dairy farmers' organization was planning to launch a new national advertising campaign (i.e., a 'Why milk?' campaign) for low fat milk, and the organization invited either health experts or consumers (i.e., non-experts) to join in a copy contest for the best advertising copy. Next, subjects viewed a set of five contest entries, each of which was a statement ostensibly endorsed by either experts (e.g., doctors) or consumers (e.g., sales clerks), while the remaining elements of the ad were held constant. After reading the contest entries, subjects were instructed to fill out a questionnaire in their own language, which was translated and back-translated as in Study 1. The questionnaire instructed subjects 1) to evaluate the general efficacy and persuasiveness of the ad (i.e., perceived ad effect), and 2) to provide their own behavioral and purchasing intentions to drink low fat milk (i.e., actual ad effect). Finally, they completed the manipulation check questions for source expertise.

Measures and Design

Expertise manipulation was assessed by averaging responses to a set of five seven-point scales (knowledgeable/not knowledgeable, competent/not competent, expert/not expert,

FIGURE 4
Differences between actual versus perceived ad effect)



experienced/not experienced, and qualified/not qualified) used previously (Ohanian 1990). The scale was reliable ($\alpha=.85$).

Perceived ad effect was measured with the two items (i.e., “How persuasive/effective are these ads?”), and behavioral intention was measured with the two items (i.e., “How interested would you be in drinking low fat milk?”; “How likely would you be to buy it?”). Again, it is important to note that the former set of dependent measures is conceptually parallel to the first-person perception in Study 1, while the latter is parallel to the third-person perception. Seven-point were scales were used for all the items, and Pearson correlations for perceived ad effect and behavioral intentions were .78 and .82, respectively. The study used a 2 x 2 x 2 (Koreans/Americans; expert source/non-expert source; perceived ad effect/behavioral intention) mixed design. The first two factors were between-subjects factors, and the last factor was within-subjects.

Results

Expertise manipulation was successful for both samples, with subjects in the expert condition reporting higher scores than those in the non-expert condition, ($M_{exp}=5.64, M_{non}=4.20; t(165)=9.39, p<.001$ for Americans, $M_{exp}=5.02, M_{non}=3.95; t(175)=8.14, p<.001$ for Koreans).

A 2 x 2 x 2 mixed ANOVA revealed a significant Nation x Expertise x Ad Effect three-way interaction, ($F(1, 360)=4.17, p<.05$). Two separate two-way (Nation x Expertise) ANOVAs on perceived ad effect and behavioral intentions were conducted to examine cross-cultural differences in viewing source expertise. A marginally significant interaction, ($F(1, 361)=2.831, p<.10$), emerged for perceived ad effectiveness, but not for behavioral intention (Figure 4). Koreans believed that source expertise would have a greater effect on other Koreans than on themselves; no such interaction emerged among American respondents. This suggests that the cross-cultural difference in the differential persuasive

effects of expert and non-expert sources tends to be more pronounced when participants evaluate the general advertising effect than when they report their own behavioral intentions.

STUDY 3

It was argued earlier that both individualists and collectivists exist in each nation. Then regardless of national culture, individual cultural differences should be reflected in both perceived ad effect and behavioral intentions. In Study 3, we looked at individuals within the U.S.

H3: An interaction between within-nation cultural variations among individuals and source expertise (i.e., the extent to which collectivists, compared to individualists, view expert sources as more effective than non-expert sources) will emerge both in perceived ad effectiveness and in actual behavioral intentions.

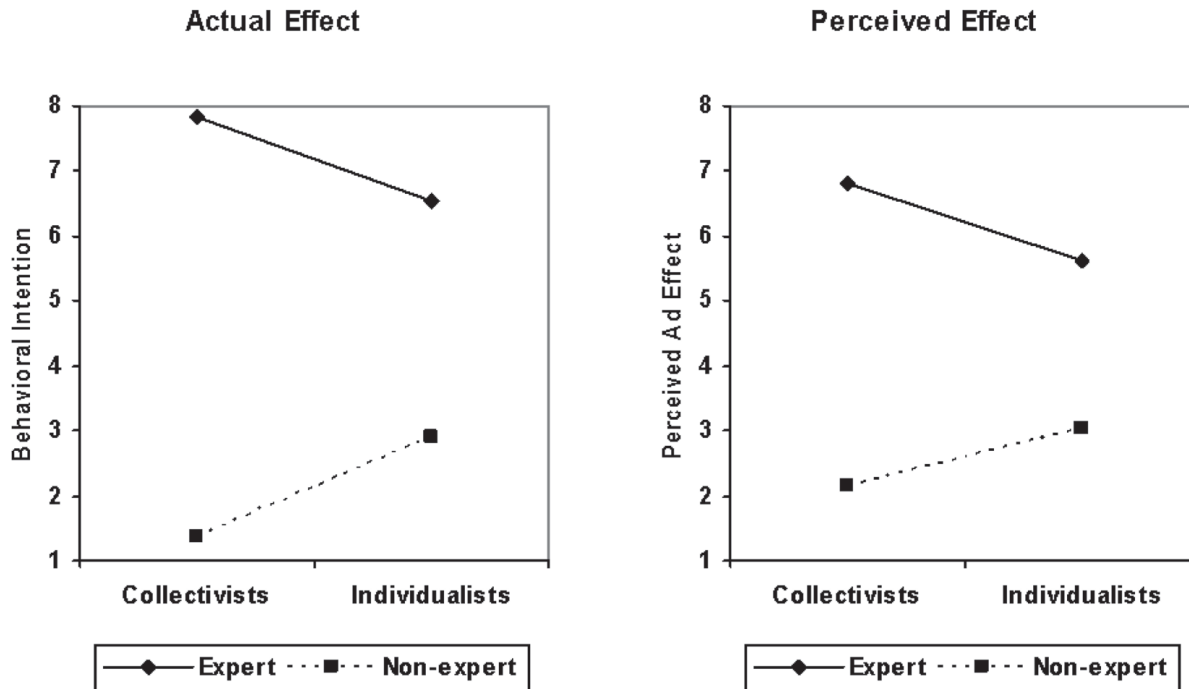
Method

Study 3 was a conceptual replication of Study 2, except that the dichotomous national culture variable in Study 1 was replaced with a continuous individual culture variable that was measured. 89 Caucasian American participants viewed the expert and non-expert ads that were used in Study 2, completed the dependent measures that were used in Study 2, and completed the INDCOL scale that was used in Study 1.

Results

Expertise manipulation was successful, ($M_{exp}=5.78, M_{non}=4.14 ;t(87)=7.56, p<.001$), and the INDCOL measure was reliable ($\alpha=.73$). Regression analyses revealed that interactions between expertise and individual culture were significant for both variables ($b=-1.46, p<.05$ for behavioral intention; $b=-1.44, p<.05$

FIGURE 5
Differences among Caucasians in the U.S.



for perceived ad effect), suggesting that source expertise influences collectivists more than individualists, regardless of whether the perceived ad effect or behavioral intention was measured (Figure 5). That is, collectivistic participants rated expert-endorsed-ads as more effective than non-expert-endorsed-ads, both 1) when they were asked to evaluate the effectiveness of the ad and 2) when they were asked to report their own behavioral intentions. Collectivists seemed to believe that both they and other Americans were more susceptible to an ad message when it was endorsed by an expert than by a non-expert.

CONCLUSIONS

The findings of Study 1 indicate that East-West cultural differences are more perceived than actual. Study 2 further revealed that this type of perceived-actual discrepancy can influence a consumer's interpretation of the differential impact of expert-endorsed advertising. Only when the advertising effect was evaluated in a third person format rather than in a first person format, did cross-cultural differences in expert versus non-expert ad effects emerge. Although perceived cross-cultural differences in perception of source expertise are greater than actual cross-cultural differences, Study 3 shows that when we examine individuals within a nation—the U.S.—individual cultural differences in fact exist, causing differential construal of expert versus non-expert endorsers in the ad.

Cultural differences exist among individuals and perhaps among nations. Yet oftentimes the latter seems overly perceived because of a self-other discrepancy. It is a common practice for an international advertiser to ask consumers directly, relying on self-report measures, to assess advertising effectiveness, and to execute the campaign that employs culturally different appeals (e.g., individualistic appeal for the U.S. market, collectivistic appeal for the Korean market). However, one should proceed with caution

when interpreting such data because the perceived self-other difference may distort the degree of perceived cross-cultural differences.

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Cross-Cultural Differences in Brand Cognitive Structures

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EXTENDED ABSTRACT

Understanding brand cognitive structures has been an important area of research in marketing. The way people organize information in their minds affects the retrieval, usage, and encoding of brand information (Wyer and Srull 1989; Cowley and Mitchell 2003). However, despite extensive research in this area, to date, few researchers have examined whether the way consumers structure brand information differs across culture. As world economies become increasingly connected, a better understanding of brand cognitive structures across cultures is essential to helping companies make better branding decisions in both domestic and foreign markets. Thus, this paper aimed to fill this gap in the literature by examining the impact of culture on brand cognitive structures.

Recent findings in the cross-cultural literature have provided compelling evidence that people in different cultures do not process information similarly (Nisbett et al. 2001). Specifically, scholars found that Easterners are more field dependent. They pay great attention to the context, and focus on the relationship between objects and the field. On the other hand, Westerners are more field independent. They focus on the attributes of objects, and pay minimal attention to the context (Nisbett et al. 2001). The research question we are interested in is: does a differential level of field dependency across cultures lead people to structure brand information differently in memory? In this paper, we proposed that it does. Specifically, we proposed that a differential level of field dependency influences the extent to which one generalizes beliefs about a product to other products by the same brand (i.e., the extent to which one possesses a global belief that is ascribed to other products by the same brand).

Previous research found that Westerners pay minimal attention to contextual information and tend to categorize objects taxonomically (Nisbett et al. 2001). They have a more context independent conceptualization of categories and concepts are abstracted out of situations. This way of conceptualizing categories should filter down to the way Westerners perceive brands. In the brand context, these findings suggest that Westerners would be chronically inclined to abstract information from product experiences, and generalize this information to other taxonomically related products by the same brand. Thus, for each brand, Westerners would ascribe the same sets of beliefs to products that are taxonomically related. On the other hand, since Easterners pay greater attention to contextual information, they possess a more situated view of concepts. They tend to focus on the contextual information surrounding the use of each brand or product. This suggests that Easterners would be more likely to generalize information across products (by the same brand) used in the same usage occasion. This is consistent with the previous finding that Easterners are chronically more likely to group relationally related products together.

To test the above hypotheses, we adapted from the property verification task. Specifically, we examined the scope of facilitation in reaction time for a target product, after subjects were asked to respond to related context products (Solomon and Barsalou 2001). According to the associative network theory, if two products are attached to the same belief node, activating the belief of one product should raise the activation level of related nodes (i.e., the other product). For example, presenting the target word "Sony TV-good quality" should spread the activation to other related words. If Sony Walkman is connected to the same belief node (e.g., "good

quality"), its activation level would rise above the baseline level, and approach threshold. Thus, when Sony Walkman is encountered later, it takes less activation to cross its threshold.

Two studies were conducted. Study 1 aimed to test if the way Westerners and Easterners store information of taxonomically related products differs. Towards this end, Study 1 employed a 2 (Country: Americans vs. Chinese) X 2 (Context product: Taxonomically Similar Product condition and Control condition) between subjects design. In this study, country status was used as a proxy for culture as previous research has shown that Americans are more field independent while Chinese are more field dependent.

Results from Study 1 supported our hypothesis. We found that Westerners reacted much faster to the target products, when they were shown context products that were taxonomically similar to the target product ($p < .05$). However, responding to taxonomically similar context products did not significantly facilitate Easterners' reactions to the target products ($p > .1$). Thus, the results supported our argument that relative to Easterners, Westerners are more likely to connect the same sets of beliefs to taxonomically similar products.

Although results of Study 1 supported our hypotheses, it has two major limitations. One, since country was used as a proxy for culture, study 1 was unable to make a definitive statement on the underlying dimension of culture that led to the cultural differences. Two, there were potentially more noise, and non-equivalence of brands across samples in a cross-country design. To address these limitations, Study 2 adopted a single country design and assessed individuals' field dependency directly. Study two also aimed to test whether Westerners and Easterners store information on relationally similar products differently.

To this end, Study 2 employed a 2 (Field Dependency: Field Dependent vs. Field Independent) X 3 (Similarity: Taxonomically similar product, Relationally similar product, and control) between subjects design. Results for the taxonomically similar product condition replicated the findings observed in Study 1. Specifically, we found that field independents exhibited significantly greater degree of facilitation than field dependents ($p < .05$). In addition, we also found support for our argument that unlike field independents, field dependents are more likely to connect the same sets of beliefs to relationally similar products ($p < .05$).

Thus, results from both studies provided converging evidence for our proposition that there are cross-cultural differences in consumers' brand cognitive structures.

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Country Image: A Reflection of the Significance of the Other

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ABSTRACT

In this study we explore new dimensions of country images by making use of theory and method new to the marketing literature on this topic. Self identity theory provides a conceptual framework for interpreting country images as they are conveyed in a longitudinal text analysis of newspaper articles. Cross country variation in degree of: a) awareness of the other country; b) analytical versus descriptive content; d) complexity of coverage; f) self- and other-anchoring of content; d) involvement in the other country; and e) depth of content reflect the significance of the other country to the observer. Transnational and collective identities between nations can be evoked on pan-cultural values and issues.

INTRODUCTION

Despite the fact that geographical source of origin has become a key issue in international trade regulations (www.fsa.usda.gov; www.europa...s_origin/rules; Dimara and Skuras 2003), marketing research on how to understand and measure a country's image in a target market is not well developed. In the marketing literature it appears that the concept of country image is defined like product or corporate images. In the Handbook of Marketing Scales (Bearden and Netemeyer 2000) there are two country image scales. That proposed by Martin and Eroglu defines country image as "a total of all descriptive, inferential, and informational beliefs about a particular country" (Martin and Eroglu 1993, p. 60). Parameswaran and Pisharodi's country of origin scale uses the following definition: "Country of origin image refers to buyers' opinions regarding the relative qualities of goods and services produced in various countries" (Parameswaran and Pisharodi 1994, p. 44). Martin and Eroglu's (1993) country image scale is refined into 13 items representing political, economic and technological factors. The Parameswaran and Pisharodi (1994) scale contains 12 country image items that reflect interaction facets (perceptions of political, cultural, and economic similarity to source country) and people facets measuring perceptions of characteristics of the people of the source country. Both scales were developed from extensive literature searches, expert panels and pilot surveys among consumers. However, they are reduced and purified to a level where the scales largely contain generic, descriptive or factual items.

Moreover, both scales have been developed in a single country setting (the USA). When testing their country image scales in different target markets, Parameswaran and Pisharodi (1994) found that, while the number of facets for each country was generally stable, items constituting a facet were "country dependent", a finding that they argue is a weakness in the use of standardized country image scales. Usunier (1997) claims that existing marketing research in different cultural contexts should encourage feedback from the informant on cultural adequacy, even as regards the instruments used and the types of questions asked. Cross-national studies and increased cultural sensitivity are crucial in developing tools for international marketing research and practice (Roth 1995; Nakata and Sivakumar 2001; Usunier 1997).

Marketing researchers are also concerned over the dominant sales orientation in promotional campaigns for country images (Jaffe and Nebenzahl 2001; Therkelsen 1999). A country's identity and image cannot be defined or controlled by a singular actor, whether public or private (Beckett 2000), and lack of interest in the images that already exist in the target market is seen as a major

reason why there are severe problems in implementing country image promotions.

Hence, in this study we have adopted a market oriented perspective, studying country images in the target markets where the images occur. First, we have extended the literature search on country image to other disciplines with long traditions in the study of perceptions of other countries. Second, we use the news media as a data source to explore dimensions of country images. The news media are significant cultural and political image makers (Jansson 2001) and are frequently used as a data source for studies of public images of gender (Kahn 1993). Finally, multinational data from this rich data source allow us to explore and compare cross-country variation in country images.

COUNTRY IMAGE: A REFLECTION OF THE SIGNIFICANCE OF THE OTHER

Organizing people in multiple nations presupposes perceptions of "us" versus "them" based on nationality (Todorow 1993), and in order to define an "us" (who we are), we use information about other peoples and nations. Our interdisciplinary review of studies that deal with perceptions of other countries—in political philosophy (Todorow 1993), political science (Byrsk, Parsons and Sandholtz 2002; Wendt 1994), tourism ethnography (Galani-Moutafi 2000), and social psychology (Hopkins and Murdoch 1998; Peabody 1985; Phalet and Poppe 1997)—suggests three important aspects of country images that add value to the marketing literature.

First, these texts see images or perceptions of other countries as reflections of the image holder's self-identity and self-interests in relation to the other country. Concepts of self and the Other from social behaviorism (Mead 1967) and reflexive anthropology (Galani-Moutafi 2000) provide new insights into how to understand country images. The social interactionist perspective has long traditions in social psychology and states that we cannot develop a self without some level of knowledge of or interaction with the Other (Mead 1967) and that "our image of our fellow men, the way in which we see each other, is the basis of all relations between man" (Ichheiser 1940, p.287). In contemporary anthropology the self-reflexive perspective is used to explain how we as travelers, tourists, and business people, use our international experience and contacts to develop our self-consciousness (Galani-Moutafi 2000). In many ways we learn more about ourselves than about the Other through our experience with other people and nations. As a consequence we look at the Other from the perspective of our self-interests (*ibid.*).

Degree of significance of the other group determines how we define our self-interests in our relations with the Other. In some situations we are dependent on another nation for our well-being; hence the significance of the Other is very high and we will be more involved in the process of defining our self-interests in the relationship (Wendt 1994; Phalet and Poppe 1997). On the other hand, when the Other has low significance to the self, the involvement in the Other will also be lower (Phalet and Poppe 1997). The significance of the Other is defined according to potential for influence over self (Woelfel and Haller 1971). Significant others usually belong to a group we identify with, such as family and close friends, while people with whom we have limited interaction are considered as out-groups (*ibid.*). Of all the categories relevant for self and Other definition the category of "the nation is perhaps the most politically significant" (Hopkins and Murdoch 1998). However,

national identities and images are at the social level. Social identity implicates a depersonalized perception of the in-group (Yuki 2003) or out-group and inter-group comparisons are a key source of identification. Social or collective categorization is defined in terms of prototypical properties that are perceived to be shared among depersonalized members of a group. Based on the above we propose that

P1: Degree of awareness of and interest in another country is a function of the significance of the other country to the observer

A second topic in the extended literature study is a discussion of qualitative aspects in perceptions of another country—e.g. stereotypes, prejudice, morality, and ethnocentrism (Peabody 1985; Phalet and Poppe 1997). Evidence suggests that stereotypical and self-anchored perceptions of another nation and people are inversely related to knowledge of and interest in the other nation or people (Peabody 1985; Phalet and Poppe 1997). There is a general tendency for national in-group judgments to be relatively favorable compared to national out-group judgments and for out-group judgments to exaggerate the homogeneity within a group (Peabody 1985). National out-group judgments tend to be less stereotypical when there is a recognized familiarity with the national group being judged. Simplistic stereotypical perceptions of people from other nations are most prevalent under conditions of unrecognized unfamiliarity with the out-group (ibid.).

In their study of six Eastern European countries, Phalet and Poppe (1997) find that in-groups tend to be judged according to competence while out-groups are judged according to morality. Specifically, perceptions of competence and morality in national stereotypes were associated with perceived balance of power and conflict of interest between national groups. Potential interaction between an observer and a source of origin country motivates the observer to define both self-interests and the Other's intended goals (ibid.).

Judgments of another nation can be informed or uninformed, analytical or superficial, empathetic or emotional versus distant and detached. Hence we propose that

P2: Qualitative content of the image of another country is related to the observer's involvement with, relational interest in, and knowledge of the other nation

Moreover, national identities are dynamic and vary according to situation and issue (Wendt 1994). A third topic from the interdisciplinary literature review that has great relevance for studies of country images is the discussion of transnational and collective identities between people and nations (Todorow 1993; Wendt 1994; Brysk et al. 2002). Typical transnational issues are concerns about human rights, the spread of democratic institutions, and environmental issues (Wendt 1994). A recent cross-national study finds that there is a striking degree of consensus across individuals and societies on certain basic values (Schwartz and Bardi 2001). Three top pan-cultural norms/values are: 1) Preservation of cooperative and supportive relations among members of a society; 2) motivation to invest in the time and physical and intellectual effort needed to perform productive work; and 3) support for the individual to the extent that group norms are not undermined (ibid.). Identities based on transnational issues can be anchored both in transnational value systems and in international institutions that constitute contexts for interaction between nations (e.g. the UN, EU, and World Wildlife Fund).

Historically and culturally anchored collective identities between nations can also take the form of deep and complex familial ties. Brysk et al.(2002) use a family metaphor to interpret the relationship between former European colonial powers and their former colonies. The family metaphor provides an important key to understanding how such relationships are reproduced and sustained: "In contrast to other metaphors describing international relations like 'partners' and 'enemies', the family metaphor constructs post-colonial relationships as domestic, paternalistic and dedicated to reproduction" (ibid., pp. 273-274). The continued acceptance of interventions in former colonies by colonial powers cannot be explained by rational criteria alone. Like other families, familial ties between nations can be both complex and antagonistic, but interestingly, close relationships tend to persist in spite of relational strains. Based on this discussion we propose that

P3: Country images can be based on transnational identities and issues that represent convergence of values across nations and on collective identities between countries that have multiple historically anchored familial ties (e.g. ethnic, geographic, linguistic)

The above propositions add new dimensions to the understanding and analysis of country images in the marketing literature. As a consequence, country images must be interpreted on the basis of the relationship and interests that an image holder has with the country that is being judged.

METHODOLOGY

Newspapers as a Data Source for Exploring Country Images

Countries are constantly subjected to media attention. Evidence suggests that the news media in particular influence our pictures of the world, have a crucial gate-keeping role in the dissemination of information, and have the ability to set the public agenda on important issues (McCombs and Gilbert 1986). In foreign affairs, of which most people have no firsthand experience, the news media have a near monopoly as an information source and hence their impact on public opinion is considerable (ibid.). Therefore the news media suggest themselves as an important data source for exploring country associations in a target market. There are three concerns that are relevant for this study. First, to capture the dynamics and structural elements of country images, longitudinal data are needed. Second, since the news media in each target market operate more or less independently, a cross-country design is necessary in order to capture variation in country images across target markets. Third, we need access to media sources that provide longitudinal and cross-country data.

We chose newspapers as a data source since they have databases that can generate complete lists of what has been written on a certain keyword—such as the name of a country—over a certain period of time. In addition to the practical concerns, analysis of newspaper articles can give insights into existing attitudes in the population (Kahn 1994).

Design of Study

Country sample. The export/source country, Norway, can be regarded as a typical country, representing many small countries with minor roles in the world economy and politics. Such countries seldom appear on the global media agenda and therefore have a shared interest in increasing public awareness in important export markets (Olins 1999). The sample of target/import countries—Sweden, France, and Japan—was designed to achieve maximum

variation in the degree to which Norway would be a significant Other country. Economic relations, and cultural and geographical proximity were used as sampling criteria. To Sweden, Norway can be considered a significant Other or 'brother country' due to long historical ties and extensive cultural, political and economic relations. Historically, Sweden has been the dominating party in the relationship and it is only one hundred years since Norway gained independence from 90 years of union with Sweden. Imports from Norway constitute approximately 8% of total Swedish imports (<http://new.sourceoecd.org>), making Norway a significant trade partner to Sweden. Extensive political and cultural collaboration between the two countries takes place in the Nordic Council of Ministers (<http://www.norden.org>) and the two countries are very similar on cultural dimensions (Hofstede 2001). The other target country—France—also has historical ties to Norway, e.g. the Viking influence on Normandy (van Houts 1995) and the Norwegian role in the European resistance movement during the Second World War (Stafford 1975). However, Norway's position as a non-member of the EU excludes Norway from a very important international arena for France, thereby defining Norway as an out-group nation. Moreover, imports from Norway constitute less than 2% of total French imports (<http://new.sourceoecd.org>) and the two countries are very different on Hofstede's (2001) power distance dimension. To Japan, Norway has little significance either culturally or economically. Norway scores the opposite of Japan on all of Hofstede's four dimensions (ibid.) and Norway only accounts for 0.5% of Japan's imports from other countries (<http://new.sourceoecd.org>). While imports and exports between the countries are fairly balanced in the Swedish case, both France and Japan are much more important to Norway than vice versa. With reference to the above, the country sample gives us the opportunity to compare one country's image in three target markets with very different relations to the source country, covering the range of relationships from very significant to insignificant Other.

Sample of newspaper articles. For each target country, the national newspaper with the highest market coverage and the leading business newspaper were selected: *Le Monde* and *Les Echos* were selected for France, *Asahi* and *NIKKEI* for Japan, and *Dagens Nyheter* and *Dagens Industri* for Sweden. Since images are typically developed over time (McCombs and Gilbert 1986), we searched the databases for all newspaper articles about the source country over a two-year period (August/September 1998 to August/September 2000).¹ The search keyword was the name of the source country, which produced a list of articles where Norway was mentioned in the headline or in the text. The criterion for including an article was the degree to which it provided relevant and substantive information for further in-depth analysis. Applying these procedures, we ended up with final sample of 412 newspaper articles from the three target countries.

The operations of semiotic content analysis consist in classifying the signs occurring in a communication into a set of appropriate categories that provides means of testing propositions which state a relationship between a communicator's environment and the kinds of signs which occur in his communication (Lasswell 1949). A basic requirement of any procedure is that the results have a high degree of reliability. However, semantic content analysis will always have elements of subjectivity since the task is to attribute meanings and psychological properties to the signs (ibid.). Since a text is not an objective thing, knowing the culture and context

within which it is written becomes essential (Manning and Cullum-Swan 1994). While it is possible to specify the ideal basis for textual analysis, such procedures are usually not fully feasible in practice (Peabody 1985). Being aware of possible fallacies, we developed thorough recording and coding procedures to secure maximum inter-rater reliability of the analysis.

The content analysis consisted of several stages and was conducted by three two-person country teams with extensive knowledge of each target country's culture and political climate. The aim was to capture traits and signs as well as patterns of information that provided us with an understanding of the character of country images conveyed in the newspaper texts. The first task was to agree on a system for categorizing the articles according to words, topics/themes, and characteristics, which are the basic units of analysis in content analysis (Berelson 1971). Based on a review of existing country image scales (Echtner and Ritchie 1993; Martin and Eroglu 1993; Parameswaran and Pisharodi 1994) and the first inspection of the newspaper articles, we obtained a master list of topics (See Table A-1 in the Annex). Organizing message content according to topics and subtopics provided us with a common structure for the data across the target countries and an overview of the descriptive content, as well as the type and breadth of the media coverage.

In the next stage article texts were analyzed and coded according to qualitative content. Manifest content would be such indicators as awareness (frequency of coverage), analytical versus descriptive, holistic versus attribute-based, and complex versus simplistic content of the media texts. Dimensions such as self-Other anchoring, degree of involvement, and depth of coverage constitute latent characteristics of the media content. This analysis was done in three stages. First, two individual coders identified dimensions, indicators, and attributes for each target country. Next they discussed their findings to ensure inter-rater reliability for each target country. After this exercise the three country teams agreed on a common structure and operational definitions that captured the media content across the three target countries. The attributes and operational definitions are depicted in Table A-1 in the Annex. Finally all the information was recorded in three data-bases for each target country that enabled us to conduct cross-country comparative analyses.

DATA ANALYSIS

There was substantive variation in the media coverage of the source country in the three target markets that suggests variation in the degree of: 1) awareness and breadth of knowledge of the other country (Keller 1993; Peabody 1994); 2) self-Other anchoring of the media coverage of the other country (Phalet and Poppe 1997; Wendt 1994); 3) involvement in the other country (Byrsk et al. 2001; Wendt 1994); and 4) complexity and depth in perceptions of the other country (Galani-Moutafi 2000).

The Swedish newspapers had high awareness of Norway, covering both major and minor domestic events on a daily basis. The broad coverage reflects the close relationship and shared interests between the two countries. However, the self-Other anchoring of the media content varied across issues. Sometimes an empathetic concern with the well-being of the source country was predominant while self-interests were evident in other instances, particularly in economic matters. Disappointment and anger were expressed very explicitly in the business newspaper when efforts to merge Norwegian and Swedish businesses failed. Norwegians were accused of being racists (*Dagens Industri*, 01.24.00), and of not sharing their wealth with their neighbors and national relative. Interestingly, the outburst of disappointment and anger did not create long-term hostility between the two countries (see Byrsk et al. 2001). In another type of country-to-country relation it would

¹The *NIKKEI* online search engine only provides articles for the past twelve months from the search date. The search period for *NIKKEI* is therefore Oct. 1999–Oct. 2000.

TABLE 1
Summary Table of Findings of the Content Analysis–Country Image Qualities and the Significance of the Other

Descriptive content of the media coverage of the source country	Qualitative content of the media coverage of the source country	Country image qualities
Sweden		High significance of the Other:
<ul style="list-style-type: none"> - Continuous coverage of domestic and current affairs in the source country - Broad coverage across topics 	<ul style="list-style-type: none"> - High awareness - Analytical - Holistic - Complex - Both self- and Other-anchored - High involvement - Deep 	<ul style="list-style-type: none"> - Image both empathetically and ethnocentrically anchored - Image based on collective identity, interests, and values shared with the source country - Image based on shared history, experience, and knowledge - Image has affective components
France:		Limited significance of the Other:
<ul style="list-style-type: none"> - Sporadic coverage of international role and significant domestic events - Continuous coverage on selective topics 	<ul style="list-style-type: none"> - Medium awareness - Analytical on selective topics - Holistic only on selective topics - Complex - Self-anchored - Low involvement - Deep on selective topics 	<ul style="list-style-type: none"> - Image ethnocentrically anchored - Image linked to shared interests can be evoked on transnational issues such as peace, democracy, sports, and art
Japan:		Insignificant Other:
<ul style="list-style-type: none"> - Sporadic coverage of international role of the source country - Narrow coverage 	<ul style="list-style-type: none"> - Low awareness - Descriptive - Attribute based - Simplistic - Low involvement - Superficial 	<ul style="list-style-type: none"> - Image based on stereotypical perceptions - Image based on shared geopolitical interests can be evoked on specific occasions

most likely have caused substantial problems if the press or politicians accused the other country of being racists. The Swedish image of Norway seems to be robust and based on deeply anchored collective identities due to shared history. Contradictions and complexities of the Other's character came across in expressions of respect and disrespect, love and hate, and in the continuous daily flow of information on a wide range of topics.

The media content in the French newspapers relating to Norway was predominantly framed according to French self-interests and was therefore rather selective in terms of topics that received attention. However, the content was usually thorough—mediating analytical and complex knowledge. The French national newspaper, *Le Monde*, describes Norway as a country with high integrity on transnational issues such as peace and environmental concerns. Norway is also perceived as having high standards in its social organization and legal system. The articles on politics, society, and economy can be seen in light of French cultural interest in political philosophy and nation-building processes (Todorov 1993). Another topic that seems to evoke French newspapers' awareness of Norway is their fascination with the Norwegian screenwriter Jon Fosse. The French seem intrigued by the Norwegian conception of the relationship between man and nature and Fosse's search for social isolation in the dramatic and beautiful

Norwegian coastal scenery constituted an exotic context for the French media (*Le Monde*, 09.18.99).

In the business newspaper Norway's idiosyncrasies are interpreted in more negative terms, as a sign of protectionist politics and economic isolation. The state capitalism of Norway in the oil industry, and the Swedish failure to establish mergers in the banking and financial sectors, are mentioned as examples of a protectionist economy. Contrary to the Swedish press, the French newspapers have an analytic approach to this topic (*Les Echos*, 05.12.99 and 12.06.99). There is little mention of historical relational ties with Norway, which seem to be overshadowed by the current position of Norway outside the EU.

The media content in the Japanese newspapers reflects low awareness, little knowledge, and low involvement with Norway. Only once during the two-year period studied did Norway receive substantive media attention in Japan. This was during the rescue operation involving the Russian nuclear submarine *Kursk*, which sank in the Barents Sea. In this case the Japanese newspapers promoted Norway as a 'partner' on issues related to nuclear waste from Russia in the North—a shared fate between the two countries that was activated by the *Kursk* accident. The articles were framed as if this could also happen close to the Japanese-Russian border. The *Kursk* accident was seen as a critical case, which put to the test

the adequacy of current knowledge and technology (Asahi, 21.08.00).

The Japanese press also carried some mention of Norway for its role in issues of global concern, e.g. the peace negotiations in the Middle East and Sri Lanka, disarmament in Kosovo, and its role in the anti-personnel mines issue. In these articles, Norway was portrayed as a peace-loving nation that takes action in conflicts that are of concern to the whole world (Asahi, 01.13.99). International peace and democracy are transnational issues and it is in Japan's interest that other countries engage in these issues. Norway and Scandinavia were also admired for their egalitarian social structure and equality between the sexes (Asahi, 05.07.00).

DISCUSSION

Insights gained from this study

The self-Other perspective proved to be fruitful in interpreting cross-country variation in the media content. The awareness of Norway in the Swedish media reflects a relation to a significant Other. It is a complex relationship with high mutual expectations of exchange and sharing. Strong emotions appeared in the media, particularly when Swedish business interests were hurt. The French newspapers' selective, analytical, and emotionally detached coverage of Norway is consistent with a relation to an out-group country. Only on a few topics involving specific French self-interests did we find signs of involvement with the source country. The fascination with the Norwegian author, Jon Fosse, was mainly framed as an exotic cultural phenomenon that could entertain the French public and this involvement had few references to mutual bonds between the two countries. The media coverage of Norway in the Japanese press is illustrative of a relation to an insignificant Other. Hence the perceptions of the other country are stereotypical and superficial. A special case in our data is how the Kursk accident defined Japan's collective interest in Norway on the geopolitical scene. This case shows how a critical incident can evoke strong collective interests even in nations that seem to be insignificant to each other.

In the third proposition we directed attention to transnational and collective identities between nations. We found that awareness can be evoked on highly valued transnational issues such as peace, domestic standards for human rights and equality, and environmental protection. Norway's role in such issues was mentioned in all the target markets. In target markets where the source country is an insignificant Other, this was the only type of news that was conveyed in the media. However, in countries where the source country was a significant Other, this type of attention was part of very rich and complex media coverage.

In summary, there are several new and interesting findings in this study. First we find substantial variation in level of awareness, type of coverage, and degree of involvement in the media coverage of the source country. Interestingly, the content in the business newspapers expresses stronger involvement and affect than what we found in the national newspapers. One possible explanation could be that self-interests in relation to other countries are more clearly defined in economic matters. We also find that there are transnational issues that can increase media involvement in and awareness of countries that would otherwise be perceived as insignificant Others.

Implications

Our study shows that the image and perception of one country varies both in quantity and substance across markets and therefore supports recent claims by researchers in international marketing that we need cross-national studies to capture variation and idiosyncrasies in different target markets (Roth 1995; Nakata and Sivakumar

2001; Usunier 1997). Second, our study shows that country images seem to have unique qualities in each target market depending on the significance of the source to the observer. Particularly shared interests and collective identities seem to be anchored in issues of historical, economic or geopolitical relations between countries. Generic country image scales should therefore be used with caution. Such scales should at least contain evaluative and relational qualities in addition to the descriptive traits that are measured in existing scales.

For marketing practitioners, the study provides useful concepts that capture different types of target markets according to national identities and relational ties between countries. Collective identities can be a source for customization of marketing strategies and cannot be copied by other countries that do not evoke this type of identity with the source country. Using transnational identities, the exporter can create involvement and awareness even in target markets that otherwise have few relations to the export country.

Although this study is based on a case analysis of how one small country is perceived in different target markets, the results have generic qualities. All countries, regardless of size and location, have relationships to other countries, and geographical, cultural, and social proximity between source and target countries have an impact on the form of their relationship and shared interests.

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ANNEX 1
TABLE A1

Categories for coding of media content

DESCRIPTIVE CONTENT

Generic topic	Sub-topic
Politics	International relations, International role, Political system, Political stability, Governmental profile
Society	Social system, Religion, Educational system, Judicial system, Population
Economy	Science, Market system, Market power, International dependency, Tourism, Industry profile, State of economy
Culture	Sports, Arts and literature
People	Physical appearance, Social relations, Relation to nature
Nature	Scenery, Climate, Localization, Environment

Coverage

Broad/Narrow	Coverage of many topics/subtopics Coverage of few/singular topics
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QUALITATIVE CONTENT

Manifest characteristics

Awareness	High: Daily coverage of the domestic agenda in source country Medium: Sporadic coverage Low: No or minor coverage of the source country
Analytical/Descriptive	Analytical: Media coverage that provides substantive information that is commented and elaborated on by the journalist Descriptive: Media coverage that refers only to events, persons, or products
Holistic/Attribute-based	Holistic: Feature articles and coverage that gives substantive and rich impressions/images of the source country Attribute-based descriptions: Articles that refer only to individual attributes, facts or characteristics
Complex/Simplistic	Complex: Multidimensional coverage that refers to and analyzes contradictory attributes and traits of the source country Simplistic: One-dimensional coverage that is characterized by simple or stereotypical characteristics

Latent characteristics

Self-/Other-anchored	Self-anchored: Coverage that reflects the targets country's interests Other-anchored: Coverage that reflects concern for the well-being of the other country
Involvement	High involvement: Coverage that expresses emotional arousal concerning the source country (disappointment, anger)
Deep/Superficial	Deep: Coverage that explores and analyzes historical, geographical, cultural or political relationships, links, and shared interests between source and target countries Superficial: Coverage that expresses non-shared interests or links between source and target country

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“Why Are We So Stupid”: An Historic Approach to Post-Socialist Consumer Research

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ABSTRACT

The transformation of state socialism in Europe is one of the most important historical developments of the last fifteen years. Yet cross-cultural consumer behavior research in this area has been confined by a lack of historical grounding. This risks overlooking nuanced changes in local consumer experiences and economic structures. Drawing on interpretive research in Croatia as an example, I describe symbolic consumption as a continuation of historical experiences, reinterpreted in the current, emerging socio-political structure. This paper contributes to an understanding of historical influences driving cross-cultural consumption research and transformation consumers.

THEORETICAL FRAMEWORK

Scholars researching in Central, Eastern, and Southeastern Europe have made inroads in the understanding of marketing principles-consumer decision making (Lofman 1993), product involvement and brand commitment (Coulter, Price, and Feick 2003)-as well as consumer behavior-demand (Kozminski 1992), desire (Ger, Belk, and Lascu 1993), conflict (Pecotich, Renko, and Shultz 1993), luxuries (Belk 1999), and globalization (Ger and Belk 1996). Yet research in this area has been confined by a lack of historical grounding. This risks overlooking nuanced changes in local consumer experiences and economic structures. Recent interpretive, cross-cultural scholarship on post-socialist consumers calls for research with a broader historic focus, predating the socialist era (Coulter et al 2003).

To work historically means to understand the context and experiences from which consumers construct the meanings of their everyday world in relation to the past, present, and future (Rassuli and Hollander 1987). Theories about the current situation should have a resonance with past events (Smith and Lux 1993). In the case of Croatia, as in many other transformation countries in the region, the current economic and political structure is rooted in the pre-state socialist and state socialist economic and political structure.

Croatia was an agrarian economy and its population was mostly rural peasants until the state socialist modernization programs after World War II. The pre-war arrangement was paternalistic: the peasants provided food for the landowners and taxes and soldiers to the state. Larger and smaller landowners as well as the peasants implicitly assumed the “natural order of things” was for the nobility to care for the peasants, who were unprepared to participate in the political and economic system. Only landowners or intellectuals participated in parliament (*Sabor*) (Biondich 2000).

The post-war economic and political arrangement abolished class differences and restricted private property ownership to a

small scale. Industrialization, modernization, and urbanization changed the demographic and economic structure of Croatia and Yugoslavia (Pecotich, Renko and Shultz 1994). Many migrants to urban areas from impoverished, Eastern regions elevated their social and economic status. One way was by rising to power in the League of Communists of Yugoslavia (Denich 1996a, 1996b; Simic 1974). Still, the state was paternalistic: it provided equally to all citizens as an idyllic father would to his children (Kligman 1998). Political participation and social status advancement were exclusive, no longer just for landowners, but for members of the League of Communists of Yugoslavia (Verdery 1996).

In the current situation, former communist political and economic elites are now the economic and political elites. Their approach to governing and operating a business is that expanding their power has benefits for those around them, similar to the paternalism of agrarianism (Verdery 1996). Without a historical view, it might seem that the political changes since state socialism have brought Western democracy. Looking to the past to understand the present suggests that the institutions function more in the local traditions of paternalistic government.

Many locals see the post-socialist economic order as a return to the “natural order” of private property ownership and state socialism as an anomaly. The economy in Croatia is oriented towards corporate ownership that maximizes profit through monopoly control of a sector. Many people in Croatia tend to see post-socialism in a historical context: it is the current arrangement in a history in which elites have power.

The fall of the Berlin Wall in 1989 and the erosion of the political divide of democracy and state socialism also brought a chance to revisit a historic question in Croatia. The cultural and political idea of unity with the West or East has a long history related to Croatia’s international relations agenda. Prior to the formation of “the first Yugoslavia” (1918-1933), the main political issue facing Croatian political parties was advancing the position of Croatia within the Dual Monarchy, either through alliances to the East or to the West with Budapest or Vienna. Marshall Tito (Josip Broz 1892-1980), the president of SFRY, developed Yugoslavia’s international position as a non-aligned state, as unique in the state socialist context by its break with Stalin in 1948 and its socialism with a human face, but still a part of the Balkans. Franjo Tudjman (1922-1999), the first president of the (post state socialist) Republic of Croatia emphasized Croatia’s western identity, promising to restore its “natural” place in Europe, confirmed when Germany pressured European Union recognition of its statehood in 1992.

The war (1991-1995) that followed succession seemed to “balkanize” Croatia rather than offer a chance to join Europe. The western media portrayed Yugoslavia’s break up with strong bias. “balkan” in the cultural and political sense has come to mean problematic, non-European, divisive, self-destructive and violent. These meanings might also apply to Western Europe’s history, but the “balkans” is Europe’s “other” (Todorova 1997). In the United States, the term “balkanization” has come to mean a suicidal war (Snajder 1996). In 1991, John Sherry, a prominent marketing scholar, known for approaching research with cultural sensitivity, described in fighting within the consumer behavior academy as its “balkanization”.

Certainly, this misnomer reads back to the people of the Balkan geographic and cultural region as a serious misappropriation of their culture and of a name for a geo-political region

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(Todorova 1997). Yet Croatians orientalize regional groups to the East, even when these groups consider themselves Croatians (Bakic-Hayden and Hayden 1992). For example, Croatians from Zagreb (*Zagrebcanin*) view migrants from villages, especially from the East (*Hercegovci*) who come to Zagreb as less Western, meaning educated and cultured, than they are. Many view the Yugoslav experience as a process of the “balkanization” of Croatia because of large-scale urbanization and because of the change in the political power structure from educated elites to peasants.

For me, as a member of the Croatian Diaspora in the USA, and as an interpretive researcher, I feel that it is important to contribute to an understanding of the region. I distinguish between the terms Balkan in the geographic sense of a mountainous region in South-eastern Europe with the orientalist view by placing the orientalist term in quotations in lower case.

Symbolic consumption is a part of playing out the larger historic and socio-economic tensions in the current situation. Consumption is a central experience of modern daily life (Droge, Calatone, Agrawal & Mackoy 1993; Miller 1997; Rassuli & Hollander 1986). Consumers, through what they possess, gain a sense of their past and present, and often their future (Belk 1988). Moreover, it is key to the process of communicating group membership and status, to the self and others (Douglas and Isherwood 1979). Membership in a status group might be understood as an aspiration or as an achievement (Holt 1998; Solomon 1999). In times of social change, status groups are in flux and communicating membership becomes crucial.

To an observer without an understanding of local history, symbolic consumption in Zagreb might seem to be the same as in Munich or Dallas. After all, the same brands, for example Marlboro and Sony, are prevalent globally (Ger and Belk 1996). It might also seem to be a sharp contrast to the collectivist ideology of state socialism (Bar-Haim 1987). A historical understanding, however, sees current consumption in Zagreb in the context of state socialist consumption, which focused on Yugoslav westernness and exceptionalism through consumption (Drakulic 1992; Sredl 2004). Through an historical and interpretive approach, it is possible to understand symbolic consumption as a way of playing out local, historically embedded meanings.

METHODS

I lived for 19 months in Croatia: the summers of 2000-1 and from June 2002 to August 2003 as part of a larger project of researching advertising in Croatia after state socialism. My understanding of symbolic consumption as it occurred *in situ* developed through observation of and participation in consumption and other daily activities in natural settings and multiple sites throughout Croatia, social interaction, and composing fieldnotes—observations, thick descriptions, emerging analysis, and reflections—and visual ethnography. Using sources from local history (Allcock 2000; Biondich 2000; Jelavich 1983; Tanner 1997) and anthropology scholarship (Bakic-Hayden and Hayden 1992; Denich 1976a, 1976b; Simic 1974) and the anthropology of state socialism (Berdahl 1999; Kligman 1998; Verdery 1996) allowed me to make connections between the past and the present. Participation in consumption rituals throughout Croatia included co-shopping for women’s and men’s clothing and shoes, women’s cosmetics shopping, and food shopping in a grocery chain in towns, at hyper-markets in suburbs, and in neighborhood outdoor markets, as well as exchange in the second economy. I observed consumers at new malls, flea markets, and in city centers. Analysis and interpretation of data was compared constantly with topical literature. Emergent design, purposive sampling, depth interviews, (Lincoln and Guba 1985; McCracken 1988; Glaser and Strauss 1967; Wallendorf and Belk

1989) and focus groups explored and tested analysis. Member checks brought to light insights from observations and directed the research to important new areas of exploration (Belk, Wallendorf & Sherry 1989).

Depth interviews and focus groups with consumers centered on the socialist and post-socialist consumption experience, consumption aspirations, political influences, attitude to money, the new social structure and social values, lifestyles, and ethnicity. The use of projective techniques allowed active construction of subjective advertising experience by the informants, as well as a balance of power in the interview process. Specific advertisements served as prompts across the interviews (Branthwaite and Lunn 1985; Buhl 1991). A total of 52 informants participated. I accessed them through the snowball method, starting with my network of friends, relatives, and colleagues at the University of Zagreb, Dept. of Marketing. The duration of each interview was between one and two hours, and I interviewed many informants more than once. Interviews were conducted in Croatian (I speak Croatian) and English, tape-recorded, and transcribed. Informants also participated in member-checking. In the context of an Orientalist view of Croatia, I often felt that my position between Croatian and US cultures facilitated access to informants.

FINDINGS

In this section, I will develop the historical tension discussed in the theoretical framework. Through informants’ voices, my observations, and historical approach, I will place this in the specific context of contemporary consumption. The end of state socialism has created new opportunities for symbolic consumption and negotiating political and social power. The meanings of status are imbedded in historical tensions of “balkanness” and Westernness. Former elites in Zagreb tend to claim their status through emphasizing their Western culture and judge easterners as less fit for the status they have achieved because they show it in symbolic consumption, which is inherently “balkan” and uncultured, unlike their Western moderation.

Local contexts of power

The economic and political power groups are in flux after state socialism. The local meanings of symbolic consumption, however, are embedded in understandings of Balkan and Western in the context of Croatia’s borderland position between the West and East. Along with the different colonial experiences come regional differences. *Zagrebcanin* (people from Zagreb), describe their culture as Germanic: organized, cultured, efficient, and educated and the *Hercegovci* (people from the Hercegovina region) as “balkan” especially because this region was under Ottoman rule. Hercegovina is a region of, since its creation in 1995, the Federation of Bosnia and Hercegovina, and previously it was a part of the Yugoslav Republic of Bosnia and Hercegovina. Most Hercegovci consider their identity as Croatian, largely because they are Catholic, not Muslim and Orthodox like their compatriots.

New Power Groups, Old Power Relations

Many people from Hercegovina moved to Zagreb after independence, largely because of the war in Bosnia. *Hercegovci* have displaced local power networks in Zagreb. One informant from Zagreb explained it to me in a joke, “There is a homeless man standing by the road with a sign, ‘Please help me, I am from Zagreb and I don’t have a relative from Hercegovina.’” The graffiti “Hercegovci go home” written on the toilet stall all at the Philosophy Faculty of the University of Zagreb, was quite typical throughout Zagreb.

I attended a play in Zagreb at a very popular comedy theatre which played on the tensions in Croatian cultural identity. The comedy played on *Hercegovci* and *Zagrebanin* cultural differences and their outcomes in social relationships. The best part for me was the audience's laughter (many people were laughing so hard they were crying) and enjoyment amid the real tensions. In April 2002, just before moving from the USA to Zagreb, I attended a lecture of Slavoj Zizek. Zizek described ethnic jokes in SFRY as a manner of describing familiarity rather than prejudice, as it is understood in the US. A few days after the play in Zagreb, I remembered this. The audience laughter can be interpreted as a similar type of ethnic joke at themselves and their status relationships.

Defending Status

Current practices of using goods to symbolize status are rooted in socialist experience (Drakulic 1992). Under Tito's progressive socialism, Yugoslavia accepted loans from the West, provided its citizens passports and permitted travel, work, and temporary residence abroad, as well as possession of foreign currency, unlike the COMECON countries (1949-1991, the Soviet Union, Bulgaria, Czechoslovakia, German Democratic Republic, Hungary, Poland, and Romania) (Ugresic 1998).

Yugoslav, especially Croat and Slovene, standards of living were higher than the other socialist states, and Yugoslavs had easier access to Western commercial goods. Many Yugoslavs, for example, worked in Germany and brought home consumer goods and deutschmarks. For Croatians, consumption was a national sign of showing membership in the west, and distance from socialism, the east, and the Balkans.

During socialism, displaying consumer brands was a local means of showing position or access to power. For example, wearing fashionable clothes or displaying western brands was a way for factory managers or party officials to show their power, and for others to show membership in this network (Berdahl 1999). For most people in Croatia today, consumption is a means of showing status. One respondent commented: "If my neighbor has a satellite dish, I need to have it tomorrow ... I have to reach the same status as he does" (Hrvoje, 30, Zagreb).

It seemed to me that people in Croatia, especially Zagreb, understood *Hercegovci* as consuming more conspicuously than other groups. Women and men *Hercegovci* are associated with BMW cars and the mafia. An informant commented: "Young girls driving BMW at the university, things like that, that's usually the mafia" (Jagoda, 35 Zagreb). While the BMW is usually a sign of status and stability in the US, in Croatia it is a sign of power related to corruption. My friends pointed to *Hercegovci* cafes, and commented on them as places that the mafia frequents. One friend from Zagreb calls them *kotsku glavi*, square heads, because, she says, that is how they look. Respondents describe *Hercegovci* as lacking taste, extremely patriotic, behaving as a mafia: a closed society, helping only its own, with ethically questionable business and political behavior. Consumption has come to symbolize the fragmentation and changing control of power relationships. Without a historical perspective, it might look like mere imitation of Western lifestyles, but a historical understanding suggests the local meaning has more to do with the changing of power relationships and historic cultural tensions.

An important aspect of the stories of informants from Zagreb is that they react to the changing social structure by re-defining their status position on cultural grounds of westernness. One respondent from Zagreb, who's parents are from Zagreb and Ljubljana (Slovenia) described the newcomers' pursuit of status goods: "how do they

earn their money as they think only about how much money they have ... it's totally a cultural shock for let's say us [people from Zagreb] who were not taught that way ... people who come now from that part of Croatia [Hercegovina]... the values are totally, I mean, wrong and they did not stand on healthy feet so you can feel it on the street" (Marija 29 Zagreb).

This subjective process of making sense of changes and regaining power relates to Bourdieu's concept of symbolic power (1984). The groups that had status before socialism, *Zagrebanin*, re-assert their historically based cultural capital through value and style judgments about the *Hercegovci*. Since these groups are outside of the current power relations, but still define cultural values, the only way for them to respond is through asserting their locally constructed notion of western habitus. They can displace the *Hercegovci* as the internal other, and keeping them there is a way to handle their status as the other to the west. They rise in their status compared to the west if they can view the *Hercegovci* as Balkan and lower status. Local status groups are understood in the context of Croatia's borderland history.

At a national level, Croatia's "balkanization" after the war, as I mentioned at the start of this section, was clearly a point for exploration. This also plays out on the individual level of understanding style and taste. One woman from Zagreb commented: "You would come to the west, and ... see this shop window with a nice design ... that's the experience, wow, how can they do it and we can't, why are we so stupid, why *are* we so stupid, that was the common question, even now, you still ask that question" (Gordana 30 Zagreb). To answer the question, many respondents turn to the *Hercegovci*: "the majority of problems that are happening right now have roots in the way of thinking of people who have arrived in Zagreb" (Ana 29 Zagreb).

The post-socialist period has brought Croatia a chance to define its identity in global systems of difference (Wilk 1995). This happens within the context of local struggles to reach consensus on Croatia's identity. This is grounded in historical power relations and is played out in symbolic consumption. Still, processes outside the region predetermine the global meaning of Croatia's identities. The informants with whom I spoke seemed aware of this tension between local and global processes of identity construction. In that way, *Zagrebanin* and *Hercegovci* are not unlike, which I suspect probably further irritates *Zagrebanin* in their efforts to hold on to their position.

IMPLICATIONS

This article presents Croatia's post-socialist transformation in a historic context. It introduces the idea that the post-socialist transformation can look quite different when seen through a historic approach. The historic approach in interpretive research has the specific benefit of viewing the present in terms of the past, bringing the researcher and the final research narrative closer to the perspectives of transformation consumers in the region (Creed 1998). This paper develops theories about the current local structure and culture of markets and democracy. They are unique in the literature because they see the present in relation to past events. From there, the market structure and culture was described in local terms. It was not typically market capitalist or democratic, but a mix of this and local paternalistic political notions and private property ownership. The meanings of symbolic consumption were similarly grounded in historic question of Croatia's, and individuals' "balkaness" and westernness rather than imitation of Western lifestyles. Further research might develop theories about consumer behavior and markets in the region. Such theories could be useful for marketing decision makers operating in the region.

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Metacognitive Beliefs about Groups

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EXTENDED ABSTRACT

We look to others to tell us how to think, feel, and act. Researchers have a detailed understanding of how group norms affect group members' cognition, emotion, and behavior. Surprisingly, however, much less is known about how people actually construct their estimates of collective sentiment (for notable exceptions, see Hamil, Nisbett, & Wilson, 1989; McFarland & Miller, 1990; Miller & McFarland, 1987; Prentice & Miller, 1993). At the same time, however, we know that perceivers often misjudge public opinion (Prentice & Miller, 1993). In this paper, we examine one reason why by exploring the process by which perceivers integrate the information they have about the number of times they have heard a sentiment expressed and the number of people they have heard express the sentiment.

We propose that people use two important pieces of information when making group opinion judgments. First, perceivers have a feeling of familiarity for how many times they have heard an opinion expressed in a group, namely the opinion's frequency. Because the more an opinion has been expressed, the more familiar it seems, repeated statements increase perceivers' sense of familiarity for the opinion even when the expressions come from one person. Second, perceivers have conscious information about the range of group members making the opinion statements, that is, information about the extensity of the opinion. To form accurate group opinion inferences, perceivers must appropriately integrate familiarity information with information about the number of group members making the statements. We investigate whether people faced with repetition from one group member are able to appropriately integrate this information or instead, whether perceivers use their feelings of familiarity for an opinion to make inferences about the opinion's extensity.

Three studies examined people's metacognitive theories about the relationship between feelings of familiarity for an opinion in a group and estimates of extensity, or the range of group members supporting the opinion. In Study 1, participants estimated a focus group's stance after either reading three comments from three different individuals (3 persons / 3 statements condition), three comments from one person (1 person / 3 statements condition), or one comment from one individual (one statement control). As expected, an a priori contrast showed that participants in the 3 persons / 3 statements condition estimated more focus group support for the issue at hand ($M=6.2$) than participants in the one opinion control condition ($M=4.7$), $F(1, 174)=62.0$, $p<.001$. More important, however, an a priori contrast also showed that participants who read one person's repeated statements in favor of the issue at hand (1 person / 3 statements condition) also estimated more focus group support for the issue ($M=5.4$) than participants in the one opinion control condition ($M=4.7$), $F(1, 174)=19.7$, $p<.001$. Thus, the implication is that one individual repeating the same information can have almost as much influence as three different individuals each offering the same information.

Study 2 examined boundary conditions of this repetition effect. We manipulated whether the norms around an issue were well-known ("evaluable") versus unknown ("unevaluable"). We predicted that the repetition effect would transpire when opinion estimators did not have previous knowledge about the issue at hand (unevaluable norms). However, when the issue was evaluable,

opinion estimators would be able to discount the phenomenological feeling of familiarity brought about by repeated statements and consequently would not infer greater group support for the issue after reading repeated statements from one person. The results confirmed our prediction.

Study 3 examined these differential effects of evaluable versus unevaluable norms in the presence or absence of a time delay. We predicted that after a time delay the repetition effect would transpire, even when participants had prior knowledge of the group's stance. In a between-subjects design, we found that the repetition effect transpires among opinion estimators when the issue at hand is unevaluable in both the presence and absence of a time delay. More important, however, we found that when participants have previous knowledge of a group's opinion (evaluable) they are initially able to discount the feeling of opinion familiarity brought about by one person's repeated statements (replicating the effect in Study 2). However, after a time delay, even participants who had previous knowledge of the group norm are affected by the repeated statements of one individual.

Study 3 also investigated the relationship between observers' estimates of group opinion and personal attitude change, and showed that when there was a time delay between exposure to one person's repeated counter-normative statements and the opinion measure, students shifted their own personal opinions in the direction of the "norm" they had misperceived. Follow up mediational analyses indicated that this personal opinion shift was due to misguided social influence. That is, students' own opinions appeared to be driven by their perceptions of overall student support rather than changed directly as a result of repetition. These results demonstrate that using phenomenological feelings of opinion familiarity as the basis for judgments about the extensity of an opinion in a group can have important consequences, and under some circumstances can even lead people to change their own opinions in what may be seen as a misguided direction.

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A Non-Interactive Social Presence in a Retail Setting: An Investigation of Its Impact on Consumers' Emotions, Cognitive Performance, and Self-Presentation Behaviors

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EXTENDED ABSTRACT

Social influence can play an important role in the consumption process (e.g., Bearden and Etzel 1982). The majority of research on social influences in consumer behavior has focused on an *interactive* social influence (e.g., Childers and Rao 1992). Examples of such interactive influences might be being greeted by a salesperson or asking a friend for an opinion in the store. However, consumers often find themselves in the presence of other shoppers who do not interact with them (e.g., other shoppers present in a grocery aisle). This raises the question—does the mere presence of another shopper influence a consumer? To date, little research has studied the impact of a non-interactive social presence (for exceptions see Zhou and Soman 2003). In the present research we study the relevance of a *non-interactive* social presence—a social entity that is physically present, but is not involved nor attempts to engage the consumer in any way. In particular, in three field experiments we test whether characteristics of the social presence (i.e., social size (number of people present), proximity, and perceived similarity) influence consumers' emotions, cognitions, and behaviors shopping when they are shopping for a privately consumed/low risk purchase product in a store aisle.

To understand how a social presence might influence a consumer and to formulate hypotheses, this research uses Social Impact Theory (SIT; Latané 1981) as a theoretical framework. The theory proposes that an individual's motives and emotions, cognitions and beliefs, and/or values and behavior are impacted by the real, implied, or imagined presence or action of a social presence (i.e., another person or group of people). The impact of this social presence results from "social forces" including the number (i.e., how many people are present), immediacy (i.e., the distance), and social source strength (i.e., the importance of the source—we operationalize this as perceived similarity), that operate within a "social force field" (Latané 1981, pg. 343). SIT relates a series of principles, two of which are discussed in the present research, that define the theory's functionality and predict inter-relationships between the three forces. First, the impact a target experiences from an increase in any of the social forces occurs as a power function where the greatest influence arises when there are more people present (vs. less), they are in close proximity (vs. further away) or they are high in strength (vs. low). Second, a social presence's influence is a multiplicative function of the forces with the greatest impact occurring when there are several people, in close proximity, and high in source strength. Results from the three studies lend only partial support to SIT's principles.

Study One results show that when the size of a non-interactive social presence increases, two distinct patterns arise. While cognition and behaviors follow SIT's power function prediction, emotions did not; negative emotions decreased (and positive emotions increased) between the no one and the one person conditions, and then inverted (increased) between the one person and three people conditions. However, consistent with SIT's first principle, when social size increased beyond one person, the consumer experienced more negative (less positive) emotions.

The results of Study Two demonstrate that the proximity of a non-interactive social presence moderates the impact of social size

on feelings, thoughts, and behaviors as predicted in SIT's second principle. This study also established the robustness of the unexpected results for emotions in Study One by producing a similar pattern. Thus, in contrast to SIT, in conditions where there is no one else present or there is a large social presence, consumers experience more negative (less positive) emotions as compared to when there is a small social presence. This study also found that crowding mediated emotions while distraction mediated cognitive performance.

Finally, Study Three's results indicate that the proximity of a non-interactive social presence moderates the impact of its perceived similarity on consumers' emotions, cognitive performance, and behaviors. As predicted and consistent with SIT, consumers experienced the least negative (most positive) emotions when a close non-interactive social presence was similar versus dissimilar; however, when the social presence was further away, perceived similarity did not influence the emotions that were experienced. Mediation analysis indicated that one theoretical driver of the impact of social presence characteristics on emotions is attraction. The patterns of results for cognitive performance and self-presentation behaviors were counter to SIT's predictions. First, consistent with the distraction literature (e.g., Schlinger and Plummer 1972), a close dissimilar social presence (i.e., low strength) had the most negative impact on consumers' recall. Mediation analysis indicated this was because participants were distracted. Second, consumers selected the most expensive/highest quality brand when a close social presence was dissimilar versus similar.

This research proposes to make a number of contributions to both the marketing and psychology literatures. First, the findings of the research demonstrate that in a consumption context the mere presence of another person has a significant influence on consumers. It is demonstrated that a non-interactive social presence influences consumers' emotions, cognitive performance, and behaviors even during the acquisition of a privately consumed/low risk purchase product. Second, this research identifies and explores theoretical drivers that explain the effects of SIT's social forces by drawing from research in crowding, distraction, and attraction. Third, the findings redefine SIT by highlighting situations in which the theory's predictions do not hold. In particular, results indicate that the impact of social size on emotions and the impact of social source strength on both cognitive performance and behaviors, do not comply with the theory's predictions. In these instances, the theory is qualified and other areas of research are integrated to support the identified pattern of effects.

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Competition and Cooperation in Joint Purchase Decisions

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EXTENDED ABSTRACT

The concepts of cooperation and competition are fundamental to our understanding of interpersonal and inter-group relations. Cooperation exists when people work together to achieve a mutually satisfying outcome, while competition can be characterized as a zero sum game in which one person wins and the other loses (cf. Tjosvold 1984). From this perspective, consumers in a decision-making dyad cooperate when they seek a mutually satisfactory purchase outcome that reflects the preferences of both parties, and they compete when they attempt to impose their preferences on each other. Deutsch (1949) argues that the tendency to cooperate or compete depends on the nature of the interdependence between the parties. Cooperation occurs when group members are *positively* interdependent such that each person only achieves his or her goals if the others also achieve their goals. In contrast, competition results when the goals of the group members are *negatively* interdependent such that each person can reach his or her goals only if the others do not reach their goals.

An issue that has been overlooked is whether consumers make more satisfying decisions when they compete rather than cooperate. Consider the possible effects of competitive behaviors on the satisfaction of two friends in which A is the influencing agent and T is the influence target. If A and T have different preferences but A has more power, A is able to impose his or her choice on T through influence. The decision outcome should be satisfying for A, but the use of power is likely to make the decision process less pleasant for both parties than if they had worked together. In contrast, if A possesses less power than T, by definition T has the ability to resist A's influence attempts (though he or she may choose to acquiesce). The inability to influence T is likely to lead to disappointment and frustration for A. Thus, the effects of competition on decision satisfaction are contingent on the extent to which A has more power and is able to achieve the desired outcomes (hypothesis 1).

Although power and influence constitute essential components of competitive decision environments, they are much less important in cooperative ones. If A and T work cooperatively, they will focus on achieving a mutually satisfying outcome. To do so, they must engage in a two-way exchange of information in order to generate a common understanding of the issues. They must also be responsive to each other in order to work toward an outcome that reflects the preferences of both. A and T's relative power is largely immaterial because they are positively interdependent; in other words, A enhances his or her own satisfaction by increasing T's satisfaction, and vice versa. Thus, we hypothesize that the effects of cooperation on decision satisfaction is always positive, regardless of the power held by A or T and their ability to achieve the desired outcomes (hypothesis 2).

The hypotheses of this research were tested with a 2 (decision process: cooperative versus competitive) X 2 (decision outcome: preference consistent versus preference inconsistent) between- and within-subjects experimental design. Subjects were randomly selected to receive one of two scenarios containing the manipulations. The scenarios described a conversation between two managers (John and Greg) making a decision about where to take an important client for dinner. The decision process manipulation was achieved with scripts that differed in terms of the degree to which the dialogue between the managers was competitive versus coopera-

tive. In the competition condition, one manager used influence to impose his preferences on the other. In the cooperative condition, the managers listened and responded to each other's suggestions or arguments. In both conditions, the managers possessed different initial preferences in order to ensure that they had a basis for discussing the pros and cons of the alternatives under consideration. Decision outcome was a within-subjects factor and so subjects responded to the questionnaire from both Greg and John's perspective. The dyadic decision was consistent with one manager's initial preferences and inconsistent with the other's. Data was collected from 113 MBA students under normal classroom conditions.

The results indicate that decision satisfaction is enhanced by decision processes that are characterized by the desire to achieve a mutually satisfying decision (i.e., cooperation) as opposed to the imposition of individual preferences (competition). Subjects thought that managers who cooperated were more satisfied with the dyad's decision within both the preference-consistent and the preference-inconsistent conditions. Decision satisfaction is enhanced by a decision process in which dyad members are attentive and responsive to each other's concerns, and where influence is attempted less frequently. Process results suggest that cooperative decision processes are viewed as fairer, less biased, more honest, more accommodative, and oriented toward mutual problem-solving.

The results related to the manipulation of decision outcome are particularly interesting. Overall, subjects thought that the managers were most satisfied when "they got their way," as reflected by a congruency between the dyadic decision and their initial preferences. However, a significant interaction between decision process and outcome revealed that preference-consistency was more important under a competitive decision process. We propose that consumers place a much greater emphasis on the degree to which an outcome is preference-consistent when they are competing, because competition is basically a zero-sum game of preference imposition. Managers who competed and "did not get their way" were thought to be extremely dissatisfied with the dyadic decision.

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How Well Do You Know Me? Consumer Calibration of Others' Knowledge

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EXTENDED ABSTRACT

When making purchases, consumers often enlist friends who help them by acting as agents on their behalf (Urbany, Dickson, and Wilkie 1989; Gershoff, Broniarczyk, and West 2001; Rosen and Olshavsky 1987). A consumer's decision to rely on a friend to act as an agent depends, in part, on the consumer's belief that the friend is knowledgeable about his or her preferences and attitudes. Thus it is important to examine consumer calibration for estimates of others' knowledge about them. Although this has been underscored by a recent surge of interest in knowledge calibration and metacognition (Alba and Hutchinson 2000; Wright 2002), research in the area remains "sparse and fragmented" (Alba and Hutchinson 2000, pg. 146).

Judgments of how well others know them are likely to be based on available cues that are perceived to be diagnostic rather than on objective measures (Alba and Hutchinson 2000; Menon et al. 1995; Wright 2002; Park, Mothersbaugh, and Feick 1994). Relevant research in interpersonal knowledge suggests cues that consumers are likely to use include perceived similarity (Schul and Vinokur 2000) relationship length, and involvement in the relationship (Swann and Gill 1997). Use of these cues may lead to errors in judgment if they are not related to objective accuracy (Kenny and Acitelli 2001; Kenny 1994; West 1996). However, in the context of a friend's knowledge, consumers may rely on these cues either because they are motivated to believe that their close friends are more capable than they really are (Kunda 1990; Murray and Holmes 1993), or because they are motivated to protect their own identity through protection of the relationship (Kenny and Acitelli 2001; Murray et al. 2000). Two studies were conducted to examine these effects.

Sixty pairs of friends who had known each other from between one and 288 months participated in Study 1. Friends were randomly assigned to either the target or perceiver condition. Targets completed a series of questionnaires in which they provided information about their own preferences and attitudes in five consumer related domains (grocery products, restaurants, activity preferences, values and lifestyle attitudes, and consumer attitudes) as well as estimates of how accurate they believed their friend would be at predicting their responses. Targets also provided measures of the length of the relationship, involvement in the relationship, and similarity to the friend in the study. Perceivers completed the same sets of questionnaires as targets, however instead of providing their own preferences and attitudes, perceivers provided estimates of their target friend's responses to the items.

Analysis of responses indicated that target participants were not very accurate in estimates of their friends' knowledge of their attitudes and preferences. Instead, targets' estimates were primarily associated with the involvement in the relationship. Overall, participants overestimated how accurate their friends would be in predicting their preferences and attitudes. Further, those who were in more involved relationships overestimated the accuracy of their friends to a greater extent than those who were in less involved relationships.

Study 2 sought to tease apart the role of different types of motivated reasoning (idealizing close friends versus protecting close relationships) that might affect consumer estimates of their

friends' knowledge about them. Thus in study 2 we examined consumers' estimates of friends' knowledge about topics other than the target consumers' preferences and attitudes. Study 2 also examined consumers' updating of their perceptions of friends' knowledge about them upon learning that their friends are more or less accurate than they had predicted.

Forty-four pairs of friends participated in study 2. Each made estimates of their friends' knowledge about their attitudes and preferences in three consumer related domains (grocery products, restaurants, activities). In addition each participant also made estimates of their friends' general knowledge in three domains (Oscar winning films, state capitals, chemical elements). Finally, friends were randomly assigned to one of two updating conditions in which they received feedback that their partner was either more or less knowledgeable than they had initially estimated about their attitudes and preferences in each of the three consumer related domains and then were asked to provide a new (updated) estimate of the friends' knowledge about them. Lastly, participants responded to questions about their relationship with and similarity to their partner in the study.

Targets' estimates of their friends' knowledge about their preferences replicated results of study 1. Relationship involvement predicted targets' estimates of their friends' knowledge about them. However, targets' estimates of friends' knowledge of other topics showed a different pattern; relationship involvement did not predict estimates of the friends' knowledge. Instead, estimates of friends' knowledge for other topics were associated with the friends' actual knowledge. Finally, depending on involvement in the relationship, participants showed bias as they updated their beliefs about their friends' knowledge about them in the face of feedback. When updating their estimates of their friends' knowledge about them, those who had high involvement relationships made greater upward adjustments when they learned that their friends were more accurate than they had initially predicted, compared to their downward adjustments when they learned their friends were less accurate. Conversely there was no significant difference in the amount of updating by individuals in low involvement relationships.

The findings of this research make a number of unique contributions to the literature on agent selection and evaluation as well as to literature in knowledge calibration and meta-cognition. First, research in the area of agent selection and evaluation has frequently focused on situations where the agents have provided general information, typically in the form of the agents' own preferences or evaluations (Gershoff et al. 2001; West and Broniarczyk 1998). Our results add to a growing body of research that suggests that aspects of consumer information processing may lead consumers to select inferior agents and to perhaps over-rely on the abilities of poor agents while they under-rely on better agents particularly in contexts where the agent is providing personalized evaluations based on the target's preferences (Gershoff, Mukherjee, and Mukhopadhyay 2003). Second, this research contributes to the literatures on calibration and metaknowledge. Our results contribute to our understanding of consumers' metaknowledge by providing evidence of a situation in which consumers rely on their beliefs about others in making decisions, but in which their beliefs are poorly calibrated with reality.

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Money Attitudes and Innovative Consumer Behavior: Hedge Funds in South Africa

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ABSTRACT

Reports the results of a study conducted in a stratified probability sample of urban South Africans with a standard of living comparable to the West. Money attitudes are observed to have substantive and theoretically meaningful relations with intentions to engage in search, word-of-mouth, and alternative evaluation for a new and complex investment product, hedge funds. The study controls for exploratory buyer behavior tendencies, dispositional innovativeness, and sociodemographic characteristics in a covariance structure model. The importance of money attitudes is consistent with expectations for a society undergoing transition. Assesses factorial structure of all scales using confirmatory factor analysis approach.

There are increasing calls to conduct research in emerging consumer markets (ECMs) in order to advance theory and practice, especially in the financial products context (Gurãu 2002; Steenkamp and Burgess 2002; Sureshchandar et al. 2002). The present ECM study concerns the important concept of money attitudes (MA), an attitude that focuses on money and its uses. MA research is providing new insights into consumer financial behaviors such as saving, debt, credit card use, and compulsive buying (e.g., Furnham and Okamura 1999; Hanley and Wilhelm 1992; Hayhoe and Leach 1999; Lau 1998; Lim 2003; Norvilitis et al. 2003; Roberts and Jones 2001; Roberts and Sepulveda M. 1999a; Roberts and Sepulveda M. 1999b; Rousseau and Venter 1999). MA scales require more rigorous testing in representative national samples and research is needed in a wider range of new product and consumer contexts (Medina et al. 1996; Roberts and Jones 2001). One such context is innovative consumer behavior. Our research examines the effects of MA on innovative behavior toward a new and complex investment product. The product, hedge funds, was soon to be approved for sale by financial regulators in South Africa. We make three important contributions. We assess the factorial structure of the most popular MA scale using confirmatory factor analysis (CFA), report the money attitudes of a representative sample with living standards comparable to the West, and examine the relations of money attitudes and intentions to engage in purposive innovative behaviors, controlling for the effects of exploratory buyer behavior tendencies and dispositional innovativeness using two new scales.

THEORETICAL BACKGROUND AND HYPOTHESES

Money Attitudes

MA research has been influenced most by Furnham (Furnham and Argyle 1998) and Yamauchi and Templer (1982); the latter's *Money Attitude Scale* (MAS) is the recommended scale (Medina et al. 1996; Roberts and Jones 2001). Yamauchi and Templer identified five MA dimensions (anxiety, distrust, power/prestige, quality, and retention/time) and reported supportive nomological relations and sociodemographic correlates. Gresham and Fontenot (1989)

revised the MAS to improve its measurement. Although previous research has not linked MA to innovative consumer behavior, cognitive consistency theorists have long maintained that important attitudes influence search and evaluative behavior and it is well-known that situational cues can prompt consumers to associate new products to ever more deeply held consequential associations that ultimately lead to centrally-held attitudes, goals, and values (viz., means-end chains of associations). Below, we discuss these MA and formulate hypotheses concerning three innovative behaviors: (1) individual search of media and professional advisors (hereafter "search"), (2) participation in word-of-mouth communication (WOM), which we distinguish from search because it also may provide consumer-relevant information to aid in decision-making but differs in its antecedents, nature, and consequences (Brown and Reingen 1987; Gilly et al. 1998), and (3) alternative evaluation.

Money Anxiety. In a process that may be self-reinforcing (c.f., Schwartz et al. 2000), consumers interrupt information processing to process anxiety-causing information (Mansell et al. 2002; Mogg et al. 2000), whether explicit or implicit in communications (Strong and Dubas 1992). According to the theory, money anxiety (MAS-anxiety) focuses on money as a source of anxiety and protection from it. People high on MAS-anxiety are anxious about money and in money situations. They approach exchange relations with hesitancy, worry, and nervousness and concern about financial security. Hedge funds reduce anxiety by hedging against risk in market downturns, at the cost of reduced returns in rising markets. Consequently, we hypothesize that MAS-anxiety will relate positively to search. We do not hypothesize relations with WOM because, although MAS-anxiety could instigate information-seeking from others, MAS-anxiety also has a social focus and people with social anxiety avoid WOM because they believe it will result in negative evaluations by others (Mansell et al. 2002). We do not hypothesize effects on alternative evaluation because novelty, complexity, and reduced returns in market upturns may offset anxiety reduction.

H1: MAS-anxiety is related positively to search.

Money Distrust. Interpersonal trust is most important in the early stages of exchange relations and when people are unfamiliar with their exchange partners or other aspects of the exchange (Andaleeb 1992). Distrust derives from personality, social norms, social learning, or expectations of systemic justice based on rules dictated by legislative or regulatory institutions (Johnson and Grayson 2000). According to the theory, money distrust concerns hesitancy, doubt, and suspicion in money situations. People high on MAS-distrust approach money, money situations, and exchange relations with suspicion and doubt. They distrust the motives of others and their own competencies and complain about the cost of things. They hesitate to spend money and leave major purchases wondering if they could have achieved a better price elsewhere. We expect people high on MAS-distrust to be less likely to engage in search because they will distrust the motives of external information providers and sources.

H2: MAS-distrust is related negatively to search.

¹We thank Sanlam Ltd. and Helena Theron for financial assistance and advice on sample design and to Jan-Benedict E. M Steenkamp for comments on an earlier draft.

Money Power/Prestige. Money power/prestige is a self-directed attitude that focuses on money's instrumental role in attaining external recognition, social status, achievement and personal control and dominance over others. People who endorse MAS-power/prestige view money as a symbol of success and a tool to gain power over their environment and others. They use it to impress others, seek status, and gain recognition. They buy things to advance their economic, social, and political position in life. We expect them to avoid WOM because it communicates a lack of knowledge and has the potential for reducing their power and prestige in social relations. We expect them to them to consider hedge funds because early purchase and consumption can be displayed as a sign of achievement and personal success.

H3: MAS-power/prestige is related positively to alternative evaluation and related negatively to WOM.

Money Quality. Money quality focuses on beliefs about money as a tool to acquire "the good life". Similar to MAS power/prestige, MAS-quality is self-directed but it focuses on acquiring and consuming high quality brands, products, and services without necessary reference to others' opinions. Instead, MAS-quality concerns the personal experience of joy and pleasure consumers derive from "quality" goods and services that money can buy. Money situations often activate consumer awareness of hedonic product benefits (O'Shaughnessy and O'Shaughnessy 2002), which may derive from tangible characteristics such as product design elements and aesthetics or intangible characteristics such as novelty, reference group endorsement, status or country-of-origin associations and experiential aspects of consumption. Western country-of-origin equates with high quality in ECMs and Western goods often are purchased by ECM consumers with higher living standards in order to express achievement, social status and global consumer identity (Batra et al. 2000; Cui and Lui 2000). We hypothesize that MAS-quality will be related positively to search and alternative evaluation. However, because it is self-directed and does not require external referencing, we do not hypothesize relations with WOM.

H4: MAS-quality is related positively to search and alternative evaluation.

Money retention/time. Money retention/time is concerned with the conservation of money through budgeting, self-control, delay of gratification, and pursuit of parsimony and utilitarian consumption. People who score high on MAS-retention/time believe that money is a resource that should be conserved through painful preparation so that one can be prepared for the future. They are prudent and keep track of their money. People high on MAS-retention time should be more likely to seek information, in order to improve their planning and decision-making. We do not propose relations with WOM or alternative evaluation. Money planning may require secrecy and acting in the interests of self and family. Despite its implied promise of conservation, we do not expect people high on MAS-retention/time to be any more likely to evaluate a novel and complex product until it has demonstrated the ability to assist in money conservation.

H5: MAS-retention/time is related positively to search of external information.

Covariates

In order to provide a more precise test of our hypotheses, we test them simultaneously in a structural equation model and control

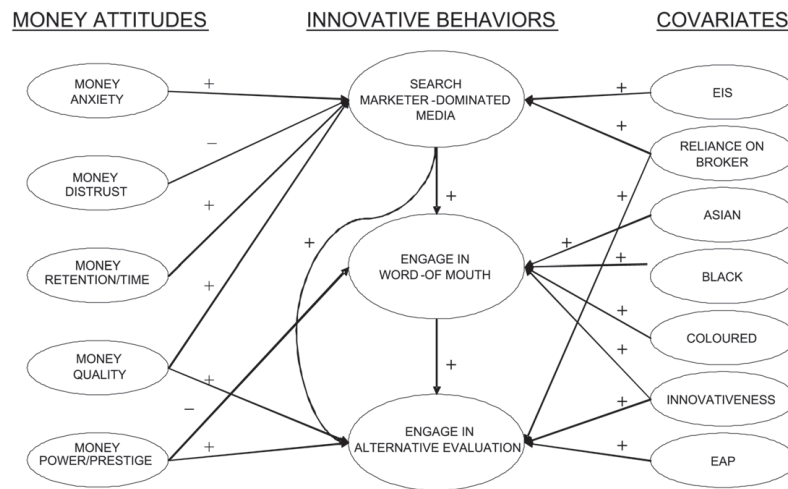
for the effects of covariates on the dependent variables (see Figure 1). In this section, we share our rationale for controlling for these covariates.

Search. We control for the effects on search of exploratory information seeking (EIS) and degree of reliance on a broker's advice. Consumers usually engage in prepurchase search before choosing complex financial products (Heaney and Goldsmith 1999). The literature, however, distinguishes between prepurchase search, which is our focus, and EIS (see Baumgartner and Steenkamp 1996). Prepurchase search is purposive and goal-directed. EIS is motivated by curiosity and a general desire for increased cognitive stimulation and environmental exploration. Stockbroker relationships increase consumer awareness and knowledge about financial products and the ways financial products can be purchased, and improve consumer confidence concerning search (Heaney and Goldsmith 1999; Jacoby et al. 2001). Consequently, the degree of reliance on a stockbroker's advice should be related to search positively.

Word-of-Mouth. We control for the effects on WOM of dispositional innovativeness and membership in a group disadvantaged under Apartheid. WOM is a dyadic process in which people play seeker and source roles (Brown and Reingen 1987; Gilly et al. 1998). We operationalize word-of mouth by measuring two behaviors: sharing available information with others and asking others to read previously acquired information. Both behaviors require one to acquire and share consumer-relevant information. Given that complex financial product purchases probably activate high involvement for most people and there are countless sources and types of information available that are practically impossible to access and process (Jacoby et al. 2001), we reason that people will engage in WOM concerning hedge funds to acquire information, reduce dissonance, and increase confidence. Innovativeness is an individual difference that can be expressed in openness to new ideas, information, and experiences, an ability to recognize applications for new products in one's life, and a willingness to purchase and use new products and share those experiences with others through WOM (Rogers 1995). In the current research, we focus on dispositional innovativeness (INN), the general tendency to be among the first to try innovative new products (Steenkamp and Gielens 2003). People high on INN like to buy and use new, innovative, and unfamiliar products in order to enjoy novel purchase and consumption experiences at the earliest opportunity and before others. We expect INN to impact positively on the propensity to engage in WOM. We control for the effects of membership in a culture/ethnic group disadvantaged under Apartheid legislation. Disadvantages in education, occupation and in other aspects of life denied Asians, Blacks and Coloureds access to the same investment advice, opportunities, and experiences as Whites, and thereby encouraged within-community WOM. WOM also plays a culturally-relevant role in African financial product choice behavior (Owusu-Frimpong 1999). We do not expect WOM to be related to EIS because EIS does not motivate sustained search for information about a particular product but rather motivates a search for product information out of curiosity and environmental exploration.

Alternative Evaluation. Finally, we control for the effects on alternative evaluation of exploratory acquisition of products (EAP), INN, and reliance on a broker's advice. EAP motivates sensory stimulation through exploratory product evaluation and purchases, which are attractive in part because of the stimulation provided by the intrinsic risk of the experience (Baumgartner and Steenkamp 1996). INN motivates evaluation in order to evaluate the possibility of enjoying novel product experiences before others. Stockbroker relations also enhance consumer's confidence in evaluating and

FIGURE 1
Conceptual Model of Hypothesized Structural Relations



purchasing new financial products (Heaney and Goldsmith 1999; Jacoby et al. 2001). We expect EAP, INN, and stockbroker relations to be related positively to the perceived propensity to engage in alternative evaluation.

METHOD

Sample

A leading marketing research company drew an area-, income-, and standard of living-stratified probability sample of people residing in South Africa’s three major metropolitan areas: Cape Town, Durban and Johannesburg (including Soweto, East Rand, and West Rand), conducted in-home interviews in the respondent’s language of choice, administered quality controls, and captured the data. Potential respondents were classified based on twenty standard LSM indicators (LSM, South African Advertising Research Foundation 2002), which included three financial product indicators (ownership of a bank account, credit card, or whole life policy) among measures of dwelling characteristics (e.g., dwelling type, electrification, water supply, flush toilet, washing machine) and ownership of possessions (e.g., TV, radio, motorcar, fridge/freezer, microwave oven, dishwashing soap). Interviews were closed immediately and a new sampling point was assigned if a respondent was not responsible for financial decision-making, was classified below LSM 7, was employed by an advertising agency, marketing research company, or financial institution, or reported a household income below R15000 per month (approx. US\$1500 at the time). The racial composition of the sample (Asian 10%, Black 25%, Coloured 11% and White 54%) is consistent with the expected LSM 7+ racial composition ($X^2=2.97, 3 \text{ d.f.}, p>.39$). The final sample of 221 respondents was 51% male.

Measures

Descriptive statistics for each scale appear in Table 1. The following scales were used: Gresham and Fontenot’s (1989) revision of the MAS, Baumgartner and Steenkamp’s (1996) Exploratory Buyer Behavior Tendency (EBBT) scale, and Steenkamp and Gielens (2003) new dispositional innovativeness scale. The response to hedge funds was measured with a new scale (see Table 3). All scales were reproduced faithfully and the data met the necessary

conditions for CFA. Scales were rendered from English into Afrikaans, South Sotho, Xhosa, and Zulu using generally accepted cross-cultural back-translation procedures (Van de Vijver and Leung 1997). The dependent variables were measured with an original scale (see Table 2).

Consistent with press reports at the time, respondents were told that hedge funds were developed in America and Europe to protect investors against risk during market downturns at the sacrifice of some returns in market upswings. They also were told that hedge fund managers were more secretive and less transparent than other collective investment product managers were because hedge funds relied on timing and a diverse range of investment strategies. Finally, respondents were told that hedge funds attract top people because managers can earn more than managers of comparable investment portfolios, as much as 20% of total fund profits.

RESULTS

Scale reliability and validity

Scale reliabilities and validities were assessed by conducting CFAs on item variance-covariance matrices using the maximum likelihood estimation method in LISREL 8.54. At least one item emerged with an unacceptable factor loading below .40 for each scale. An iterative procedure was then followed, modification indices and residuals were inspected, the worst performing item was excluded, and the CFA was repeated until there were no more offending items. Results for baseline models and final models are reported in Table 3. Chi-square difference tests were significant at .05 in all cases.

Work by Yamauchi and Templer (1982) and Gresham and Fontenot (1989) predated the widespread use of CFA. Both studies proposed combining two of the five MA factors, based on exploratory factor analysis results (Y&T combined MAS-quality and MAS-power-prestige and G&F combined MAS-anxiety and MAS-distrust). As these four-factor models have been very influential, we conducted CFAs to test them against the five-factor MAS baseline model. The results for RMSEA, ECVI, CFI, and TLI suggest that the five-factor model fits these data better than the four-factor models (see Table 3).

TABLE 1
Descriptive statistics

Variable	M	SD	Alpha	Variable	M	SD	Alpha
MAS-anxiety	2.842	0.892	.69	EAP	2.722	0.593	.72
MAS-distrust	2.694	0.737	.72	EIS	3.497	0.724	.77
MAS-power/prestige	1.781	0.700	.85	INN	2.919	0.716	.78
MAS-quality	3.218	0.740	.78	Search	4.079	0.789	.76
MAS-retention/time	3.844	0.781	.84	Word-of-mouth	3.638	0.967	.71
Reliance on broker's advice	2.005	1.146	n/a	Alternative evaluation	3.256	0.766	.79

Note: See text for abbreviations. Coefficient alpha is reported for scales after item deletions.

TABLE 2
Dependent Variable Measures

Dependent variable	Items included in index
Intention to engage in search of external information	I would read any information that was available to me regarding hedge funds I would request further information on hedge funds
Intention to engage in word-of-mouth	I would ask colleagues and friends if they would like to read the information on hedge funds that I have accumulated I would share my information about hedge funds with friends and colleagues.
Intention to engage in alternative evaluation	I would consider buying hedge funds I would definitely buy hedge funds I would recommend that friends and colleagues buy hedge funds

Hypothesis Tests

As noted above, the hypothesized relations were tested simultaneously in a structural equation model, controlling for the effects of the covariates (see Figure 1). The test was performed on the variance-covariance matrix using maximum-likelihood estimation in LISREL 8.54. Each latent variable was measured by a single indicator variable ("data parcel"), which was constructed by taking the mean of the items remaining for each scale after dropping offending items and then fixing the error variance to a level appropriate to its coefficient alpha reliability. Data parceling is particularly effective, and results in less biased estimates of structural parameters and better fitting solutions, when items have a unidimensional structure (Little et al. 2002). Consistent with consumer behavior metatheory, the effects of search on WOM and alternative evaluation and the effects of WOM on alternative evaluation were estimated in the structural model. Age, education, gender, household income, household size, and marital status were included to control for confounds in an initial version of the model, but did not result in significant relations ($p > .10$) and were trimmed in the final model to avoid over-fitting (Bentler and Chou 1987). The final model fits these data very well, $X^2=28.03$, 20 d.f., $p > .11$, RMSEA=.041, prob. RMSEA<.05=.63, TLI=.94, CFI=.99.

The results are reported in Table 4. Although we did not draw

hypotheses concerning relations that were not the focus of our study, we begin by reporting the inter-relations of search, WOM and alternative evaluation and the covariate relations because of the paucity of consumer information in emerging markets. As expected, the direct effects of search on WOM and alternative evaluation and of WOM on alternative evaluation are significant. Search also affects alternative evaluation through WOM. The indirect effect of search on alternative evaluation indicates that 60% of the total effects of search on alternative evaluation are through WOM. The effects of covariates generally are as expected, with the effect sizes for membership in a previously disadvantaged group and for reliance on a broker's advice being most noticeable. There is one exception; innovativeness has negative direct relations with alternative evaluation. However, the indirect effect through search is in the hypothesized direction.

The tests of hypothesized effects of MA generally were confirmed and substantive (as measured by effect size). The positive relations between MAS-anxiety and search proposed in H1 were confirmed. The results do not support H2; as the relation between MAS-distrust and search was in the expected direction but did not reach statistical significance. H3 was confirmed. MAS-power/prestige was related negatively to WOM and positively to alternative evaluation. H4 proposed that MAS-quality would be

TABLE 3
Confirmatory Factor Analyses Results for Individual Scales

	χ^2	d.f.	p	RMSEA	ECVI	TLI	CFI
Money Attitudes Scale							
Baseline 5-factor MAS model	791.51	395	.00	.068	4.23	.90	.91
5-factor, two items dropped	687.32	340	.00	.068	3.72	.90	.91
MASQ/MASP 4-factor model	1058.67	399	.01	.087	5.41	.85	.87
MASA/MASD 4-factor model	826.39	399	.01	.070	4.35	.89	.90
EBBT Scale							
Baseline 2-factor model	369.08	169	.00	.073	2.05	.82	.84
Two EIS items dropped	288.86	134	.00	.072	1.65	.84	.86
Dispositional innovativeness scale							
Baseline model	172.54	20	.00	.190	.93	.71	.79
Two items dropped	16.13	9	.07	.060	.18	.98	.99

Note: Confidence intervals for RMSEA and ECVI available from the corresponding author.

related positively to search and alternative evaluation. The results confirm the hypothesized relations with alternative evaluation. The results for relations with search were in the hypothesized direction and fell just outside the region of acceptance. Finally, relations between MAS-retention/time and search proposed in H5 were confirmed.

DISCUSSION

The results support the five-factor structure of the MAS and suggest that MA have substantive and theoretically meaningful influences on intentions to engage in innovative consumer behaviors. It is noteworthy that these relations are observed even though we control for the effects of exploratory buyer behavior tendencies, dispositional innovativeness, reliance on broker advice, and sociodemographic characteristics. The relative importance of MA for South Africans with a living standard comparable to the West differed from results reported for Anglo- and Mexican-Americans (Medina et al. 1996). The cross-sectional nature of the studies, the lapse of time between studies, and other differences in research context limit our ability to draw inferences from these differences. Nevertheless, the relatively higher endorsement of MAS-retention/time and MAS-quality is consistent with expectations for a population experiencing rapid social change and suggests an important focus for future research.

The undisputed, substantial, and growing importance of ECMs in global marketing stands in stark contrast to our limited understanding of ECM consumers. Perhaps no gap in our knowledge is more important to remedy in contemporary scholarly research than our urgent need to understand the effects of change on ECM consumers. Rapid socioeconomic and political change, so-called "transition", may be the most defining characteristic of life in ECMs. As money and possessions are important aspects of self cognitions (Camilleri and Malewska-Peyre 1997), MA offer the

potential for important new insights on the effects of change on consumers.

We recommend that research focus on the relations of money attitudes and self-cognitions, especially in ECMs. ECM transition affects the prospects for acquiring money, the utility of traditional social relations that have assisted in its acquisition, and the ability to conserve it. This impacts on elements of personal, relational, and social identities and their meaning. For instance, personal perceptions of well-being and security are important motives in maintaining and enhancing positive social identity (Brewer and Brown 1998). Values may provide important information about the motivational goals of MA (viz., conservation vs. self-enhancement, see Schwartz et al. 2001) and help explain how MA serve the goals of personal safety and stability, the maintenance or enhancement of living standards, and the stability of personal and social identity during transition (Sagiv and Schwartz 2000). Transition also affects the meaning of social groups, their boundaries, and permeability (Jackson et al. 1996). This increases consumer's information about within-country diversity as regards money, possessions, well-being, security, and future financial prospects, with implications for the relative importance of MA and purchase and consumption behavior. As MA play a central role in exchange relations, it is likely that such research will yield important insights into a wide range of consumer behaviors and product contexts. Clearly, this work will have greater value if the measurement properties of scales and expansion of research contexts continue to receive more attention, including research with representative national populations that encompass the diversity of ECM living standards.

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TABLE 4
Parameter estimates for hypothesized covariance structure model

	Structural coefficient	t-value	Effect size
MAS-anxiety→Search	.23	1.77 ^d	.39
MAS-distrust→Search	-.18	-1.17	.27
MAS-power/prestige→WOM	-.31	-3.04 ^b	.58
MAS-power/prestige→Evaluation	.24	2.53 ^c	.51
MAS-quality→Search	.14	1.56	.35
MAS-quality→Evaluation	.24	2.52 ^c	.51
MAS-retention/time→Search	.16	1.88 ^d	.41
EAP→Evaluation	.43	1.40	.31
EIS→Search	.10	1.03	.24
Innovativeness→WOM	.08	.86	.20
Innovativeness→Evaluation	-.40	-1.66 ^d	.36
PDG: Asian→WOM	.39	2.08 ^c	.44
PDG: Black→WOM	.20	1.33	.30
PDG: Coloured→WOM	.43	2.43 ^c	.50
Reliance on broker→Search	.12	2.51 ^c	.51
Reliance on broker→Evaluation	.07	1.65 ^d	.36
Search→WOM	.82	8.68 ^a	.90
Search→Evaluation	.20	1.78 ^d	.39
WOM→Evaluation	.34	4.14 ^a	.70

Note: ^a= $p \leq .001$, ^b= $p \leq .01$, ^c= $p \leq .05$, ^d= $p \leq .10$

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Giving Gold Jewelry and Coins As Gifts: The Interplay of Utilitarianism and Symbolism

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ABSTRACT

This paper explores the practice of giving gold jewelry and coins as gifts through a qualitative research conducted in Ankara, Turkey. We seek to understand the occasions of gift giving and the motivation behind this practice of gift giving. We aim to contribute to the existing literature not only by extending our understanding of the dynamics of gift giving behavior in non-Western contexts but also by questioning the tenability of the distinction between functionally and symbolically motivated gift giving. We argue that gift giving behavior is guided by interplay of utilitarian and experiential motives, whereby the economic values of gifts play a significant role along with symbolic values.

INTRODUCTION

Gift giving is a behavior with important social, personal, and economic implications. Given its significance and prevalence as a universal ritual an extensive literature addressing various aspects of gift giving exists within the consumer behavior field. Drawing from anthropological, sociological and psychological literatures these studies explore the underlying motivations, functions, occasions, and participants of gift giving behavior. We aim to contribute to the existing literature by examining the practice of giving gold jewelry and coins as gifts in the Turkish society. Through our study we hope to extend our understanding of the dynamics of gift giving behavior in non-Western contexts and also question the tenability of the distinction between functionally and symbolically motivated gift giving. Guided by these concerns, we first briefly review the literature and state our objectives. Then we explain the methodology of the study. We conclude by presenting main findings and discussing the contributions and future research areas.

MOTIVATION

Gift giving is a topic that has received significant attention from consumer behavior researchers. Researchers examined various aspects of gift-giving including the stages of the gift-giving process (Sherry 1983), gift-giving occasions (Miyazaki 1993; Otnes, Kim and Lowrey 1992; Otnes, Ruth and Milbourne 1994), gift selection (Belk 1976), search time and effort of givers (Belk 1982; Otnes, Lowrey and Kim 1993), gender differences in gift-giving (Fischer and Arnold 1990; Minova and Gould 1999; Palan, Areni and Kiecker 2001), gift-giving and dating behavior (Belk and Coon 1993), meanings of gifts (Belk 1988; Wallendorf and Arnould 1988; Wolfenbarger 1990; Richins 1994), self-gifts (Mick and Demoss 1990, 1992; Pandya and Venkatesh 1992), and returning gifts (Rucker et al. 1991, 1992).

Many of these studies also explored why people give gifts, and indicated that gift-giving motivations may range from altruistic to agonistic (Sherry 1983; Sherry and McGrath 1989; Wolfenbarger 1990). The commonly discussed motives included compliance with social norms (e.g. Belk 1976; Garner and Wagner 1991), marking and communicating social relationships (e.g. Belk 1979; Ruth et al. 1999), and altruism (e.g. Belk and Coon 1993). When giving is perceived as obligatory, gifts tend to be less symbolic, less likely to communicate feelings, and more practical (Goodwin et al. 1990). On the other hand, when gift giving is an "expression of love" (Cheal 1988), great deal of thought and effort goes into selection, and givers try to select gifts that are likely to communicate the nature of the relationship and the feelings.

However, it appears that there are two assumptions underlying the gift giving literature. First, there is a distinction between utilitarian and experiential gift giving, and a tacit understanding that either utilitarian or experiential motives underlie gift giving and that they cannot operate simultaneously (for an exception see, Wolfenbarger and Yale 1993). Second, it seems that the symbolic value of the gift has more importance than its economic value. Because most of the value of the gift stems from the thought and effort put into its selection, gifts of cash or gift certificates appear as inappropriate, impersonal and too materialistic unless they are given in certain contexts such as weddings.

This study aims to extend the literature by examining a gift giving behavior in which the distinctions between utilitarian and experiential motives, and economic and symbolic values are blurred: giving gold jewelry and gold coins as gifts. There are several reasons for our focus on gold. First, gold and gold jewelry seem to share many aspects of a gift identified by Belk (1979) including communication, social exchange, economic exchange, and socialization. Jewelry is often characterized as a favorite, popular and traditional gift item (Wolfenbarger 1990; Belk and Coon 1991). It is a highly communicative product (Holman 1981) that carries social cues (Belk and Zhaou 1987). Gold and gold jewelry also facilitate social exchange. Jewelry is perceived as expressive of social connection (Wallendorf and Arnould 1988) and symbolizing relationships in rites of passages (Noble and Walker 1997). Gold, on the other hand, serves as a symbol of continuance and merit, and signifies attainment of high standards (Clark 1986). It is also a medium of exchange that can function as a store of value, and therefore, has an economic value.

Furthermore, gold is a major investment, adornment and gift item in the Turkish society. In fact, Turkey constitutes one of the world's biggest gold consumption markets, ranked as fifth in demand (Turkishtime.org 2003). In Western markets gold jewelries are usually low karat and they are bought primarily as items of adornment. In Asia and Middle East, on the other hand, most of the gold jewelries are high karat, which can be easily converted back into gold. In Turkey, the main karat marks for gold jewelry are 14, 18 and 22. The 14 and 18 karat jewelry are usually considered as modern designs, whereas the 22 karat gold jewelry is perceived more as an investment tool. The gold coins, on the other hand, come in five different sizes. In Turkey, gold jewelry and coins are traditionally given as gifts in ritualistic occasions. Receiving gold also plays an important role in the empowerment of Turkish women (Sirman 1991). The gold items the bride acquires in her wedding are considered as her property and wealth, and serve as a safeguard against misfortunate events (Neuberger 2001). In this study we explore the occasions gold jewelry and coins are given as gifts, and discuss the underlying motives and meanings as well as the functions gold gifts serve.

METHODOLOGY

Given the exploratory nature of the study we adopted qualitative research methods which are deemed better for obtaining an in-depth understanding of the phenomenon (Denzin and Lincoln 1994) and capturing consumers' own perceptions and subjective apprehensions (Berg 1989). The study was conducted in Ankara, Turkey in the summer of 2003. In the light of previous studies suggesting that women are more involved in gift exchanges (Fischer

and Arnould 1990; Otnes, Lowery, and Kim 1993) we selected twenty female Turkish respondents through purposive sampling (Maxwell 1996). The age of the informants ranged from 24 to 55, allowing us to explore gift-giving behaviors of women at different life cycle stages. They belonged to high and middle-income groups, and hence, constituted a heterogeneous faction. Income was defined in terms of monthly household revenue, and classified based on an updated edition of Prime Ministry State Institute of Statistics 1994 (Sonmez 2001).

Data collection procedure included projective techniques of free associations and picture associations followed by semi-structured, in-depth interviews. Projective techniques have been frequently employed in consumer behavior research to overcome social desirability bias and bring into light the latent and unconscious components of individuals' personalities (Levy 1985; Rook 1988). The informants were first instructed to write down whatever comes to their mind when they hear the word 'gold', and then the same procedure was repeated for the word 'gold jewelry'. After they accounted how these associations came to their mind, they were given six pictures of females and were asked to describe the women's use of gold jewelry. The semi-structured interviews lasted from 30 to 120 minutes. These were designed to elicit stories of giving and receiving gold jewelry/coins as gifts.

We followed the general procedures of grounded theory (Strauss and Corbin 1990) in our data analysis. The interpretation of the verbatim interview transcripts involved focusing both on individual case analysis to gather comprehensive and in-depth information about each informant, and across-person analysis to explore variations among the informants. First, we sought to identify conceptual categories and themes, and discover their properties and dimensions. Then, we established relations among the emerging patterns and identified how they relate to pertinent theoretical constructs through the constant comparison method using axial and selective coding procedures (Strauss and Corbin 1990).

FINDINGS

Giving Gold Jewelry/Coins As Gifts

Gold jewelry and gold coins are given as gifts in various ritualistic and special occasions. In Turkey, it is customary to give gold jewelry or coins as gifts to women getting engaged or married, to newborn babies, and to boys who get circumcised. In these contexts, the gift operates as a ritual artifact marking the role transition. While traditional ritualistic gift giving is still prevalent and commonly practiced, our informants also mention that they give gold jewelry and coin as gifts in Western originated special occasions such as Valentine's Day, Mother's Day and New Year's Eve. Additionally, gold can be an appropriate gift item for celebrating occupational events such as retirement or promotion and personally symbolic days such as birthdays or wedding anniversaries.

Given the multitude of occasions that gold items are given as gifts, how people choose between gold jewelry and gold coins and how they decide on the monetary value of the gift emerge as important questions. Our analysis indicates that the decision depends of three factors: the existence of a traditionally appropriate gift item for a particular ritual, the intimacy of the relationship, and the taste of the giver and the receiver. While in certain situations one of these factors dominates the others, in other situations the decision is a result of the interplay of many factors. For some rituals there are strong and unchallenged traditions. For example, if the gift is given to a newborn baby, it is always a gold coin. The choice in this case

is not between jewelry and coin, but the size of the coin. The decision on the appropriate size of the coin, hence the monetary value, depends on the intimacy of the relationship. The intimacy of the relationship between giver and receiver conveys information about appropriate gifts (Wolfenbarger 1990). As Sherry argues "[gifts are tangible expressions of social relationships]" (1983, p.158) and they signify the strength of the relation between the gift-giver and receiver. Typically, the closer the relationship is, such as gift giving between family members or close friends (Joy 2001), the bigger the size of the gold coin is. Giving monetarily more valuable gifts to relationally close recipients is such a strong cultural norm that even the informants with lower income levels go well beyond their means to fulfill this obligation.

The knowledge of the recipient's taste also plays an important role in the selection of the gift. Most of the informants express their wish to buy something that the recipient will like. Aylin, for example, believes that it is appropriate to give gold jewelry than gold coins to those that she has intimate relationships with because she knows their taste:

"...for example if your sister is getting married you don't give gold [coins] because you would know what she likes; you would give her a jewel, you can give [an ornament with] diamonds, it can be silver if she likes silver or gold if she likes gold, something crafted or at least you can ask your sister, I mean you can give jewelry only to your close ones..."

However, even when the giver is not sure about the recipient's taste but has close relationship with her, gold jewelry can still be preferred. Since gold is a malleable metal, its physical appearance can be greatly enhanced by the art of the goldsmith. Moreover, gold jewelry has fashion; while some designs become trendier and are considered as contemporary, there are designs that are perceived as classic. Consumers prefer more classic and simple designs if they do not know the tastes of the receiver:

"...I try to buy more general things for them because I don't know their tastes."

(Hamide)

"...when I buy jewelry I prefer plain, simple ones so that she can use it daily."

(Aylin)

Informants also aspire to reflect their taste in the items they purchase. They consider not only the personality and taste of the recipient, but also their own tastes and preferences. They seek to purchase a jewelry that they themselves would wear. This observation supports Schwartz's argument that the "act of giving is self-defining" (1967, p.2), that one may confirm his/her identity through objectifying it in the form of a gift.

Gold coins, on the other hand, are especially preferred when the recipient's taste is not known. One of the symbolic meanings attached to the gift of gold jewelry is its uniqueness, which is absent in the case of gold coins since these are standard items. Many of our informants state that they prefer to purchase gold coins for people whom they do not know very well. In this case, the gift does not communicate much about the giver but rather represents compliance with social norms. As Goodwin, Smith and Spiggle (1990) argue rituals are associated with the notion of reciprocity. This kind of obligatory gift giving is guided more by traditions and is less personal and simple:

“...sometimes it’s obligatory, for someone who works with you, for example one of my husband’s assistants, there is nothing much you can do, so you have to buy gold [coins]; it has become a tradition.”

(Beyhan)

Furthermore, giving gold coins serve pragmatic purposes; there is no danger of giving duplicate gifts, and the recipient can sell the coin or exchange it with something that suits her taste:

“...I buy gold jewelry only for my closest ones but I buy gold coins for people whom I don’t know very well, for example I can buy gold jewelry for my mother because I know her taste more or less, and for my sister but besides them, I would probably hesitate to buy gold jewelry for a friend...”

(Asuman)

“...when I don’t know what present to buy, I buy it [gold coin] because it has monetary value and she can buy something she wants with it, because of that purpose and reason, when a child is born or when someone gets married there can be many of the same presents so I think like that and I prefer it [gold coin]...”

(Diler)

“...when I don’t know the tastes of my friends who are getting married, I buy gold [coins] because she can make some other use of it, sell it or she can buy a jewelry that she likes.”

(Burçin)

The Interplay of Utilitarianism and Symbolism

The data reveals that the informants attribute three qualities to gold jewelry and coins: they are precious, long lasting, and flexible items. These qualities render gold jewelry and coins as suitable gifts, and help consumers explain and justify why they prefer to give gold items as gifts. Interestingly, however, all of these attributes are double-coded; they carry both utilitarian and symbolic connotations. As our analysis indicates, the motivation behind giving gold jewelry or coins as gifts entails the interplay of utilitarianism and symbolism.

Arising from the inherent quality of the metal gold, gold jewelry and coins are considered as precious items. Being precious refers to two different concepts. First, it indicates that they are monetarily valuable. In Turkey, as well as in other cultures such as India and China, gold is a major investment tool. Especially in societies with high inflation rates, such as Turkey, gold items preserve their financial value; hence offer protection against depreciation of monetary wealth. When people give gold items as gifts, they present something that will retain its financial value. Second, gold items are precious because they symbolically represent the value the receiver and how beloved the relationship between the giver and the receiver is.

“Gold is always preferred as a present in our family tradition; bracelets, small gold [coins] are given. The quantity of gold that is given to a son or a daughter indicates how much they are valued”

(Feride)

“...for my mother’s or my sister’s birthday, or when I want to purchase a gift for them, not always of course but sometimes, I can think of [gold jewelry], especially for instance if we buy it together as siblings and if we want to get something precious then I buy it.”

(Asuman)

Gold also has long lasting or even eternal quality (Renfrew 1986). This attribute arises from the durability of the metal gold. When gold jewelry or coins are given as gifts, they maintain their physical existence eternally, unless of course they are lost or sold by the recipient. However, gold items are also symbolically enduring gifts as they represent the eternal character of the relationship between the receiver and the giver. They are often given with the expectation that they will be cherished by the receiver even after many years of possession. When gold items are given as gifts for special days, they become reminiscences of major events in the lives of the recipients and take the character of an heirloom (Curasi 1999).

“...for instance when we look back with my married daughter, [she says] ‘mom you gave me this one, my aunt gave this one, this one is from my uncle, and this one is from Tayfun’s birth’; it makes a lasting gift.”

(Ulku)

“I usually buy gold [jewelry] for my sister, I always prefer gold presents for my mother and for her [sister], because I believe that it lasts forever.”

(Beyhan)

“...when her daughter gets married ... she gives jewelry as a keepsake to last for a long time. Why does she give that? So that she doesn’t sell it, I mean so that she doesn’t let go of the memory.”

(Cagla)

Gold is also a flexible gift item. In essence, gold coins are equivalent of money, and in this regard, they are considered as practical gifts especially when the recipient’s needs are undefined. As Schwartz (1967) suggests, “money, unlike a particular commodity, does not presume a certain life system: it may used in any way and thus becomes a more flexible instrument of the possessor’s volition” (p. 5). The easy conversion of gold coins into money provides flexibility and control to the recipient.

“...if people have needs for instance they can sell it [gold coin], for example you want to buy something for her but she needs something else, she can exchange it for cash and use it for that purpose, so it can be an investment tool in terms of fulfilling the person’s needs, it can also serve as money that’s what I want to say, giving money would be rude but gold, do you know what I mean, if she wants she can change it and buy what she wants, it can stay as gold if she wants to...”

(Ilgim)

Flexibility of gold coins renders the process of gift selection easy and time efficient. Since these are standard items, gift selection does not entail a laborious and time-consuming search. As the only decision that the giver has to make is regarding its size, gold coins are perceived “easy” gift items.

“...it makes life easier when buying a present, there’s nothing else. When buying a present, instead of thinking if she likes it or not we buy a gold coin, we think she can at least change it to cash and buy whatever she wants.”

(Ilgim)

Not only coins but also gold jewelry is deemed as a flexible gift item. This characteristic applies especially to those designs that do not contain craftsmanship, which are usually 22 karats of gold.

These can be easily converted to cash without any loss of monetary value or exchanged with another piece of gold jewelry later if the receiver is not happy with that particular model. Consequently, the giver does not need to identify what the recipient needs or likes; instead he/she provides her with freedom to decide on the precise nature of the gift.

“...I buy *ray bilezik* [22 karat plain bracelet] for a wedding because that is the non-crafted type, then she can sell it for the same price and buy something she wants, if she wants, she can buy earrings”

(Aylin)

In Western societies, gifts of money are generally considered as inappropriate and impersonal (Douglas and Isherwood 1979; Webley et al. 1983; Zelizer 1994). Giving money as gift can be interpreted as placing monetary value on the relationship (Cheal 1987). Furthermore, the real value of the gift stems from the effort went into the selection (Belk and Coon 1993) as the amount of care invested in finding the right gift reflects the intensity of the relationship (Joy 2001). Cash type gifts, therefore, are more often presented when the needs and wants of the recipient are not well known (Cheal 1988). However, there are some exceptions to this restriction, such as intergenerational transfers (Waldfogel 1993), wedding gifts in certain cultures (Cheal 1988), and gift giving to catastrophe victims (Sayre and Horne 1996). The Turkish case presents another exception. Gold coins and jewelry are perceived as abstract forms of money. They provide flexibility to the recipient but do not appear artificial as gift certificates. Furthermore, they are not restricted to distant relationships. While they provide practicality to the giver when she needs to present a gift to someone that she does not know intimately, they are also frequently exchanged among family members and close friends among whom the relationship ties are strong. In parallel to Joy's (2001) observation regarding the preference for functional gift giving practice among family members in Hong Kong, gold items are preferred for their utilitarianism in the Turkish society as well.

“Instead of buying a present that I'm not sure she would like or not and instead of buying something that takes up space, I buy gold. If she needs money she can sell it and use the money, if not she can keep it. She can use it for future needs after all it has a value. For example Ebru [her sister-in-law] lives abroad, if they cannot buy a present or if they don't know what to buy, they put some money in an envelope and send it. It is a little bit artificial but gold is a precious thing and it doesn't feel like you are giving money...”

(Anil)

However, while the flexibility of gold renders coins and jewelry as utilitarian and practical gift items, their flexibility also connotes symbolic meanings. Wolfenbarger and Yale suggest that wedding gifts are often given with the intention to support the “creation and regeneration of households” (1993, p.3). Similarly, gold coins and jewelry given in ritualistic occasions such as weddings, birth or circumcision of a child function as means to provide support for the newly wed or born, signaling concern shown for the recipient. People give gold items as gifts to support the future financial needs of the receiver and express how much they care about his/her well being.

CONCLUSIONS AND FUTURE RESEARCH

Most of the scholars studying gift-giving behavior emphasize the symbolic meanings of the gift and focus on how gift giving maintains and enhances relationships. The results of our study, however, indicate that utilitarian and symbolic motives simultaneously influence the decision to give gold jewelry and coins as gift items, and that the distinction between utilitarianism and symbolism can be rather blurred. Gold jewelry and coins are interesting gift items because they can be both tangible and intangible. The receiver has the option of keeping the gold jewelry and coins, or converting them into money.

In gift-giving rituals, the giver attributes meaning to the gift and hopes for it to be interpreted similarly by the recipient. Our findings suggest that when the cultural meaning carried by consumer goods is not specifically stated, although clearly recognized, as in the case of gold jewelry and gold coins in Turkish society, there is less chance of misinterpretation in the flow of meaning. The gold jewelry and coins are also capable of reinforcing the message conveyed by the giver about the relationship for a long period of time. However, as Schwartz (1967) argues in rites of passage, gifts do “not only serve the recipient as tools with which to betray more easily his or her former self but symbolize as well the social support necessary for such betrayal” (p. 2). Having the option of converting the gold jewelry or coins into money extends Schwartz's argument by illustrating how gold jewelry and coins also serve as economic support.

The economic dimension of gift giving centers on the notion of reciprocity. Although the act in itself does not establish obligations for exchange, to avoid feeling inferior the recipient must reciprocate. The evident economic value of gold coins seems to make the obligatory nature of gift-giving easier. If one receives a small size coin as gift, she typically reciprocates with a similar size. While gifts of money are perceived to be improper gifts in many cultures, coins and certain types of gold jewelry overcome this negative discernment. Partly due to their perception as abstract forms of money and partly due to their flexibility to be framed as both functional and symbolic, they are considered as rather reasonable gift items.

Overall, our study develops the current theoretical understanding of the interrelationship between utilitarian versus experiential motives for gift-giving and symbolic versus economic value of gifts. By focusing on various ritualistic occasions and the factors that play into the selection of appropriate gift, our study also highlights the ways in which consumers activate object meanings, create and stabilize cultural categories, and communicate culture specific meanings through gift-giving. However, given the restricted size and gender bias of the sample, further research is needed to extend these initial results. Specifically future studies that include male informants' views and research on different product categories are needed. Furthermore, studying the practice of giving gold items as gifts in other non-Western cultures can contribute to our understanding of the dynamics of gift-giving behavior.

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To Spend or Not To Spend? The Effect of Budget Constraints on Estimation Processes and Spending Behavior

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INTRODUCTION

Both marketing and economic budget-allocation and spending-behavior models often assume that consumers know the prices of the products they buy and hence are knowledgeable about the total value of their shopping basket as they shop (e.g., Frank et al. 1967). It is consistently shown, however, that consumers have difficulty in accurately estimating the prices of the individual items they purchased (e.g., Vanhuele and Drèze 2002). While the estimation accuracy of the total value of a shopping basket with multiple items may increase as a result of natural hedging, the increased complexity may reduce the estimation accuracy (cf., Johnson and Payne 1985).

Given this potential increased inaccuracy, the question arises as to how (budget constraint) consumers manage their spending behavior. The objective of this research is to examine the shopping-basket value estimation process of budget-constrained consumers and how these consumers control their real-life, in-store spending behavior.

Our research focuses on the value estimation of shopping baskets with multiple grocery items. Besides the fact that it is almost a 700-billion dollar industry in the USA, groceries form an important part of daily life. Furthermore, consumers generally shop for multiple grocery items on a given trip. And, for most of these items, consumers are usually unable to determine the actual prices before visiting the store. Finally, grocery shopping is repetitive (Bell and Lattin 1998).

THEORETICAL BACKGROUND AND HYPOTHESES

Researchers in both marketing and economics assume that consumers know how much they spend (Hauser and Urban 1986; Rosen 1974). Price recall studies consistently show, however, that consumers generally do not know the exact value of the individual items in their basket as they shop (Urbany and Dickson 1991). Since estimating and recalling the aggregate value of the shopping basket is an even more complex task than recalling individual item prices, we hypothesize that consumers are unable to accurately estimate the value of their shopping basket.

Being unable to accurately estimate the value of a shopping basket while shopping makes consumers uncertain as to how much money they are spending. Knowing the value of their shopping basket is particularly important for a consumer with explicit budget constraints. Consumers with a budget constraint will probably not want to run the risk that the value of their shopping basket exceeds their budget. Consequently, compared to consumers without budget constraints, those with budget constraints should be more involved in the shopping task from a financial perspective, increasing their motivation to monitor how much they spent while shopping and to process the price information encountered (cf., Alba et al. 1991). The more involved and motivated consumers are to process price information, the more accessible that information becomes. Hence, we should find that *consumers with explicit budget constraints are better able to accurately estimate the value of their shopping basket than consumers with no immediate constraint*.

Even though consumers with budget constraints can try to be accurate in estimating the value of their shopping basket, they still run the risk of exceeding their budget. How do consumers manage not to exceed their budget during a shopping trip? Building on the risk behavior literature (e.g., Arrow 1964; Pratt 1964), we hypothesize that budget constrained shoppers build a safety margin into their shopping trip—the risk premium (cf., Thaler and Shefrin 1981). This safety margin represents the amount of money a consumer is willing to forgo to eliminate the risk of exceeding the budget. As a result of the built-in safety margin, *budget-constrained shoppers spend less than their budget*. Furthermore, we hypothesize that risk aversion positively influences the size of the safety margin budget-constrained shoppers build into their shopping trip to avoid spending too much. Hence, *the degree of under-spending by budget-constrained consumers is positively influenced by the degree of risk aversion towards exceeding their budget*.

Are budget-constrained shoppers aware of the built-in risk premium? To answer this question, it is important to realize that the risk premium represents the difference between the shopper's *budget* and the *actual value of the shopping basket*. The estimation bias represents the difference between the *actual* and the *estimated* value of the shopping basket. If budget-constrained shoppers are unaware of the risk premium, the estimated value of their shopping basket should equal their budget (which they do know). However, if they are aware of the built-in safety margin, they should provide a value estimate that is significantly lower than their budget. We assume consumers with budget constraints are aware of being conservative shoppers. Hence, *the estimated value of the shopping basket of budget-constrained consumers is significantly lower than their budget*.

Furthermore, we hypothesize that risk aversion towards exceeding their budget stimulates shoppers to track the value of their shopping basket and increases the amount of attention paid during the shopping process. Consequently, risk-averse shoppers are more aware of the size of their risk premium and thus better able to account for it when estimating the value of their shopping basket. Hence, *consumers' risk aversion towards exceeding their budget reduces the degree of basket estimation bias*.

STUDIES AND RESULTS

An in-store field study, involving real shoppers, and a controlled lab experiment, show that in line with our hypotheses budget-constrained shoppers build a spending safety margin into their shopping trip to avoid exceeding their budget. The size of safety margin is positively correlated with shoppers' risk aversion towards exceeding their budget. Furthermore, we find that budget constrained shoppers seem to be aware of their built-in safety margin—they provide a value estimation of their shopping basket that is below their budget. And, shoppers' risk aversion towards exceeding their budget reduces the degree of basket estimation bias.

CONCLUSIONS

Budget constrained consumers build a safety margin into their shopping trip to avoid exceeding their budget. Consequently, they spend significantly less than their budget. If consumers were able

to accurately estimate the value of their shopping basket, they would have spent more, thereby increasing their utility. Furthermore, the “under-spending” (relative to what they would have otherwise spent) causes a retailer to forgo some of the consumer surplus that might subsequently be spent at a different store.

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Attitudes and Trading Behavior of Stock Market Investors: A Segmentation Approach

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Judith Lynne Zaichkowsky, Simon Fraser University

ABSTRACT

Individual investors now own more than half the stocks on the increasingly volatile US stock market (Editorial Staff A, 2000). Their actions are often unpredictable and often contribute to market volatility (Gibbs, 2000). Stock market crashes, caused by retail investor panic, reduce companies' ability to raise capital and reduce the portfolios that both investors and financial advisors rely on (Anonymous B, 2000). Unfortunately, it is difficult for companies and advisors to encourage stable long term investing, because little is known about these individual investors; most research is macro or experimental.

To try to solve this problem, this study identifies and characterizes segments of individual investors based upon their shared investing attitudes and behaviours. Profiling information on these segments will help companies and financial advisors to selectively communicate to these investors to encourage successful investment growth.

A literature review of the behavioural finance area revealed five main constructs that drive investor behaviour: Investment horizon, Confidence, Control, Risk attitude, and Personalization of loss. Ninety individual investors were surveyed via a questionnaire on these constructs. A cluster segmentation analysis identified four main segments of individual investors: 1) Risk intolerant; 2) Confident traders; 3) Loss averse young traders; and 4) Conservative long term investors.

- 1) The Risk intolerant group have medium levels of confidence and control. They are not active traders, but do check their investments frequently and seek advice from financial advisors. Financial advice should be centered upon diversification and risk management.
- 2) The Confident traders have the highest levels of confidence and control, and are the most active traders. These experienced investors are older and have the largest portfolios. This group invests heavily in technology and smaller growth stocks, but also maintains a diversified portfolio. Communications should concentrate on performance related issues. Current news is found more useful than financial data for volatile stocks.
- 3) The Loss averse young trader group doesn't mind taking risks but can't afford to lose money. They frequently use the internet to trade and research their volatile investments, but they rely on financial advisors for advice on stable investments. Advisors should focus communications on diversification and loss management. Companies could target this segment with web pages that offer news updates, which the group finds useful for evaluating volatile investments.
- 4) The Conservative long term traders have low ratings for control and confidence and, therefore, invest primarily in mutual funds through financial advisors. This groups trades less actively and checks their investments infrequently. This group does not find financial information

useful, so results should be summarized. Conservatives may work with financial advisors to encourage long term stock investing within RRSP shelters.

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SPECIAL SESSION SUMMARY

The Influence of Primary and Secondary Goals on Consumer Decision Making

Leonard Lee, Massachusetts Institute of Technology

SESSION OVERVIEW

A multitude of goals can potentially influence consumers in their day-to-day activities. Some of these goals are primary (be they consciously or unconsciously activated), whereas others are relatively more secondary. How do these goals interact with one another to influence consumers' every day decisions, especially when these goals conflict with one another? This session brings together three recent empirical papers that examine this question.

In the opening paper presented by Arie Kruglanski (Kruglanski, Chun, Sleeth-Keppler, and Friedman, 2004), the authors distinguish between two different types of goals that can influence people's behavior--primary *focal goals* that are cognitively accessible vs. secondary *background goals* that are activated unconsciously. Using a series of experiments, they found that when only possible, individuals are guided by the principle of multifinality and choose such means that serve both the focal and the background goals, even though they are unaware of the latter. However, when the means serving the focal goals conflict with those serving the background goals, the focal goals tend to take precedence in determining consumers' choices and preferences. For example, when participants were asked to choose among three soft drinks, their focal goal (determining the tastiness of drinks) dominated their conflicting background goal (identification vs. disidentification with the U.S.) in their choice. However, when the drinks were equally instrumental to attainment of the focal goal, the choice between them was determined by their instrumentality with regard to the background goal, again without the individuals' awareness of this being so.

Arthur Markman, Miguel Brendl, and Kyungil Kim (2004) examine more directly the relationship between the strength of primary goal activation and preferences in the second paper. In their previous work (Brendl, Markman, and Messner 2003), they found that when specific primary goals are activated, people's preference for goal-related objects increases (valuation), and their preference for goal-unrelated objects decreases (devaluation). In this work, they delve more deeply into the link between primary goals and such valuation/devaluation, demonstrating that the degree of valuation and devaluation of an object depends on the degree of association of the object to the primary goal. They also discovered that people's goals are specific. For example, invoking consumer's need to eat in the morning causes them to value breakfast foods but not dinner foods.

Finally, the third paper illustrates the distinction between consumers' own primary spending goals, and other secondary goals primed by their environment in a real-world shopping context. Specifically, Leonard Lee and Dan Ariely (2004) ran a series of field experiments at a local convenience store to investigate the mechanisms that underlie retailer promotions involving conditional coupons (e.g. "Spend \$X and get \$Y off"). They found that in addition to pure economic reasons, consumers have a propensity to use these coupons to set concrete (secondary) spending goals, and subsequently to complete these goals they have set. The experiments demonstrate that this tendency stems primarily from consumers' lack of clear (primary) spending goals of their own when entering the store.

All in all, these three papers together provide substantial insights into the structure and consequences of goals and motiva-

tion. Given the fundamental questions and findings in these papers, we believe that this session will be of broad interest to psychologists and consumer behavior researchers, and will contribute significantly to enhancing our understanding of the goal-driven facets of our day-to-day behavior.

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EXTENDED ABSTRACTS

"On The Psychology of Quasi-Rational Decisions: The Multifinality Principle in Choice Without Awareness"

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Woo Young Chun, University of Maryland

David Sleeth-Keppler, University of Maryland

Ronald S. Friedman, University of Missouri-Columbia

In Nisbett and Wilson's (1977) research, passersby at a department store chose among four different nightgowns of a similar quality, or among four identical pairs of nylon stockings. A strong position effect was found such that the two rightmost objects in the array were heavily over chosen. Intriguingly, participants seemed unaware of their bias. Whatever it was that systematically pushed their choices rightward, seems to have operated outside their awareness. To the extent that choices are made in the service of individuals' specific goals, some goals might have operated here as well, without being consciously represented.

At that time, the notion that goals can operate outside individuals' awareness would probably have been considered as outlandish by social cognition researchers. Yet this day and age, this possibility has been supported in manifold experiments and is part and parcel of the received world view in motivated cognition (see e.g., Bargh and Bardollar 1996; Kruglanski et. al. 2002). Thus, participants in Nisbett and Wilson's (1977) studies, too, may have been driven by a goal of which they were essentially unaware to prefer the items placed on the right hand side of the array over their left-positioned alternatives. Specifically, participants in the Nisbett and Wilson (1977) studies may have had two goals: (1) Making a reasonable choice, constituting a "focal", completely conscious, goal that would have been equally gratified by any object in the array, (2) reaching quick closure after inspecting the entire array, constituting a "background goal" of which the participants might not have been consciously aware. *Both goals* would have been satisfied by the rightmost objects in the array, which would have been the last ones to inspect following an initial, necessary, sweep from left to right. In other words, the rightmost objects would have been more *multifinal*, hence more appealing, than their preceding, left lying alternatives.

We conducted three experiments to examine these notions. The first manipulated the need for cognitive closure assumed responsible for the unexplained position effect in Nisbett and Wilson's (1977) research. The second study employed different background goals, consisting of identification or disidentification with one's university. The third used identification/disidentification

with the American culture as background goals and investigated whether the effect of unconsciously activated “background goals” would be eliminated if their pursuit would conflict with the “focal goal.”

Study 1

Participants were given the (focal) goal of choosing among four pairs of (actually) identical athletic socks, the pair that was of the best quality. To manipulate the “background goal”, participants in one condition were placed under time pressure to heighten their need for closure (Kruglanski and Webster 1996). In a second condition, no time pressure was applied and participants were given accuracy instructions to reduce their need for closure. As predicted, we found that the rightward position effect replicated in the time pressure condition and was eliminated in the accuracy condition. Subsequent inquiry revealed that participants were completely unaware of their choices having anything to do with time pressure or accuracy concerns.

Study 2

Our next study investigated possible multifinality effects involving the “background goals” of identifying or disidentifying with one’s home university. We treated the desire to identify or disidentify with the University of Maryland, College Park as “background goals” activated by pride or shame-inducing events that visited the UMDCP student body in 2001. The *pride-inducing* event consisted of inclusion of the UMDCP basketball team (the Terps) in the group of finalists (the “Final Four”) of an important inter-collegiate tournament (the 2001 NCAA tournament). The *shame-inducing* event consisted of an outbreak of vandalism in College Park in the aftermath of the loss to Duke University at the semifinal game. University of Maryland College Park (UMDCP) students were asked to recall either one or the other event and to report their feelings about it.

In a subsequent context, participants chose which of two swaths of fabric is more durable. In fact, both swaths were of the same material only one was colored *red*, representing the UMD school color whereas the other was colored *purple*, representing a non-UMD color. We assumed that a choice of the red-colored swath would be multifinal with regard to the both “focal” and the “background” goals. Indeed, we found that the red swath was chosen more often than its purple alternative in the *pride* condition. By contrast, the purple-colored swath was chosen more often in the *shame* condition. That occurred, again, without the participants demonstrating any awareness of the true reasons for their choices.

Study 3

The third study induced again the background goals of identification and disidentification, this time with respect to the United States of America. In the pride condition, assumed to foster the identification goal, participants were reminded of the voluntarism in New York City in the aftermath of 9/11. In the shame condition, participants were reminded of the possibility that deadly Anthrax packages were dispatched by Americans. Participants were subsequently asked to select the tastiest of three soft drinks, Diet Coke, Diet Pepsi, and Shoppers’ Cola. By pretest, we found that in our participants’ population Coke was considered a more American drink than Pepsi. In one condition the alleged Shoppers’ Cola was made to taste inferior to both alleged Coke and Pepsi that actually tasted identically (constituted the same drink). In the other condition, the Shoppers’ Cola was made to taste superior to the “Coke” and the “Pepsi” that, again, tasted identically. We found evidence for multifinality in the condition where the Coke and the Pepsi were

superior in taste to the Shoppers’ Cola. There, the Coke was chosen over the Pepsi in the pride condition and the Pepsi over the Coke in the shame condition. Where the Coke and the Pepsi were inferior in taste to the Shoppers’ Cola the latter was chosen over both former drinks attesting to the primacy of the focal goal (determining the tastiness of drinks) over the background goals (identification vs. disidentification with the U.S.) in the case of goal conflict.

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“Goal Strength, Preference, and the Structure of Goals”

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C. Miguel Brendl, INSEAD

Kyungil Kim, University of Texas at Austin

Predicting consumers’ preferences requires understanding the nature of people’s goals and the relationship between the strength of goal activation and preferences. Neither of these facets of preference is well mapped out. To address this issue, we start with a finding from our previous research that as a goal increases in activation there are valuation effects, whereby preference for goal-related objects increases, and there are also devaluation effects, whereby preference for goal-unrelated objects decreases.

We begin by exploring the relationship between the similarity of objects to an active goal and the degree of valuation and devaluation of those objects in two studies involving habitual smokers. In one study, we manipulated people’s need to smoke, and then had them evaluate a set of consumer products. Some were brands of cigarettes, some were objects instrumentally related to smoking (e.g., a lighter), some were foods associated with smoking (e.g., Dr. Pepper), some were nonfoods associated with smoking (e.g., a Marlboro baseball cap), and finally some were items unrelated to smoking (e.g., a DVD player).

In this study, we observed significant valuation effects for brands of cigarettes and for objects instrumentally related to smoking. We observed significant devaluation for objects unrelated to smoking. An intermediate pattern was observed for the foods and nonfoods associated with smoking. This finding suggests that the degree of valuation and devaluation of an object depends on the degree of association of the object to the focal goal.

In a second study, we explored whether this preference was related to the degree of accessibility of the representations of the objects. Once again, need to smoke was manipulated, and participants both evaluated the objects and performed a Stroop task in which they had to identify the color of the font in which the name of the item was printed. The greater the accessibility of the concept, the longer it should take to identify the color of the font. The pattern of response times to identify the color name mirrored the pattern of

valuation and devaluation. The color of the font was identified significantly more slowly in the high need than in the low need condition for brands of cigarettes and instrumentally related items. The color was identified significantly more quickly in the high need than in the low need condition for cigarette unrelated items. Finally, no significant difference between need conditions was found for the associated foods and nonfoods.

Given this pattern, we then addressed the nature of people's goals. It has been difficult to study goals, because people have no conscious access to the end states of their goals. We can assess the end states of people's goals by examining the pattern of valuation and devaluation associated with items. Objects that are squarely within a goal should show a pattern of valuation. Objects clearly outside a goal should show devaluation. Items associated with the goal, but not within the goal should show an intermediate pattern.

To explore the end-states of people's goals, we examined eating behavior. We manipulated people's need to eat and examined whether the need to eat is general (i.e., the need to eat food) or specific (i.e., the need to eat particular kinds of food). We used a contextual manipulation that might influence the specificity of a goal by bringing participants to the lab either at 9am (where breakfast foods might be most appropriate) or at 4pm (where dinner foods might be most appropriate). Participants evaluated a set of items that included foods related to breakfast, foods related to dinner, and nonfoods. The data were consistent with the interpretation that people's goals are specific. In the morning, we observed valuation for breakfast foods, devaluation for nonfoods, and an intermediate pattern for dinner foods. In the evening, we observed valuation for dinner foods, devaluation for nonfoods, and an intermediate pattern for breakfast foods.

These data have important theoretical and practical implications. On the theoretical side, they promise to resolve long-standing questions about the nature of people's goals. The pattern of valuation and devaluation can be used to map out the specificity of people's goals, despite people's inability to articulate the end states of their goals. The present data suggest that goals may sometimes be specific. However, this finding needs to be explored at a variety of different goal strengths and for both cognitive and physiologically-based goals.

On the practical side, this research demonstrates potential positive and negative influences of goal activation. Retailers should activate people's goals in contexts where they are only trying to sell products relating to the focal goal. Thus, activating a goal to buy a car using a test-drive is a good idea, because car dealers care about selling cars, but not car-unrelated products. In contrast, supermarkets should be wary of activating the need to eat, because it may hamper sales of nonfood products.

“Conditional Coupons: Preference Uncertainty and Spending Goals”

*Leonard Lee, Massachusetts Institute of Technology
Dan Ariely, Massachusetts Institute of Technology*

Conditional coupons are pervasively used as a promotional device in today's retail marketplace. These coupons typically entitle customers to a discount or fixed monetary rebate if they spend at least a stipulated amount (e.g. “Spend \$X or more and get \$Y off). Given the popularity of these coupons, it is important to try to understand how they work. A straightforward answer stems from the financial incentives that such coupons create by decreasing the cost of buying additional (marginal) product items. In addition to such incentives, we propose that these coupons, particularly with their spending conditions, can provide concrete spending *goals* for consumers, changing their shopping agendas.

To test this hypothesis, a series of six field experiments was conducted at a local convenience store. In each experiment, we randomly distributed different types of promotional coupon to customers as they entered the store, and analyzed the influence of these coupons on both the amounts and patterns of their subsequent spending.

In *Experiment 1*, we demonstrated the basic goal effects by distributing three different types of coupon, all having a face value of \$1. One type of coupon entitled customers to an instant rebate of \$1 if they spent at least \$5 (conditional-\$5 coupon), another had the same rebate value but with a required minimum expenditure of \$10 (conditional-\$10 coupon), and the third type of coupon offered a rebate regardless of spending (unconditional coupon). We found that customers who were given either type of conditional coupon spent significantly more than those who received either the unconditional coupon or no coupons at all (all $p < 0.0001$). Most central to the goal explanation, we found that customers who were given conditional coupons tend to spend amounts that clustered above the respective condition values (\$5/\$10) on the coupons (which we shall call the *goal-clustering* effect), providing initial support for the goal hypothesis.

Experiment 1 suffered from one major problem—a large number of customers who did not qualify for the rebate did not return the coupons (despite being given lottery incentives to return them as they exited the store). This self-selection problem poses a serious challenge to the interpretation of the results from Experiment 1. In *Experiment 2* (as well as later experiments), we corrected this bias by recording customer spending and disbursing the rebates directly to customers at the cashiers. The results from Experiment 2 replicated the results from Experiment 1—there was a significant increase in average spending when customers were given conditional coupons ($p < 0.0001$), as well as a similar goal-clustering effect.

Nonetheless, the effects described thus far could be explained by either the goal perspective or standard economics. From an economic perspective, conditional coupons that provide rebates have the effect of reducing the marginal cost of buying an additional item (assuming that the purchase of this item would allow the customer to meet the condition on the coupon), and can thus induce more spending. To provide an initial test that contrasts the goal perspective and the economics perspective, we included a conditional coupon that had a very low requirement level in *Experiment 3*. From an economic perspective, setting a lower condition value should only make the rebate easier to obtain, and should still lead to an *increase* in overall spending. On the other hand, the goal hypothesis would predict a *decrease* in spending, given that the *lower* condition value would induce the corresponding setting of a *lower* goal. In addition, in order to test the generality of goals, we introduced a different type of goal—one that was dependent on the number of items purchased and not on the amount spent. As in the earlier experiments, the results showed a similar goal-clustering effect with this new type of goal. More notably, we also found a significant *decrease* in the number of items bought by customers given the low condition (1-item) coupon ($M = 2.11$) relative to those not given any coupons at all ($M = 2.69$, $p = 0.03$).

The next three experiments were designed and conducted to test more directly the goal explanation. In *Experiment 4*, we distributed two types of coupon—a conditional-\$6 coupon and an unconditional coupon. However, half the customers who entered the store were asked to estimate how much they thought they would spend in the store before receiving the coupons. Consistent with the goal hypothesis, this prior questioning significantly attenuated the degree to which customers used the coupon conditions to set goals

for their spending ($p < 0.05$ for interaction effect). We believe that the initial questioning had the effect of increasing customers' psychological commitment to their *own* spending goals, hence making it less likely for them to use the coupon conditions to set goals for their spending.

While the results of Experiment 4 are in line with the goal hypothesis, the manipulation used is potentially open to criticism since only half the customers were asked a question. Plausible alternative explanations include the "mere-measurement hypothesis" (Morwitz, Johnson, and Schmittlein 1993) and pure reactance (Simonson, Carmon, and O'Curry 1994). To rule out these explanations, in *Experiment 5*, conducted in the evenings, every customer was asked a question before receiving either a conditional coupon or an unconditional coupon. Half the customers were asked to recall what they had bought the last time they had visited the store in the evening (i.e. a relevant past experience), whereas the other half of the customers were asked to recall what they had bought the last time they had visited the store in the morning (i.e. an irrelevant past experience). Consistent with the results in Experiment 4, we found that the effectiveness of the conditional coupons in increasing spending was attenuated when customers were asked to recall a relevant experience, when their current spending goals were potentially made more concrete ($p = 0.02$ for the interaction effect.)

A more implicit test of the goal explanation was carried out in *Experiment 6* by manipulating the location at which the coupons were distributed. Instead of handing out all the coupons outside the store, we distributed half the coupons along the aisles at the back of the store. (Presumably, at this later stage, consumers had more defined goals for their spending at the store). Interestingly, we found that customers who received the coupons inside the store were less influenced by the coupons--there was a significant interaction effect between the type of coupon and the location of coupon distribution on spending ($p = 0.02$). Arguably, customers who received coupons inside the store were more decided on what to buy and how much to spend, and were thus less influenced by the conditional coupons.

In sum, the results from this set of experiments demonstrate that consumers have vaguely defined objectives when entering a store, and at that point, different persuasion efforts that allude to some goal can have a significant effect on their consumption behavior. More generally, these results provide additional support for the goal perspective that motivation and planned actions in day-to-day life are directed at the fulfillment of some end state.

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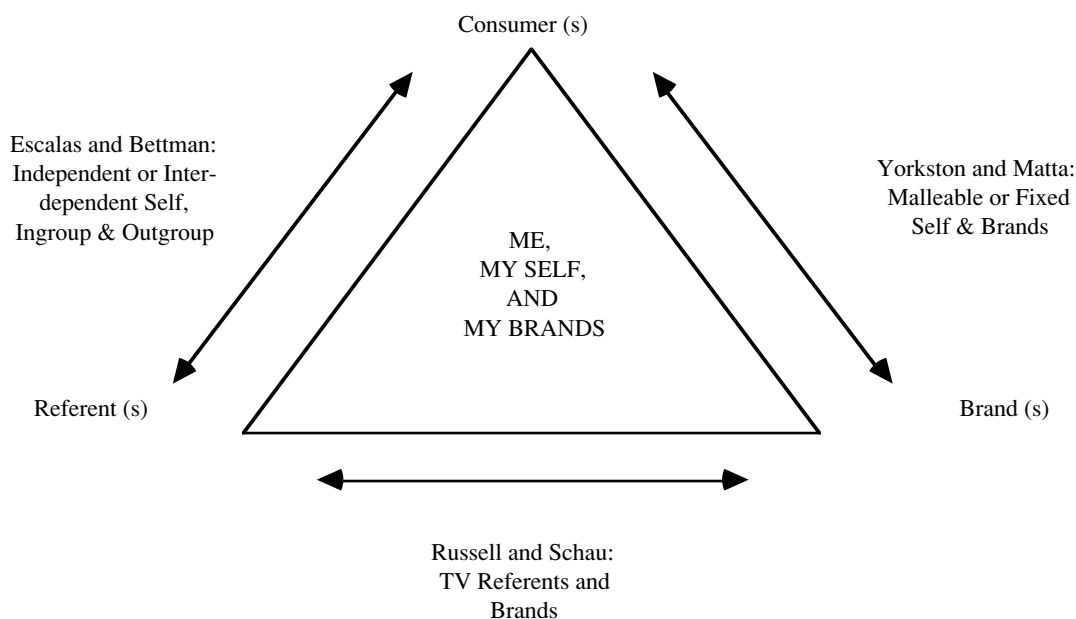
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SPECIAL SESSION SUMMARY
Me, My Self, and My Brands
 Hope Jensen Schau, University of Arizona
 Cristel Antonia Russell, San Diego State University

SESSION OVERVIEW

The notion that consumers use brands to develop and express their selves is at the heart of much consumer research. It is well-established that brands can serve as active relationship partners and as a basis for various types of consumer-brand relationships (Fournier 1998). Beyond individual consumer-brand dyadic relationships, self-brand connections may also be used for consumers to evaluate brand extensions, affiliate themselves with reference groups (Escalas and Bettman 2003), or develop consumption constellations around a particular anchor-referent.

This session was organized around the consumer-brand-referent triad depicted in the Figure. Yorkston and Matta set the stage by introducing the notion that theories of the self can apply to brands and that brands, like people, can be perceived as either fixed or malleable. Next, Escalas and Bettman focused on the third component of the triad: referents. They demonstrated that reference groups can be used as a source of symbolic brand meaning and used by consumers to communicate their self-concepts. Finally, using a triangular set of methods, Russell and Schau illustrated the role of television characters in shaping brand constellations that consumers use for their own identity. Sanjay Sood concluded the session and further expanded the discussion about the role of referents in consumers' evaluations and experiences of brands.



“Through the Looking Glass: How a Brand’s Malleability Mirrors the Self”

Eric A. Yorkston, University of Southern California
Shashi Matta, University of Southern California

Individuals have lay-theories about the self, people’s behavior and the motivations underlying that behavior. Dweck and her colleagues (Dweck, Chiu, and Hong 1995) have proposed and found strong support for their assertion that individuals hold systematic beliefs about the nature of people’s personality, ability and moral character. One set of lay theories relates to how fixed or changeable they view personal traits (i.e. how much of a person’s behavior is constant and how much is malleable). Based on these beliefs, people are generally categorized into two groups: those who believe that people change (incremental theorists) and those who believe that personalities are more rigid and hard-wired (entity theorists). This lay theory has been termed an implicit theory of the self.

This presentation posits that people not only apply these theories to how they and others behave, but that this implicit theory of the self acts as a gestalt perceptual filter through which even complex actions involving objects are viewed. Brands are often conceived as entities around which consumers organize their knowledge, attitudes, and affect. Further, past research has shown that individuals imbue objects and brands with personalities (Fournier 1998). It is therefore reasonable to expect that people use their lay theories of person perception when appraising brands. The implications of this theoretical expectation in the consumer domain are immense. This presentation examined one implication of applying these implicit theories of the self to brands and how this influences consumers’ perceptions of the links or ‘fit’ between a brand and its extensions.

The extent to which a brand can extend into various other categories has been termed brand extendibility or the extent of ‘stretch’ (Kirmani, Sood, and Bridges 1999). In line with previous

definitions, brand extendibility can also be conceptualized as the perceptual distance between the parent brand and the farthest acceptable extension. Therefore, extendibility represents the extent to which a brand is seen as *malleable* while retaining an identity/personality. If consumers perceive a brand to be highly extendible, they would see the brand as being malleable, and the various extensions that fall within the extendibility range as having a fit with the brand. On the other hand, if they perceive a brand to be more fixed (than malleable), they would see the brand as less extendible into other categories. In sum, consumers who believe in an implicit theory of fixedness (i.e. entity theorists) would perceive brands as being less malleable or extendible, when compared to consumers who believe in an implicit theory of malleability (i.e. incremental theorists). The first study (n=60) demonstrates that this difference surfaces when consumers make evaluations of a brand's extendibility in 5 different categories.

In the second study (n=123), we successfully manipulate participants' implicit theories and examine the associations that consumers make between a brand and its extensions. We posit that these associative links can be seen as a measure of the malleability and transferability of a brand's "self". Incremental theorists show evidence of illusory correlations when evaluating an object. One process that has been implicated in the formation of illusory correlations is that of making 'associative links' between the two concepts in question (Anderson and Lindsay 1991). We demonstrate that incremental theorists do not generate more associations concerning an object, but instead see existing associations as more valid. In the case of branding, consumers primed to be incremental theorists do not make more associative links between a brand and an extension. Instead, they see the existing links between a brand and an extension as more valid connectors of the two concepts, thereby resulting in a better fit between the two products. Finally, study 3 (n=116) further explores this process and finds that this effect is mediated through consumers' relationships with the brand. As relationships between brands and consumers strengthen, brand personifications and connections to individuals' identities grow. In these cases implicit theories of the self are more vehemently applied.

Research in brand extensions has traditionally examined the concept of 'fit' or links between a parent brand and its extensions by focusing on the attributes or concepts that a brand and its extension share. For example, extant models have based fit on similar attributes, brand concepts, usage occasion, and goal orientation. This paper examines where consumers are willing to 'draw the line' of fit among these associate links. The novel framework explains how consumers' implicit theories influence the range of associative links that they make between brands and their extensions. The primary contribution lies in examining those links that consumers make between brands and brand extensions that are independent of the brand's attributes, but are a result of consumers' pre-existing notions of fixedness and malleability of the self. The fact that the utilization of these theories can be manipulated through contextual information enhances the processes' theoretical interest and managerial importance.

"Self-Construal, Reference Groups, and Brand Meaning"

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People engage in consumption behavior in part to construct their self-concepts and to create their personal identities (Richins 1994; McCracken 1989; Belk 1988). We examine one aspect of this construction process, namely the appropriation of the symbolic meanings of brands derived from the usage of these brands by reference groups. Building on McCracken's (1988) theory of

meaning movement, we propose that the symbolic properties of reference groups become associated with the brands those groups are perceived to use. These symbolic meanings can then be transferred from reference groups to consumers as they select brands with meanings congruent with an aspect of their self-concept, in this paper operationalized as independent versus interdependent self-construals. When the symbolic properties of brands are used to construct the self or to communicate the self-concept to others, a connection is formed with the brand. Two studies provide empirical support for the notion that brands used by reference groups are connected to consumers' self-concepts as they use these brands to define and create themselves, and we show further that the influence of ingroup versus outgroup brand usage differs depending upon whether the consumer has a primarily independent or interdependent self-construal. We also show that this effect is moderated by brand symbolism, that is, the degree to which the brand communicates something about its user.

Our paper provides an empirical demonstration of the ideas in McCracken's (1988) theory of meaning movement by demonstrating that brand use by reference groups is a source of symbolic brand meaning. Consumers form associations between reference groups and the brands they use. These meanings are in turn transferred from the brand to the consumer as consumers actively construct themselves by selecting brands with meanings relevant to an aspect of their self-concept. Consumers form connections to brands that become meaningful through this process and self-brand connections are intended to measure the extent to which individuals have incorporated brands into their self-concept (Escalas and Bettman 2003). A critical distinction in terms of such construction processes is that between the use of brand associations deriving from one's own group (an ingroup) versus groups to which one does not belong (an outgroup). Consumers are likely to accept meanings from brands associated or consistent with an ingroup and reject meanings associated or consistent with an outgroup. We propose that when consumers appropriate or distance themselves from brand associations based on reference group brand usage, they do so in a manner that is consistent with self-related needs, such as goals arising from independent or interdependent self-construals.

Although the self-concept often is considered to be distinct from other people's self-concepts, recent evidence from the cross-cultural domain suggests that individuals' mental representations of self often depend on social aspects of self, such as relationships with others and membership in social groups (Brewer and Gardner 1996; Markus and Kitayama 1991). Such research indicates that on average, Westerners tend to focus on the personal self, thinking of themselves in terms of unique personal traits and attributes and de-emphasizing others (independent self-construal), while Easterners tend to focus on the social self and how the self is related to other people (interdependent self-construal). Independent self-concepts can lead to different motivations than interdependent self-concepts. Independent self-construal goals include both independence, i.e., self-determination, and differentiation, i.e., distinctiveness, whereas interdependent self-construal goals focus on an aspect of self shared with some subset of others, enhancing maintenance of relationships and assimilation to ingroup norms (Kampmeier and Simon 2001; Triandis 1989). Our studies use two different approaches to operationalizing chronic differences in self-construal: ethnicity and Singelis' (1994) scales designed to measure independent versus interdependent self-construals.

Results from two experiments show that both independent and interdependent consumers report higher self-brand connections for brands with images that are consistent with the image of an ingroup compared to brands with images that are inconsistent with the image of an ingroup. This finding is consistent with the brand

congruency findings of previous reference group consumer research. However, we propose that congruency is the result of active self-construction, which depends on an individual's self goals. The positive effect of ingroup brand associations on self-brand connections is consistent with both assimilation goals for interdependent self-concepts and self-determination goals for independent self-concepts.

On the other hand, we find that consumers report lower self-brand connections for brands with images that are consistent with the image of an outgroup compared to brands with images that are inconsistent with the image of an outgroup, and that this negative effect is stronger for independent versus interdependent consumers. We propose that this stronger effect is due to stronger self-differentiation goals for consumers with more independent self-concepts. As Kampmeier and Simon (2001) argue, differentiation needs are more predominant for the independent self when outgroups are the focus; thus, individuals with independent self-construals show a stronger negative effect of outgroup brand associations than those with interdependent self-construals.

Finally, our effects are moderated by the degree to which the brand is symbolic, i.e., able to communicate something about the user, with more symbolic brands having greater effects than less symbolic brands. First, the positive effect of ingroup brand associations on self-brand connections is stronger for brands that are perceived to communicate something symbolic about the brand's user compared to brands that do not. Furthermore, we find that only symbolic brands are used to differentiate oneself from an outgroup. The fact that brand symbolism moderates the effects of ingroup and outgroup brand associations on self-brand connections provides additional evidence that consumers use brands to communicate their self-concept, appropriating brand associations that are the result of reference group brand usage.

“Does Being Glued to the Tube Mean Sticky Brand Associations? Consumer Television Connectedness and the Enrichment of Brand Meanings and Associations”

*Cristel Antonia Russell, San Diego State University
Hope Jensen Schau, University of Arizona*

This research is anchored in the consumption of television programming and motivated by the fact that consumers' experiences of TV programs and their characters can enrich and shape their experiences of brands. Over the course of viewing a TV program, consumers can develop parasocial relationships with its characters (Russell, Norman and Heckler 2004). Levels of connectedness not only reflect the degree to which consumers engage in referential relationships with the characters, but also their willingness to symbolically (Mick 1986; Solomon 1983) and physically consume consumption constellations (Solomon and Englis 1992) associated with the plot and characters of the program. As Schau and Gilly (2003) found, consumers volunteer brand associations in personal webspace (homepages and blogs) and these digital associations quite often involve highly contrived narratives that strategically employ consumer interpretations of brand meanings.

Combining these three concepts (television connectedness, consumption constellations, and digital brand association), this research examines the manner in which connected consumers engage in interpretations of brands associated with self-relevant television characters. We propose that, as connectedness increases, consumers rely on their experiences of television programs and their parasocial relationships with TV character referents to establish and express their consumer identity. Because consumption narratives developed around TV characters often involve brands (Russell 2002), they contribute to connected consumers' own brand experiences and identity expression (Aaker 1999).

The data consist of digital collages and surveys collected from television viewers as well as interviews with a subset of participants. Participants were recruited for a brand collage task focusing on a character within the TV program of their choice. Each participant created a brand collage for their chosen focal character using MS Word, the Internet and the “copy” and “paste” functions. Participants created collages that referenced between 5 and 36 brands, and often to varying degrees narrated their collages with commentary. This creative task served to uncover the brand narratives surrounding the focal TV character. Respondents' digital collages approximated a consumption constellation. The task requested that they consider a typical day in the life of the character and all the various products and services they are likely to use. A follow-up survey measured respondents' level of connectedness as well as a series of measures of connection between the respondent and the selected character (self-character connection and parasocial interaction) and between the brand collage and the respondent's self-identity.

Together, the collage and survey data access latent consumption constellations of the participating consumers and illuminate the role of consumer-character identification in the development of consumption constellations and consumer identities. Analyzing the collage data in a manner consistent with the analysis of projective data in Belk, Ger and Askergaard (1997), we garner an understanding of what the fan believes the consumption choices are for this character. Follow-up interviews with a subset of participants provide insights into how connectedness contributes to self-TV character-brand relationships. Using the collage in a manner analogous to Heisley and Levy's (1991) autodiving, participants were asked to walk the researcher through their collages discussing the meanings the collage creators attributed to the brands, the significance of their inclusion and placement within the collage, and the degree to which the collage represented the participants' own consumption constellations and identities. In each case, the researcher offered preliminary analysis of the collage and encouraged the participant to interact (affirm or contradict) these findings. This small scale member check served to achieve emic validity for our research assumptions and findings.

We find that participants' level of connectedness is related to the degree to which they identify with their brand collage but this relationship is fully mediated by the degree of self-character connection. Not only did participants identify strongly with the characters they chose as subjects of their collages, but these referential relationships affected the degree to which their brand collages related to their own consumer identity. The collages thus represent forms of self enacted in direct relationship to brands and commercial referents. We concluded that the brands that comprise the consumption constellation for the characters tap into both real and aspirational brand associations and that, as consumers develop strong, self-relevant relationships with television characters, those become important anchors of brand meanings and associations.

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SPECIAL SESSION SUMMARY

Feeling the Future Now: The Influence of Affect on Preferences, Predictions and Perspectives

Vanessa M. Patrick, University of Georgia

PAPERS PRESENTED

“Sadness, Anxiety and the Ordering of Future Events”

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Kim P. Corfman, New York University

Marketers have a natural interest in understanding the drivers of predicted utility (cf. Kahneman and Snell 1990), since it presumably determines one's propensity to sample future consumption events. Work on affective forecasting (e.g. Patrick et al 2004; Raghunathan and Mukherji 2004) suggests that people often make erroneous predictions about how much they will enjoy a future consumption event, displaying, in general, a tendency to over-predict the extent to which they will enjoy a future pleasant event. Consistent with the theme of this special session, this research examines whether one's ordering of future events is influenced by the current mood state one is in. In particular, we examine whether two affective states of the same (negative) valence, viz., anxiety and sadness may produce differences in preference for ordering of future consumption events. Research on ordering of future consumption events (e.g., Loewenstein and Prelec 1993) suggests that people tend to prefer an improving sequence. We predict that this general tendency is moderated by one's current negative mood state, as explained below.

According to cognitive theories of affect, affective experiences are preceded by cognitions, with different cognitive themes evoking different affective states (Roseman 1991). Sadness related states (depression, distress, gloom, etc.) are evoked by cognitions pertaining to the loss or absence of a cherished object. In contrast, anxiety related states (such as nervousness, tension, and fear) are preceded by cognitions pertaining to uncertainty and lack of control, especially with regard to the potential occurrence of a negative outcome. Thus, uncertainty about achievement of a desired end-state (e.g., salary raise) evokes anxiety, while knowledge that one has not achieved that state evokes sadness. This theme is echoed in psycho-evolutionary perspectives on affect, according to which, affect is experienced in response to changes in the environment, with different changes evoking different affective experiences (Plutchik, 1980). In this view, sadness is experienced when the environment indicates loss of a source of support (e.g., a loved one or an opportunity), whereas anxiety is experienced when the environment spells risk or danger of not being able to fulfill desired goals (e.g., illness or loss of job security). Combining the cognitive and psycho-evolutionary perspectives, we predict that:

H1: Sadness leads to greater seeking of pleasurable stimuli.

H2: Anxiety leads to greater attentiveness

As a result, when presented with the task of ordering two future activities—one that is consistent with the goal of seeking pleasure, and another that is consistent with the goal of being attentive—sad subjects prefer to completing the former activity first, while anxious subjects prefer completing the latter activity first.

Two experiments were conducted to test our hypotheses. The objective in the first experiment was to show that the states of sadness and anxiety do indeed prime goals of seeking pleasurable stimuli, and attentiveness, respectively. The procedure in experiment 1 (n=173), adapted from Raghunathan and Trope (2002), had

two stages. In the first stage, mood was induced by asking participants to recall a recent sad or anxious from memory. Following the mood manipulation, participants were exposed to an essay on caffeine consumption that contained 5 neutral, 5 negative and 5 positive pieces of information. After reading the essay, subjects participated in a recall task, in which they were asked to recount any and all information from the essay. The number of correctly recalled positive, negative, and neutral items served as the dependent variable. Consistent with H1, sad mood resulted in a recall advantage for positive items ($M=3.38$), compared to negative items ($M=2.44$, $F(1, 31)=9.29$, $p<.01$), whereas this difference was in the opposite direction for those in the happy mood condition ($M_s=2.81$ and 3.33 , respectively, $F(1, 26)=6.14$, $p<.05$), and was non-significant for those in the anxious mood condition ($M_s=2.73$ and 2.88 , respectively, $F<1$). Consistent with H2, the total number of items recalled was greater among anxious participants ($M=4.63$), than among sad participants ($M=3.64$) or happy participants ($M=3.03$, $F(2, 166)=15.64$, $p<.001$). In experiment 2, we turned to the primary focus of this research: the influence of sadness (anxiety) on ordering of future consumption events. This experiment (n=93) also consisted of two stages. In the first stage, anxiety, sadness or a neutral was induced through an affect manipulation procedure borrowed from Raghunathan and Pham (1999). Then, in a purportedly unrelated study, participants were asked to imagine that they were faced with completing two tasks in the next two weeks, one task per week. One of the tasks, meeting friends for dinner, was portrayed as enjoyable, while the other, meeting with a plumber to fix a leaking sink, was portrayed as necessary. Whereas the former had greater hedonic potential, the latter held greater appeal for individuals motivated to display attentiveness. Consistent with our predictions, a significant main effect of mood ($F(2, 90)=4.80$, $p<0.05$) emerged, revealing that preference for the more enjoyable task was greatest in the sadness condition ($M=6.13$) and lowest in the anxiety condition ($M=4.59$), with the neutral condition in-between ($M=5.27$). The difference between the sadness and anxiety conditions was significant ($F(1, 90)=10.53$, $p<.01$).

Results from Experiment 2 show that one's preference for ordering future consumption events is influenced by one's current mood state. In particular, they indicate that the general preference for an improving sequence of future episodes does not hold true when one is feeling sad: in this state, people exhibit “weakness” and consume the more pleasurable event first.

“The Future is Colored Pink or Blue: The Effect of Mood on Affective Forecasting”

Vanessa M. Patrick, University of Georgia

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Debbie MacInnis, University of Southern California

This paper examines the role of mood on affective forecasting, the predictions of future affective states. Loewenstein et al. (2003) suggest that people “project” their current emotions onto the future, a phenomenon called “the projection bias.” The notion underlying the projection bias is that people tend to overestimate the extent to which future experiences of an event can be equated to a current experience (a notion referred to as “presentism” by Gilbert et al (2002)). This research, would predict that when in a “hot” state, say negative or positive mood, people would rely on this mood state as

a proxy when making predictions about a future affective state. Consequently, mood would color affective predictions in the direction of the mood state.

However, the mood literature suggests that mood may have an influence only on stimuli that are neutral or unambiguous but not on valenced stimuli. Research on the mood-congruency effect has shown that mood-congruent evaluations are more pronounced when the stimulus itself is affectively unambiguous (Gorn 2001; Isen 1985; Isen 1982; Miniard 1992). Thus, this research would predict that when the mood is positively or negatively valenced and the stimulus is also valenced, the effect of mood disappears. *The literature on mood thus suggests a boundary condition for the "projection bias"*.

Study 1 (N=208) was designed to examine the influence of mood on affective forecasts of future events that are positive, negative or neutral in valence. The study was a 3X3 between-subjects design with mood (positive, negative and neutral/no mood baseline) and valence of the future event (positive, negative and neutral) as the two independent factors manipulated. After participants' mood was manipulated by using film clips, they completed a brief survey that asked them to imagine themselves at either a restaurant with friends (positive future event), doing an in-class quiz (negative future event) or at a grocery store (neutral future event) two weeks later. Participants were then asked to predict how they would feel while at the restaurant/doing the quiz/at the grocery store. The results of this study indicate that mood influences the affective forecast of a neutral future event (visit to a grocery store) in the direction of the mood state. Specifically, a mood congruency effect is observed in which a positive mood state leads to a more positive affective forecast of a neutral future experience while a negative mood state leads to a more negative affective forecast, and 2) Mood has no impact on affective forecasts of valenced future events (dining at a restaurant or an in-class quiz). Thus affective forecasts of valenced future events are not altered by mood states of same or opposite valence.

These results further our understanding of the influence that ambient affect has on affective forecasts of future events. Moreover, this study proposes a boundary condition the "projection bias" suggesting that the bias is more likely to influence the affective predictions of neutral future events but not those that are valenced.

In study two, we examine the influence of recalling similar past events on the impact of mood on affective forecasting. The two literatures, namely the affective forecasting literature and the mood literature, make opposite predictions about the impact of such elaboration. Specifically, the affective forecasting literature suggests that elaborating about or recalling similar past experiences improves the accuracy of the affective forecast (Buehler and McFarland 2001) while the mood literature suggests that ambient mood has an impact on the valence of recalled thoughts (Lee and Sternthal 1999; Lyubomirsky et al. 1999) such that valenced mood states would elicit the recall of only mood-congruent thoughts that would in turn limit the accuracy of affective forecasts. Thus, in this study we empirically examine these opposing predictions to investigate the impact of mood and recall on affective forecasting of affectively valenced and neutral future events.

Study 2 (N=371) was designed to investigate the role of recall of past experiences on the influence of mood on affective forecasts of future events that are neutral or positively or negatively valenced. The design of the study was a 3X3 between-subjects design with mood (positive, negative and neutral/no mood baseline) and valence of the future event (positive, negative and neutral) as the two independent factors manipulated. Results of this study reveal that elaboration decreases the impact of mood on affective forecasting

of neutral future events but increases the impact of negative and positive mood on future events.

Study three (planned) is designed to examine the process by which affective forecasts are influenced by situational factors (e.g. mood) and the impact on behavioral intentions.

"Augmenting Affect and Discounting Cognition: Consumers' Attitudes Toward Environmentally Friendly Products"

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Geeta Menon, New York University

Research from environmental and social psychology suggests that consumers need to have environmental values and these values to be part of long-term goals in order to have higher purchase intentions and more positive product evaluations of environmentally friendly products (EFPs; e.g., Norlund and Garvill, in press; Verplanken and Holland 2002). However, this stream of research fails to recognize the time-dependent benefits that are offered by EFPs. We suggest that EFPs not only have short-term, consumption-related (and, therefore, more cognitive) benefits just like any other product, but also offer long-term, protection-of-environment related (and more affective) benefits. Therefore the interplay of time and affect might play a significant role in consumers' evaluations of such products.

Construal Level Theory (CLT; Trope and Liberman 2003) contrasts different theories of time-discounting and suggests that only when the moderating role of goals are taken into account, then the divergent predictions made by different time-discounting theories can be resolved by a common explanation. CLT suggests that judgments, predictions, and choices regarding the more temporally distant events are likely to be based on higher-level construal (goal-relevant, primary, central aspects) of those events, and similarly more temporally close events are likely to be based on lower-level construal (goal-irrelevant, secondary, non-central aspects) of those events. Depending on the goals of the individual, different aspects of a target object or event might constitute the high versus low-level construal.

Theories of affect-based time discounting (Loewenstein 1996; Metcalfe and Mischel 1999) suggest that affective value is discounted more steeply than cognitive value. Metcalfe and Mischel (1999) suggest that affective (hot) value is represented at concrete level (therefore should construe the low-level representations) and cognitive (cold) value is represented at abstract level (therefore should construe the high-level representations). Thus, no matter what the goals are (affective or cognitive) affective value should be valued higher in the short-term and cognitive-value should be valued higher in the long-term.

We conducted two studies to test alternate theories. In Study 1, we manipulate mindset by asking subjects about 'how's versus 'why's of past purchase situations. Under each mindset, subjects evaluate an EFP when its environmentally friendly benefits versus consumption related/utilitarian benefits are highlighted in an ad message. We contrast time-matching hypothesis with goal-matching hypothesis in this study. According to time-matching hypothesis, if answering 'how' questions puts subjects in a concrete mindset and answering 'why' questions puts them in abstract mindset (Freitas, Gollwitzer, Trope, Working Paper, Study 1), then environment-related benefits which are reaped in the long-term should be valued more in abstract mindset and consumption-related benefits should be valued more in the concrete mindset. According to goal-matching hypothesis, if answering 'how' questions puts subjects in an affective mindset and answering 'why' questions puts them in cognitive mindset (Millar and Millar, 1990), then environment-related benefits which is more affective should be valued

more in affective mindset and consumption related benefit which is more cognitive should be valued more in the cognitive mindset. We find support for goal-matching hypothesis in study 1 with a significant two-way interaction of mindset and message content ($F=3.967$, $p<.05$). Furthermore, we find that thinking about environment mediates this two-way interaction predicted by goal-matching hypothesis. We also show that environmentally friendly benefit versus consumption related benefit creates more increase in positive emotions and more decrease in negative emotions hence carries more affective value.

The pattern of results in support for goal-matching hypothesis of study 1 might also mean show that people discount cognitions (higher purchase intentions for EFP in why mindset) however they neither discount nor augment affect (no difference in purchase intentions for EFP between why and how mindsets). In the EF message condition (representing affective value) people might be under the influence of both time-matching and goal matching hypothesis. More specifically, they may be augmenting affective value and also might be immediately discounting it, because of the dual meaning in the mindset manipulation. Therefore, in study 2, we manipulate time and goals orthogonally. Furthermore, study 2 provides us the opportunity to directly contrast affect-based discounting, construal level theory and our prediction that affect will be evaluated more highly in the longer-term and cognition will be evaluated more highly in the shorter-term.

In the second study, we manipulate time (buy an EF car tomorrow versus buy an EF car next year) as well as goals (consummatory versus instrumental) and ad message content (affective versus cognitive) between subjects. We used 'purchase intentions' as the main dependent variable. We find support for our prediction that affective value is augmented and cognitive value is discounted with a two-way interaction of message content and time ($F=4.205$, $p<.05$). We also find a two-way interaction of goals and time ($F=6.135$, $p<.02$). The pattern of means in goals and time interaction is opposite of the pattern in message content and time interaction. Goals and time interaction show that when people evaluate a target product under a consummatory goal, they want to consume it sooner, whereas when people evaluate a target product under an instrumental goal, they want to consume it later. The goals and time two-way interaction is a support for Metcalfe and Mischel (1999) affect and cognition discounting theory. However, we also find support for our predictions. This suggests that affect and cognition can be both augmented and discounted. We argue that augmenting or discounting depends on the specific meaning of affect and cognition. For example, when affect activates warm emotions (calm, peaceful, hopeful—Edell and Burke, 1987) such as in the case of EF message content, affective value can be discounted. However, when affect activates upbeat emotions (excited, happy, joyful—Edell and Burke, 1987), such as in the case of a consummatory goal of enjoying oneself, affect can be discounted. A similar explanation can be constructed to explain the results for cognition: cognition that is related to short-term benefits (utilitarian, cost-saving benefits for a car) should be discounted, whereas cognition that is related to long-term benefits (an instrumental goal of making a rational and logical decision) should be augmented. In this study, we also find a two way goals and message content interaction ($F=6.729$, $p<.02$). This final interaction was not predicted and theoretically is not of interest to us, but is well supported by previous research (Pham, 1998). There wasn't a significant three way interaction ($F<1$), as construal level theory would have predicted.

SPECIAL SESSION SUMMARY
Contracting for Relationships
Susan Fournier, Dartmouth College

SESSION OVERVIEW

It has become acceptable in the consumer behavior literature to consider consumers' engagements with brands through a relationship theoretic lens. Still, despite the inherent appeal of this metaphor for understanding brand loyalties and consumer-brand behaviors, many questions remain regarding the types of relationships consumers may form with brands, the nature and quality of these various engagement forms, and the processes whereby such relationships evolve and develop over time. An explanatory construct that has been fruitfully applied in the business-to-business and human literatures to illuminate relationship questions such as these is that of the relationship contract (Dwyer, Schurr, and Oh 1987; Lusch and Brown 1996; Sager 1976). This session uses theories and frameworks from this conceptual domain to deepen our understanding of the relationships that form between consumers and their brands.

The relationship contract comprises rules and norms of behavior that guide perceptions, evaluations, attributions, judgments, behaviors, and interactions within the relationship (MacNeil 1985; Rousseau and McLean Parks 1992). Related notions such as relationship cognitive structures (Baucom, Epstein, Sayers, and Goldman Sher 1989), relationship schemata (Baxter 1987), relationship norms and expectations (La Gaipa 1987), and relationship theories-in-use (Fletcher and Fitness 1993) similarly concern templates of beliefs, assumptions, socio-cultural ideals and standards by which relationships are guided and against which relationship judgments are formed. Importantly, and especially relevant to the consumer behavioral context at hand, relationship contracts are a psychological phenomena (Rousseau 1989) existing only "in the eye and head of the beholder" (MacNeil 1985). Thus, rather than embodying an explicit contractual reality, the relational contract can be thought of as embodying both openly and explicitly communicated terms as well as implicit terms and agreements assumed by both parties. Relationship contracts are inherently dynamic and are continuously refined and updated via an active, reciprocating "signaling and response" system in which partners observe and assess their own and their partner's behaviors to infer operative contract terms and make necessary contract adjustments (Sager 1976). The contract lens thus allows consideration of the various conundrums of structure and process that remain unaddressed in the consumer behavior realm.

The contracts notion was first explicitly considered in consumer research by Aggarwal (Aggarwal 2004) who documents the manifestation of exchange and communal relationships (Clark and Mills 1979) in the consumer setting. This research demonstrated how exchange and communal relationships are differentially governed by a set of behavioral norms specific to each type of relationship that form the basis for consumers' evaluations. In a recent study, Aaker, Fournier and Brasel (Aaker, Fournier, and Brasel 2004) provide field experimental evidence in which the operation of contracts in the consumer-brand realm was centrally implicated. Transgressions, these researchers conclude, have variable effects on the strength and trajectory of consumer-brand bonds depending on the contract that is implicitly established, and the consumer's judgment as to whether terms of that contract have been violated by the enactment of the transgression. These foundational studies provide a basis for more considered study of contracts in the consumer domain, both in terms of process and qualifications of

content beyond the classic exchange-communal distinction. The dualistic and reciprocating nature of contracts (Sager 1976; Wieselquist, Rusbult, Foster, and Agnew 1999) has also yet to be explicitly considered, particularly as the contracts of the consumer become (in)congruent or (mis)aligned with those put in play by the firm.

This special session had four goals: (1) to enhance our understanding of the nature of the contracts existing between consumers and brands/firms, including their status as implicit/explicit, psychological/ socio-cultural, and idiosyncratic/shared entities; (2) to develop a deeper appreciation of the varieties of contracts that exist, and the rules and beliefs that characterize each; (3) to explore the role of contracts vis-à-vis loyalty formation and dissolution processes; and (4) to explore the dynamic nature of contracts, and the processes by which they are established and updated. A judgment of the theoretical utility of the contracts notion in the consumer research domain was also sought, both as amplification to and as a competing explanation for such consumer theoretic ideas as expectations-setting, satisfaction, loyalty, and trust.

Each of the papers in this session offered theoretical and empirical insights into different aspects of consumer-firm/brand contractual phenomena. Zweig and Aggarwal opened the session by directly probing the implied existence of the psychological contract, and providing evidence of its mediating effects on judgments of satisfaction and trust. Malshe and Price provided foundational insight into the most studied consumer-brand contracting relationship, brand loyalty, and explored the nature of the consumer loyalty contract versus other loyalty contracts outside the consumption domain. Fournier, Avery, and Wojnicki used contract theory to address process gaps in our knowledge of brand relationship development. Steve Duck, a world-renowned scholar of relationship theories in the interpersonal realm, and the author of hundreds of articles and books, served as discussion leader, raising provocative questions about the pros and cons of transferring theory from the interpersonal to the consumer realm. The three session papers and discussant comments are summarized below.

"Breaking Promises: The Role of Psychological Contract Breach in Mediating the Relationship between Marketing Practices and Brand Evaluations"

David Zweig, University of Toronto

Pankaj Aggarwal, University of Toronto

Considerable media coverage and recent research evidence (Tavani 1999) suggest that consumers are becoming increasingly concerned about efforts to record and track their purchasing behaviors. However, little research has investigated the theoretical basis for this concern; specifically, what are the underlying mechanisms driving consumer concerns over data gathering and dissemination practices? Furthermore, why should marketers care about consumer reactions to the use of personal information? An obvious possibility is that consumers are concerned about the invasion of their privacy when personal information is collected and disseminated. Other potential reasons include perceptions that engaging in these activities violates the implicit psychological contract between brands and consumers.

Drawing from theoretical and empirical evidence pointing to the importance of privacy invasion (Zweig and Webster 2002), and psychological contract breach (Rousseau 1989) in the relationships

between employers and employees, we conducted two studies to determine why people care about protecting their personal information in a brand context. In the first study, 191 participants were asked to share their personal information with a brand (at time 1) under the pretext of enhancing customer service. For example, participants were asked for demographic information (e.g., gender, age) as well as more personal information on their current financial situation, consumption habits, relationship status and living arrangements. Participants were later informed (time 2) that their personal information was either sold or not sold to a marketing database firm. Results of structural equation modeling and bootstrap analyses indicated that the sale of personal information led to negative brand evaluations, negative intentions to interact with the brand in the future and negative affective reactions toward the brand. Furthermore, we found that perceptions of privacy invasion only partially mediated the relationships between the sale of personal information, and brand evaluations, future intentions and violation perceptions (negative emotional reactions). However, only a small proportion of the effect of selling information on brand attitudes can be attributed to a perceived invasion of privacy. Knowledge-based marketing practices were also found to lead to a perceived breach in the psychological contract between the brand and the consumer. We discovered that perceptions of psychological contract breach between the consumer and the brand plays a larger mediating role than privacy in explaining reactions to organizations that collect and distribute personal information.

The second study (N=195) was designed to extend the results of the first study by testing a theoretical model of consumer reactions. This second study also sought to use both a different measure and a different method of assessing psychological contract breach. As before, some participants were told that their personal information was sold. However, unlike study 1, another group was told that their information was requested by, but not sold to, the marketing database firm. Furthermore, using structural equation modeling techniques, a theoretically derived model that assumed relationships between privacy invasion and psychological contract breach was tested against a model that assumed no relationship between the two but included direct effects of each on brand attitudes. The findings of Study 2 suggest that the model that assumed a directional relationship between perceptions of privacy invasion and psychological contract breach fit significantly better than the other. Not only did we replicate the results of Study 1 concerning the effects of personal information sale on brand attitudes, we also demonstrated that these effects are partially mediated by perceptions of psychological contract breach. Furthermore, we found preliminary evidence to support the notion that perceptions of privacy invasion leads to a perceived breach in the psychological contract, which in turn, mediates the relationship between privacy invasion and brand attitudes. These results again highlight the importance of upholding the psychological contract between the brand and consumers. As in the first study, we found that perceptions of privacy invasion are important. However, our respondents suggested that the sale of personal information also triggered a breach in the implied contract between them and the brand. It is this perceived breach that best predicts thoughts, feelings, and intentions toward the brand. Finally, the data also suggest that upholding promises can lead to more positive brand evaluations.

In sum, the present research contributes to our understanding of knowledge-based marketing practices and privacy by establishing the importance of the psychological contract between the brand and the consumer. In demonstrating the related roles of privacy and psychological contract breach in predicting brand attitudes, we have extended the boundaries of privacy theory to include consid-

eration of relationship consequences when privacy is invaded. Future theory building efforts should incorporate the construct of psychological contract breach in explicating the interrelationships among privacy invading activities and attitudes.

On a more practical level, this research points out that brands need to be very careful with the use of consumer information. When brands collect customers' personal information, they concurrently become a party to a contract with these customers that concern the sanctity of this information. If brands subsequently sell this information to third parties, they may violate this contract which, in turn, puts the entire relationship with consumers at risk. In other words, although there might be immediate gains to be had by firms when they sell their customers' information to other organizations, the potential for long-term losses cannot be overlooked. Brands need to ensure that they do not take any step that threatens, or worse, breaches, the contract with the consumer, lest they face the wrath of consumers who may decide to completely cut off their relationship with them.

"Embedded Loyalties: A Consumer-Centric View"

Avinash Malshe, University of Nebraska

Linda L. Price, University of Nebraska

Eric J. Arnould, University of Nebraska

Loyalty is a powerful and dangerous word that is oppositional to impartiality and justice. It represents a permanent source of moral danger as we navigate whether and how loyal to be. Loyalty sets the contours of our relationships defining who's in and who's out. It is always relational and partial—loyalties are situated within the context of a historical self and linked to an individual's identity (Fletcher 1993). Aristotle observed that loyalty evolves in the context of communal projects and shared life experiences and requires attentions and caring that are effortful. For consumer researchers however, loyalty has become synonymous with brand loyalty—positive affect, cognition and repeat purchase of a brand (Oliver 1999). Consequently, consumer researchers have overlooked the array of consumers' important relationships that situate them, engender obligations of loyalty and require rejection of alternatives that undermine these relationship bonds. Nevertheless, there is increasing recognition that consumers' relationships with brands are context dependent, embedded in socio-cultural settings and social phenomenon (Coulter, Price, and Feick 2003; McAlexander, Schouten, and Koenig 2002; Muniz and O'Guinn 2001). For example, recent research stresses that consumers' loyalties to brands may be embedded in their ties with other consumers. Brands may serve an important role in linking consumers together—binding them to a community.

Our research is focused on the multifarious, effortful, often conflicting and predominantly *non-commercial* loyalties that define consumers' lives. We then examine how *commercial* loyalties and brand relationships are situated in the context of these other important relationship bonds. Our consumer-centric framework highlights a different view of loyalty, with significant implications for brand management to enhance customer-brand relationships.

Our paper is based on fifty semi-structured depth interviews directed at uncovering consumers' loyalty labors and how brands service those loyalties. Because we wanted to uncover tensions, conflicts and relationships among loyalties we sampled men and women with children working full-time primarily in professional roles. As with our prior work on commercial vs. other friendships and commercial vs. interpersonal betrayals, this research uncovers the divergent senses of loyalty that apply in commercial and non-commercial contexts (Bardhi, Price, and Arnould 2004; Price and Arnould 1999). For example, commercial loyalties are far less

important, less effortful and more instrumental than non-commercial loyalties. Our research also helps to untangle distinctions between shifting loyalties and breaches of loyalty obligations that constitute betrayal. Moreover, our research highlights the significant interactions between commercial and non-commercial loyalties. For example, we illustrate that commercial loyalties may be fully mediated through other important loyalties—e.g., devotion to a brand as devotion to another. Commercial loyalties may also be solutions to problems consumers encounter in managing and allocating loyalty resources among their important relationships. Our research provides a grid for understanding the complexities of loyal relationships. Loyalties to children, spouses, profession, employer and God, interweave and interact with loyalties to brands and services. We conclude our paper delineating future directions for loyalty research in light of our findings. Importantly, our findings direct attention away from the dyadic relationship between a consumer and a brand to a view of the consumers' network of relationships and loyalty bonds in which brand relationships are situated. In addition, we uncover the opportunity for firms to build powerful brands through creating multiple links to the consumer through their most important loyalties. This is a strategy that varies substantially from conventional wisdom about how to build strong relationships with customers.

“Contracting for Loyalty”

Susan Fournier, Dartmouth College

Jill Avery, Harvard Business School

Andrea Wojnicki, Harvard Business School

This research applies a contract theoretic lens to provide insight into the processes involved in consumer-brand relationship development, specifically those governing the formation and dissolution of consumer-brand loyalties over time. A multi-method research design comprising three complementary data sources was engaged to enliven consumers' subjectively-interpreted experiences of relationship contracting. As the cornerstone of the research, we conducted an in-depth case study of a highly-loyal, high share-of-wallet “best customer” of a national retailer whose banishment from shopping at the store received national coverage in the news. This case study served as an inductive road-map for our research, illuminating key contractual contents, processes, and mechanisms, and suggesting propositions for further investigation. The case study also reinforced the power of insights to be leveraged in “reverse-engineering” the failed contracts of loyal consumers by exposing core contract terms at a critical inflection point in the relationship. Our second database consisted of ten semi-structured interviews conducted among consumers whose attempts to sustain brand loyalties were similarly thwarted by their respective firms. These “fired” consumers represented relationships with a range of product and service firms and brands, thus adding scope and generalizability to our process findings. Our third data collection method recognized the static and retrospective nature of our case history and critical incident interviews, and their juxtaposition against the inherently dynamic nature of contracting. To allow analysis of contracting processes as they unfolded and evolved, we re-analyzed data collected during a two-year, four-phased, ethnographic study of twenty-five consumers' experiences with an Internet grocery service provider. While originally collected for a study on the diffusion of technologies in the home, this data allowed an independent assessment of the viability and value of the contracting lens in understanding relationship evolution over time.

Four phases of the relationship development lifecycle (Dwyer et al. 1987) provided the structure through which our findings are reported. Collectively, our findings support that the contract per-

spective is relevant and productive in understanding relationship development processes in the consumer realm: our informants initiate, explore, negotiate, and continuously renegotiate contracts with firms toward various loyalty states. The thick description that follows dimensionalizes the consumer-firm contract in useful ways and, fleshes out contracting concepts and process mechanisms suggested but never fully explored in the business-to-business marketing literature.

Relationship Exploration. Sub-processes in this phase enabled consumers to elaborate the basic “gives and gets” of the ill-formed initial contract, and to ascertain or refine the core terms and rules of the emergent contract. A taxonomy of eleven rule types within three general categories (reward and reciprocity rules, interaction rules, and relational rules) was inducted, adding descriptive depth to previously established contract term taxonomies in the B-Z-B realm (Heide and John 1992). Rule expansion into previously unacknowledged domains of interaction with various intermediaries who contract on behalf of the firm was also identified. The exploration phase also included an active and purposive hypothesis testing component. Eight feedback-seeking contract illumination tests were uncovered, including tests to ascertain the level of commitment of the relationship partner, or the purposive breaking of rules thought to be at play.

Relationship Expansion. The expansion phase comprised efforts to organize and structure emergent contractual contents in order to settle on a working relationship definition. A primary process involved the prioritization of contract terms into a hierarchical structure, bringing inviolate rules—“must do’s” or “can’t do’s”—to the fore while relegating less central terms to a broader “permissiveness zone.” Specification of adaptive norms identifying critical behaviors for successful operation within the constraints of the system figured prominently in this task. With core parameters thus identified, a particular relationship template began to emerge. This template was then embellished as the consumer’s individual terms were augmented to include socially-shared, normative terms for the identified relationship template. Several templates previously discussed in the consumer literature were identified in our data, including partnerships and friendships. A hierarchically-arranged relationship in which the firm stood as “slave” to the consumer “master” was also identified. Interestingly, the data failed to support the marriage template evoked most often as the ideal relationship between consumer and brand. Moreover, several templates particular to the consumer relational setting emerged that did not have parallel templates in the interpersonal literature. Prominent among these was the “best customer” template, which characterized a consumer differentiated by heavy purchasing patterns and on whom the firm had conveyed a recognized status of entitlement and special treatment. The rules of this asymmetric, imbalanced relationship were interesting, and included a biased mental accounting of gives and gets. As the relationship template solidified, we saw the manifestation of a final prioritization process in which an overriding “über-norm” governing the relationship at a meta-level was specified. The über-norm for best customers, for example, involved a special, individuated treatment, while the über-norm for partnerships concerned mutual helping. These rule structuring tasks figured prominently in judgments of the severity of relationship breaches down the line.

Relationship Commitment. Our data suggest that transition from engagement to commitment involves the willful performance of consumer behaviors that fall outside of the terms of the contract. Referred to as supra-contracting in the literature (Rousseau and McLean Parks 1992), these extra-role actions exceed minimum contractual requirements and thereby signal the consumer’s desire

to change the operative contract to one with deeper requirements and entanglements. Five types of supra-contracting behaviors were inducted (e.g., word-of-mouth advocacy, gifting, and active customer recruiting). Consumers' extra-role actions provided no direct rewards, yet were clearly executed with expectations for reciprocity. The firm's reciprocation of the consumer's supra-contracting moves set the scene for a normative contract based virtuously on increasing loyalties. If the firm neglected to reciprocate, the relationship stabilized at the operative commitment level. This redefinition of loyalty in terms of mutually-executed supra-contracting behaviors reinforces preliminary findings in the business-to-business literature (Narayandas and Rangan 2004), and shifts conceptual definitions of consumer loyalty from abstract to concrete behavioral lines.

Relationship Disengagement. In this final evolutionary phase, relationships either terminated, what has been referred to as dissolution in life cycle models of relationship development, (c.f. Dwyer et al. 1987) or rolled back to a less committed state. Several sub-processes gave rise to the fundamental "coming to terms" seen as determinant in this process path, during which time the psychological contracts of the consumer and the firm were revealed as misaligned. Contract breach most commonly forced confrontation and misalignment of contracts, though two additional, coincident processes were implicated as well. On the consumer side, evidence of a natural, yet self-serving, process of contract drift (Rousseau and McLean Parks 1992) was revealed, in which the consumer expected more of the firm while decreasing perceptions of their own obligations. Raising the joint probability for misalignment was a second process evident for the firm: opportunistic contracting. In stark contrast to consumers who continuously superseded prior contracts with renegotiated normative terms, firms maintained two contracts: one seemingly aligned with the consumer's evolved contract, as per implicit behavioral reciprocations on the part of the firm's intermediaries, and one that maintained the initial, formal policies of the firm. Thus, while consumers felt that firms acted "as if" they were operating under the evolved normative contract, a contract in which "universal rules" no longer applied to the specific individual, firms never truly relinquished initial contract terms. This "convenient" and "unjustified" reversion (in the consumer's view) to a standardized and obsolete contract was centrally implicated in outright loyalty failures or retreats to lesser relational states. This process reality suggests the ultimate futility of consumers' loyalty contracting efforts, and the potential farce of firm practices for CRM.

Comments of the Discussant

Steve Duck, University of Iowa

Professor Duck closed our session with a reflection on the asymmetries existing between human and commercial/marketing relationships, and a call for deeper consideration on these possible disconnects when applying theory across disciplinary bounds. Duck recommended that consumer researchers consider the following "relationship truisms" and attempt to qualify the distinct nature of the relationship metaphor as it might apply in their own research plans:

Personal relationships are voluntary and bi-directional: is this same power dynamic operative in the marketing field, or is there an intrinsic imbalance regarding relationship initiation and termination activities on the part of consumer or the brand?

Human relationships are inherent and natural: A person enters into a relationship "for the sake of itself." Is there a similar inherent quality to marketing relationships, or are these more instrumental and goal-focused in their stance?

Personal relationships are not time bound; they are essentially open-ended. Is this same longitudinal view adopted in consumer-

firm engagements, or are marketing relationships shorter and decidedly time-constrained? How does this change in time horizon effect evaluations of the marketing relationship and other time-bound phenomena such as intimacy sharing with the brand?

Personal relationships are highly variable experiences, with a lack of clarity, specificity, and demarcated boundaries within any given relationship class. Is this same variability manifest within types of marketing relationships, or are consumers less tolerant of opacity in the marketing domain?

Personal relationships are comprised of bonds and binds, and these "positives" and "negatives" are expected parts of relating. The bonds and binds of a relationship create vulnerabilities which stand as an acknowledged relationship cost. Do consumers harbor similar expectations when entering commercial relationships with firms? Is vulnerability willfully accepted by consumers of the brand?

Personal relationships are generally not bound by explicit, written contracts. In stark contrast, formal policy contracts exist in the consumer realm, and provide legal recourse or redress in the event of contract breach. Is this difference significant? How does it manifest itself and where?

In the personal domain, relationship transgressions are generally confronted with questions, discussion, and a predisposition to forgive and try to move on. Not so in the marketing realm where communication surrounding a breach is hardly a given, where forgiveness appears rarely as an option or perhaps not at all, where the tendency is to act versus discuss and clarify. How should we alter our theories of transgression response?

Human relationships are social construals: they happen in cultural context, as defined by the rules of the cultures in which they are manifest. What is the social context for marketing relationships? What norms for appropriate behavior exist; what expectations have been set?

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Interpretive Research: Lessons from the Field and A Report from the World of Practice

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SESSION OVERVIEW

The session is organized around the practice of interpretive research and its application to real world issues.

The first objective is to share the knowledge and experiences of three well-trained anthropologists and interpretivists who have been using qualitative research methods in the field. In the past twenty years or so, academic consumer research has witnessed a proliferation of methods and research tools and ontologies that derive from an interpretivist orientation. These tools are now being put into practice with some interesting results, sometimes encouraging and other times less so. The questions that this session poses are: What are the factors that account for the successful use of qualitative techniques in world of practice? What are the challenges that go with it? What lessons can be drawn from the field and where do we go from here? In one sense the session is aimed as a report to the world of academics who may not have such a direct or sustained experience in applying their methods to advance their research knowledge and an opportunity for them to reflect on the impact of their work on the social world.

The second objective is, as consumer technologies proliferate and consumers are confronted with the latest technological gadgets, to develop a profound understanding of these technologies in the domain of popular culture, locally and globally. The presenters focus on the use of interpretive research as they try to unravel consumer experiences relative to technology adoption and consumption.

There are several ways to describe what this session is all about. At one level it is a feedback to the academic world. At another level, it is a way to bridge the gap between theory and practice. At a more technical level, it can be described as praxis, as the integration of theory and practice, and a deep understanding of the complexity of social interactions in society. The process of praxis allows reflection on reality, with mutual understanding evolving from dialog, which in turn is aimed at eliminating the dichotomy between theory and practice. Praxis is always action and reflection: they occur simultaneously. It is this dialectical relationship that offers the possibility of resolving the conflicts that often arise between critical theorizing and action.

PAPER PRESENTATIONS

The first paper uses a combination of ethnography and semiotic analyses in technology advertising. As the authors state succinctly, "in this paper, we consider both the substance and the boundaries of technology as a symbolic construct through the semiotic analysis of different sets of advertising." The paper concludes with the practical implications of their work and the impact of their analyses on marketing practice.

The second paper focuses on meanings of technology in cross-cultural settings. The author uses the term, "translocal," to problematize how global diasporas and the continuous movement of people and ideas around the world call into question the association of culture with place. To quote the authors, "this paper draws on an example from international market research to show how local, global and translocal interpretations of technological innovation shape effective communications with brand managers."

The third paper raises the broader issue of how ethnographic methods are becoming part of corporate marketing research in large corporations such as H-P, Whirlpool, 3M and J.C.Penney, and yet

create some challenges for anthropological research. Thus the issue raised in the paper in the words of the author is, "For the most part, ethnography has gained acceptance as a research method, but it is not usually accompanied by the philosophy or holistic approach which is a hallmark of anthropological inquiry." The author provides some deep insights into this anthropological tension in the practice of consumer research.

"From Door Knobs to Cars: Semiotics of Technology in Advertising"

Rita Denny, *Practica Group, LLC*

Patricia Sunderland, *Practica Group, LLC*

In the last decade, ethnography has become almost standard practice in applied marketing research. For anthropologists in marketing, ethnography is grounded in cultural analysis. *The traditional anthropological method used to illuminate cultural categories, cultural domains and cultural practices, ethnography in applied marketing has been a way for brand managers or agency planners to reconstrue and rethink marketing problems— whether branding, new positioning or new product development. This paper extends the scope of cultural analysis from ethnography to semiotics as an additional venue for re-thinking consumers and consumption.*

Semiotic analysis is not new to the academic advertising (Bignell, 1997; Cook, 1992; Goldman, 1992, Mick 1997) and market research communities (Arnold, Kozinets and Handelman, 2001; Larsen, Mick & Alsted, 1991; Mick, 1986; Nadin Tanaka, 1994; Umiker-Sebeok 1987) or even popular culture (New Yorker, 2001). Nonetheless, semiotics is not common practice in applied marketing research in the U.S. Indeed, in part because ethnography itself is all too often applied as a method rather than form of (cultural) analysis (Sunderland and Denny, 2003), semiotic analysis can seem jargon-laden (see Mick, 1997) and too far afield of brand managers' practical needs.

While semiotic analyses can and do reflect a spectrum of theoretical perspectives brought to bear in the analysis—including psychological, linguistic, folkloric, literary—our vantage point is a cultural one. Semiotics in anthropology has a rich tradition in which texts produced by the culture are a focus for illuminating symbolic and cultural meanings (see Barthes, 1972; Daniel, 1984; Goffman, 1979; Handler and Segal, 1990; Lutz and Collins, 1993; Martin 1987, 1994; Mertz and Parmentier, 1985).

This paper explores the utility of semiotic analysis in applied marketing. It does so through the lens of technology, in which we treat technology as a cultural construct of today's world. Technology is a preoccupation of popular culture, lived and experienced today through computers, cell phones, the internet, broadband or digital imaging. In the living, technology has become a symbolic arena for re-constructing how we see ourselves (Turkle, 1984, 1995, 1997) and our spaces (Denny and Sunderland, in press; Nippert-Eng, 1996; Venkatesh, 1998; Venkatesh et al. 2001). As both a practical and symbolic construct, technology has been studied ethnographically. In this paper we consider both the substance and the boundaries of technology as a symbolic construct through the semiotic analysis of different sets of advertising. Our goal is to illuminate culture through advertising and, in the end, to demonstrate how semiotics offers a new way of thinking for brand managers or agency planners. More specifically, we explore 3 case examples:

- The boundaries of technology and nature: Car ads in New Zealand
- The boundaries of technology and art: Faucets and fixtures advertising in the U.S.
- The boundaries of technology and biology: Skincare advertising in the U.S

In each case we illustrate how technology, as a symbolic or cultural category, is nuanced through the analysis of advertising and, in each case, how technology lives and is in tension with other cultural realms. Finally, we discuss how each analysis was used by clients to re-think their marketing dilemmas.

“Local and Translocal Meanings of Technology—When Does It Matter?”

Maryann McCabe, Cultural Connections

Applied consumer research has passed the threshold of learning to cross cultural boundaries. Global brand managers are savvy enough to know that successful marketing requires positioning products/services within the context of local meaning (Mazzarella 2003). Marketing skill to position in foreign countries stems from a cultural understanding of a particular place which ethnography has often provided (Watson 1997). However, global diasporas and the continuing movement of people and ideas call into question the association of culture with place. Translocal solidarities defy the culture/place connection (MacGaffey and Bazenguissa-Ganga 2000). This paper applies recent ethnographic knowledge of people living in different domains of meaning (a translocal domain and the domain of meaning in a host culture) to consumer commerce because learning to translate from one domain to the other offers brand managers opportunity to identify the sphere critical for successful communication with consumers.

Grasping multiple domains of meaning is key to developing communication strategy for many markets. Yet, it seems hardest to do when the market involves one’s own culture. This is especially the case for positioning and communication focusing on technological innovation. There are two reasons for this difficulty. One is that when studying behavior in one’s own society, one is quickly prone to assume the meaning of what people say and do. The analytic problem created here is that the assumed meaning may *or may not* reflect the subjective meaning of the other’s behavior. The other reason is that technological innovation is a potent and multivocal symbol with contested meanings (Turner 1967). What may not be readily apparent is that customers can interpret a symbolic construct like technological innovation from different domains of meaning. Which domain is key to communications strategy? Because knowledge is situated (Said 1978), it is important to interpret all domains and pinpoint the key operative one in order to connect with customers at the most powerful emotional level. To talk from the ‘wrong’ domain would be talking past the customer (Ortner 1999).

This paper draws on an example from international market research to show how local, global and translocal interpretations of technological innovation shape effective communications. Customers live in several realities when it comes to thinking about technological innovation. These realities pertain to collective and personal identities (Foster 1999), or national and workplace cultures—or, a translocal culture.

The purpose of sharing the example is to demonstrate the separation of culture and place and the need for understanding separate domains of meaning when a target is part of a culture not joined by place. Managers may work for different entities (corporations, professional firms, etc.), but they form a translocal culture

in that they have a common professional identity. Translocality raises the issue of imagined communities of belonging that cut across geographic boundaries (Anderson 1983, Appadurai 1996, Inda and Rosaldo 2002). Thus, this paper brings to light the existence of and tension between different domains of meaning (local/global/translocal) motivating behavior within groups defined by either an imagined or geographically situated sense of community. The implications for brand managers, if we think of them as managers of symbolic meaning, is to determine what part of customer identity drives consumption.

“What’s Anthropological about Corporate Ethnography? Lessons from the Field”

Norman Stolzoff, Ethnographic Insight, Inc.

This paper explores the challenges and successes of incorporating ethnographic methods and the broader anthropological mindset into the consumer research context. These reflections are based on lessons I have gained after more than five years experience conducting ethnographic research for the high-tech industry with companies such as H-P, Whirlpool, 3M, and JCPenney.

The paper focuses on the cultural divide that separates the academic and corporate approaches to ethnography, and seeks to understand what has been gained and/or lost in the relatively rapid adoption of ethnography for market research ends. That is, what are the challenges of adapting ethnography to fit corporate time-tables, budget constraints, and familiar market research customs?

While there has been a general openness to new methodologies in the market research world over the last few years (such as rapid growth of online surveys and ethnography), it’s much more difficult to have an impact on the fundamental research process, the overall way that companies think and utilize research. In fact, there is very little understanding within companies of the role of market research in the enterprise and much less about the introduction of these new methodologies.

For the most part, ethnography has gained acceptance as a research method, but it is not usually accompanied by the philosophy or holistic approach which is a hallmark of anthropological inquiry. In too many cases, ethnography is new wine in old bottles. While companies yearn for fresh ways of getting beyond focus groups and other consumer research methods, they often demand that ethnography not challenge their comfort zone. For example, they demand that ethnography be “staged” in a manner they are familiar with such that they all but resemble the focus groups they are trying to get beyond. Frequently, the looser qualities of ethnography (such as participant observation), which are in fact its core strengths, are all but eliminated in the name of convenience and control.

In conclusion, the paper argues that a more full-bodied anthropological approach to ethnography would serve companies with more of the consumer insights they so desperately need.

The Roles of Perceived Value, Perceived Equity and Relational Commitment in a Disconfirmation Paradigm Framework: An Initial Assessment in a 'Relationship-Rich' Consumption Environment

Rosidah Musa, Universiti Teknologi MARA
John Pallister, Cardiff University
Matthew Robson, Cardiff University

ABSTRACT

Investigations to unravel the determinants of customer satisfaction are crucial to elucidating the role and significance of the construct and advancing management practice. Accordingly, our study investigates the drivers of customer satisfaction and its impact on behavioral intentions in the direct sales channel context. A conceptual model was developed and tested, which integrates perceived value, perceived equity and relational commitment into the disconfirmation framework. The findings suggest performance is the key driver of customer satisfaction at the subsystem level, while perceived value plays the leading role in influencing customers' overall satisfaction. Further, two new paths—perceived value to relational commitment and perceived value to perceived equity—neglected in prior research were established. The discussion of our findings reveals important implications for future research and management practice.

INTRODUCTION

Not only is customer satisfaction regarded as a valued outcome of good marketing management (Malthouse et al. 2004), its maximization has emerged as a top priority strategy for most business organizations (Fournier and Mick 1999; Woodruff 1993). This tenet of customer-orientation philosophy has become a fundamental basis for continuous improvement of mainstream business practice (Grigoroudis and Siskos 2002; Mittal and Kamakura 2001). Research evidence has discovered customer satisfaction is essential in realizing desired outcomes such as customer loyalty, customer retention, and ultimately profitability (e.g. Burnham 2003; Kassim 2001). It comes as no surprise that there has been resurgent interest in understanding the impact of customer satisfaction on customer loyalty and firm performance. However, the pragmatic and theoretical value of customer satisfaction is limited by the fact that our understanding of what makes customers satisfied remains equivocal (Bloemer and Odekerken-Schröder 2002). Hence the primary goal, and main contribution, of our study concerns highlighting drivers of customer satisfaction.

A second contribution of our work is that we identify determinants, and explore the role, of customer satisfaction in the context of direct sales channels. Despite being the 'bread and butter' of several well-known companies (e.g. Avon and Tupperware) and a vibrant and increasingly prevalent mode of distribution (Laggos 1998) with significant socio-economic implications for the firm (Berry 1998; Crossens 1999; Endut 1999), direct selling¹ has been undervalued in the retailing literature. Indeed, it was reported recently that in several countries the direct sales industry is growing at a faster rate than conventional shop-based retailing (Berry 1998).

¹Direct selling is a method of distribution of the consumer product through personal, face-to-face (direct seller-to-customer) sales away from fixed business locations such as retail stores. Major modes of direct selling are one-to-one selling at home or the workplace and sales parties at the consumer's home, workplace, or another location.

Yet even though empirical research on customer satisfaction is abundant, satisfaction in the direct sales channel has not been subjected to marked conceptual and empirical scrutiny. Crucially, direct selling is a 'people' business that involves significant personal touch, which implies interaction between the direct seller and customer is paramount (and undoubtedly its strength) (Bartlett 1994). Hence, unlike in prior research, not only do we attempt to predict overall customer satisfaction, but also we investigate two satisfaction subsystems: the product and the direct seller.

The third contribution of the study concerns the integration of perceived value, perceived equity, and relational commitment with insights from the Expectancy Disconfirmation Paradigm (EDP). Our theoretical approach is novel as it attempts to explain customers' overall satisfaction and behavioral intentions by considering the 'traditional' disconfirmation approach within a broader post-consumption behavior framework. On this basis, two paths—perceived value–relational commitment and perceived value–perceived equity—overlooked in prior research were established.

THEORETICAL PERSPECTIVE

The Expectancy Disconfirmation Paradigm

The EDP has dominated consumer satisfaction research since its emergence as a stream of study in the early 1970s (Erevelles and Levitt 1992). According to this perspective, consumers' satisfaction judgments stem from a discrepancy between prior expectations concerning the performance of the product/service and actual performance post-consumption (Oliver 1980; Yi 1990). If performance falls short of expectations, this will yield negative disconfirmation; on the other hand, if performance exceeds expectations, positive disconfirmation transpires. Positive disconfirmation will be realized as satisfaction, while negative disconfirmation translates into dissatisfaction (Oliver 1980). Though EDP has for many years been the dominant theoretical framework for assessing customer satisfaction, as yet no consensus has been reached pertaining to the impact of disconfirmation on satisfaction formation (Erevelles and Leavitt 1992). Spreng and colleagues (1996) suggest it does not provide a complete picture of satisfaction formation.

The Consumption System Approach

Duhaime (1988) observed that existing consumer satisfaction research has focused predominantly on goods and services, and overlooked the importance of the consumption or distribution system in influencing the satisfaction evaluation process. A few exceptions notwithstanding (e.g., Crosby and Stephens 1987; Mittal et al. 1999), the system perspective remains neglected. This lack of emphasis may provide an incomplete understanding of the reality of the consumption of goods or services, since consumption is a process that comprises the evaluation not only of the products consumed but also of the different enterprises which produce, distribute, and service these products (Duhaime 1988, p.53). Considerable research advocates that product satisfaction is affected not only through product evaluation and information, but also through the indirect peripheral influences route, such as interaction

with salespeople (Humphreys and Williams 1996). Crucially, direct selling not only concerns the distribution of consumer products, but also is a high touch approach to which interacting and establishing relationships with consumers is paramount (Bartlett 1994).

Therefore, our study of this 'relationship rich' consumption environment adopts the more comprehensive system approach, with the EDP framework as a theoretical foundation. Specifically, unlike tangible products or pure services, consumption experiences within the direct selling distribution channel are an amalgamation of two significant subsystems: the product itself and the direct salesperson or seller² who provides the product together with a service component.

The Post-consumption Perspective

Many studies of customer satisfaction imply that satisfaction is a sufficiently important and independent phenomenon to merit examination as a single area of study (Olsen 2002; Woodruff 1993). However, emerging evidence suggests that satisfaction may be an integral part of a larger phenomenon, which is the post-purchase evaluation process (Woodruff 1993). Several scholars (e.g., Anderson and Mittal 2000; Day and Crask 2000) have suggested that germane theoretical concepts such as equity, value, and the relational paradigm should be used to cross-fertilize and augment the traditional customer satisfaction framework. In response to this, the current investigation included perceived value, perceived equity, and relational commitment in an attempt to advance our understanding of the antecedents and outcomes of customer satisfaction within a broader post-consumption behavior framework.

THE CONCEPTUAL MODEL

Our conceptual model and hypotheses are depicted in Figure 1. The main elements of the EDP framework are expectation, performance, disconfirmation, and satisfaction (Oliver 1980); however, performance and disconfirmation, but not expectancy, are emphasized as drivers of satisfaction in the model. Performance and disconfirmation alone have emerged as the key predictors of customer satisfaction in extant research (Bolton and Drew 1991). Contrastingly, several studies have unveiled that expectancy itself has no substantive influence on customer satisfaction (Churchill and Suprenant 1982; Kristensen et al. 1999; Yuskel and Rimmington 1998). Moreover, obtaining pre-consumption expectation evaluations would be difficult for any study based on post-consumption assessment (Halstead et al. 1994). This is not to suggest that customers' expectations are unimportant, but rather the current conceptual approach has proven sufficient in previous empirical research (De Wulf 1999; Halstead et al. 1994). There have been various attempts to extend Oliver's (1980) classical EDP framework (e.g. Oliver and Swan 1989), in order to impart more comprehensive insights into customer satisfaction. We contribute to this stream of research by investigating the role of perceived value, perceived equity, and relational commitment in the focal EDP process.

²Direct sellers sometimes referred to as distributors or direct salespeople, are independent representatives of a direct selling company who have the right to sell and facilitate the distribution of the product to the end consumers.

CONCEPTUALIZATION OF CONSTRUCTS AND HYPOTHESES

Conceptualization of the EDP

Perceived performance is the customer's evaluation of product or service performance following the consumption experience. This is consistent with Czepiel's (1990) conceptualization of performance as functional and performance-delivery elements in the customer satisfaction process. Thus, this study defines product performance as subjective evaluation of the core product (i.e., attributes of the focal product), comprising both intrinsic (effectiveness) and extrinsic (packaging) characteristics. Direct seller performance refers to performance-delivery elements including the direct salesperson's characteristics and services offered (Endut 1999; Raymond and Tanner 1994).

Disconfirmation is viewed as a distinct psychological construct resulting from direct subjective evaluation of the disparity between product performance and expectations, in a summary-judgment manner (i.e., we used a scale from "better than expected" to "worse than expected") (Hong and Rucker 1995; Oliver 1980; Tse and Wilton 1988).

Satisfaction denotes the consumer's post-consumption evaluation and affective response to the consumption experience. This concept was conceptualized and assessed at the subsystem and overall abstraction levels (Mittal and Kamakura 2001). At the subsystem level, satisfaction judgments comprise two main aspects: evaluation of product attributes transpires as product satisfaction, and evaluation of the direct seller is realized as direct seller satisfaction. Overall satisfaction concerns the consumer's evaluation of the total consumption experience.

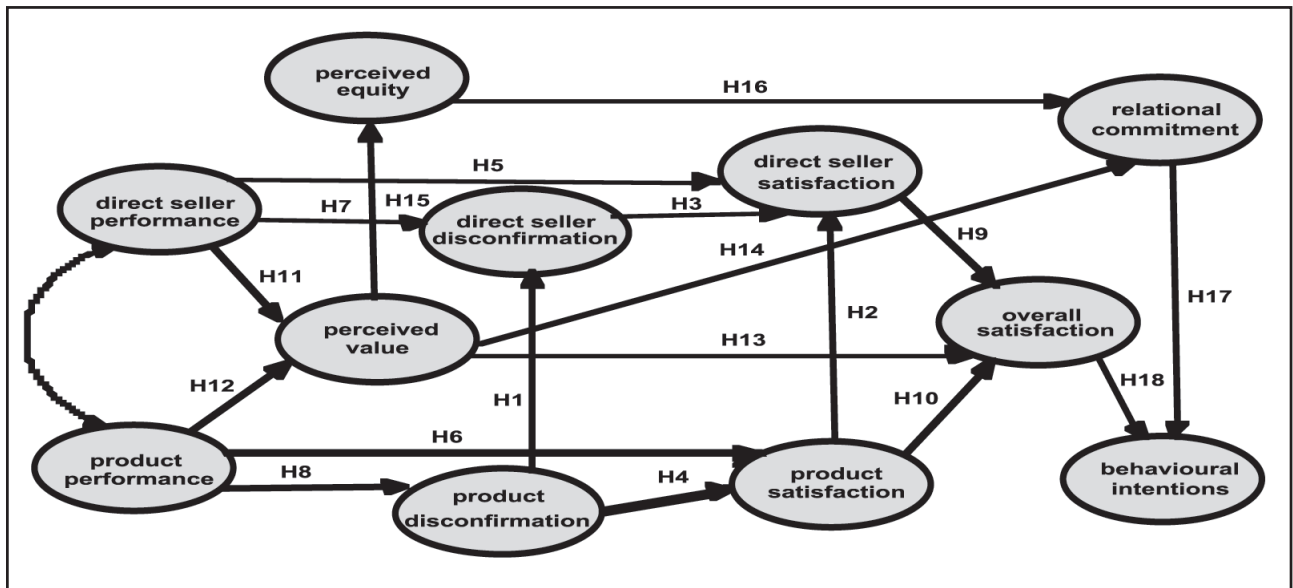
Following Mittal and Kamakura (2001), both performance and disconfirmation were measured at the attribute level and then aggregated to represent the subsystem level (e.g., product performance and direct seller performance). By contrast, satisfaction at subsystem level (i.e., product satisfaction and direct seller satisfaction) is derived from summary judgments of overall product/direct seller performance. Consequently, overall satisfaction is a summary of two satisfaction concepts at subsystem abstractions (i.e., product satisfaction and direct seller) (Mittal and Kamakura 2001).

Crossover Effects

There is evidence within the consumption system approach that product and service subsystems could influence each other; a phenomenon known as 'crossover effects' (Mittal et al. 1999). For example, Oliver and Swan (1989) found that product satisfaction positively influences satisfaction evaluations concerning car dealers, while Crosby and Stephens (1987) revealed that satisfaction with insurance products develops not only through product judgment and information, but also through interaction with the salesperson. However, Crosby and Stephens (1987) go on to illustrate that satisfaction with the core service is not driven by satisfaction with the service provider. Tellingly, for fast moving consumer goods, Westbrook (1981) found a significant positive path from satisfaction with the merchandise purchased from the retailer to satisfaction with the specific retailer. Although no prior research has examined this phenomenon for disconfirmation, we would expect a comparable crossover effect. Hence, the present research empirically examines crossover effects from product to direct seller for both disconfirmation and subsystem satisfaction.³ We advance the following hypotheses:

³We tested the alternative perspective that crossover effects transpire from direct seller to product for both disconfirmation and satisfaction. These paths proved nonsignificant.

FIGURE 1
The Conceptual Model



H1: In the direct sales consumption system, product disconfirmation is positively related to direct seller disconfirmation.

H2: In the direct sales consumption system, product satisfaction is positively related to direct seller satisfaction.

Disconfirmation–Subsystem Satisfaction

Adequate empirical evidence demonstrates that disconfirmation plays a significant role in the customer satisfaction process (Spreng et al. 1996; Tse and Wilton 1988). For example, Patterson et al. (1997) found that the influence of disconfirmation on satisfaction is greater than the influence of performance on satisfaction. Drawing from this evidence, we predict that the disconfirmation–satisfaction relationship exists at the subsystem (product and direct seller) level:

H3: In the direct sales consumption system, direct seller disconfirmation is positively related to direct seller satisfaction.

H4: In the direct sales consumption system, direct sales product disconfirmation is positively related to direct sales product satisfaction.

Performance–Subsystem Satisfaction

That performance is positively associated with customer satisfaction has been established (Halstead et al. 1994; Yuskel and Rimmington 1998). Recent studies strongly argue that performance effects should be modeled directly, rather than through a disconfirmation route (Brady et al. 2002). Referring to these arguments, direct relationships between performance and satisfaction at the subsystem level are hypothesized. Hence:

H5: In the direct sales consumption system, the higher the performance of the direct seller, as perceived by the

customer, the more satisfied he/she will be with the direct seller.

H6: In the direct sales consumption system, the higher the performance of the product, as perceived by the customer, the more satisfied he/she will be with the product.

Performance–Disconfirmation

It is generally conjectured that, all things being equal, the higher the level of perceived performance, the greater the possibility that expectations will be exceeded. Thus there is a positive relationship between performance and disconfirmation (Oliver and Bearden 1985). Accordingly:

H7: In the direct sales consumption system, the direct seller's performance, as perceived by the customer, is positively related to direct seller disconfirmation.

H8: In the direct sales consumption system, the product's performance, as perceived by the customer, is positively related to product disconfirmation.

Subsystem Satisfaction–Overall Satisfaction

Overall or global satisfaction is viewed as 'composite satisfaction', which is specifically derived from satisfaction with facets of the goods or service (e.g., Mittal et al. 1999; Spreng et al. 1996). Crosby and Stephens (1987) posit that overall satisfaction is a function of satisfaction with the core service, contact person, and institution, whereas Rust and Oliver (1994) conceptualize overall satisfaction from the standpoint that product and service elements jointly shape satisfaction. In sum, it appears that evaluations for different aspects of the consumption experience (e.g., product and service) may be summarized together to produce an overall assessment of satisfaction. Consistent with this, we posit that overall satisfaction in the direct sales consumption setting is derived from direct seller satisfaction and direct sales product satisfaction, that is,

two separate yet integrated evaluation processes. We thus hypothesize that:

H9: In the direct sales consumption system, satisfaction with the direct seller experienced by the customer will positively influence his/her overall consumption satisfaction.

H10: In the direct sales consumption system, satisfaction with the direct sales product experienced by the customer will positively influence his/her overall consumption satisfaction.

Performance–Perceived Value

While several authors have presented definitions and conceptual models of value perceptions (e.g., Day 2002; Woodall 2003), minimal empirical research has explored their role within the satisfaction process generally, and the EDP framework specifically. This study attempts to fill this gap by positioning ‘perceived value’ from tangible product and services aspects in a comprehensive customer satisfaction model. It is anticipated that the formation of value by the consumer in the direct sales situation is influenced by the comparative approach (for discussion, see Holbrook 1996). We thus view perceived value as being encapsulated in ‘benefit gains’ from the purchase transaction, psychologically compared to ‘perceived sacrifice’; these take into account both economical and non-economical aspects. In essence, perceived value is framed as a positive assessment of this trade-off in the consumption experience within the direct sales channel, in comparison to making the same purchase from a conventional retail store. This theorizing of perceived value is based on existing findings which suggest that purchasing from the direct sales channel offers specific qualities that are viewed as advantages, despite some sacrifice customers must endure (Endut 1999; Raymond and Tanner 1994). The services marketing literature has noted that technical product attributes and interpersonal processes yield value (Humphreys and Williams 1996; McDougall and Levesque 2000). It is logical to speculate that there might be a positive association between direct seller/product performance and perceived value. Thus:

H11: In the direct sales consumption system, the direct seller’s performance is positively related to the perception of value made by the customer.

H12: In the direct sales consumption system, the product’s performance is positively related to the perception of value made by the customer.

Perceived Value–Overall Satisfaction

Several scholars have suggested a close relationship between perceived value and satisfaction. For example, Fornell and colleagues (1996) posit that perceived value is the main driver of overall customer satisfaction, while McDougall and Levesque (2000) concluded that perceived value is a significant determinant of customer satisfaction and its impact on loyalty works entirely through customer satisfaction. Based on this empirical evidence, it is possible to suggest that perceived value is positively associated with overall satisfaction. Thus:

H13: The perception of value derived from the direct sales consumption experience has a positive effect on overall satisfaction. That is, the higher the perceived value, the higher the level of overall satisfaction.

Perceived Value–Relational Commitment

Consistent with Morgan and Hunt (1994), this study conceptualizes commitment as the direct sales customer’s enduring desire to continue a relationship with the direct seller, accompanied by the willingness to make efforts to maintain it. Patterson and Spreng (1997) noted that, ‘only recently managers and marketing scientists have begun focusing on the hitherto ignored role of consumer value as a key strategic variable to help explain repeat purchase behavior, brand loyalty, and relationship commitment’. However, to our knowledge, no prior research has examined empirically the perceived value–relational commitment link. We firmly believe that when a customer experiences exceptional value in his or her consumption experiences via the direct sales channel, he or she will seek to maintain the relationship with the direct seller. Correspondingly, Johnson et al. (2001) suggested that future research should examine how salespeople create value for customers within the exchange relationship to minimize defections. Direct sellers may enrich customers’ value experiences through the provision of quality products coupled with personalized product services in order to create enduring relational interactions (cf. Crosby et al. 2002). We thus propose that:

H14: The perception of value derived from the direct sales consumption experience has a positive effect on relational commitment. That is, the higher the perceived value, the higher the level of relational commitment with the direct seller.

Perceived Value–Perceived Equity

Equity is a key component in signifying whether or not an exchange is fair (Gassenheimer et al. 1998). We conceptualize perceived equity as the fair treatment received by customers from the direct sellers they bought their products from. It is intuitively reasonable to believe that consumers who perceive that they have received great value from their direct sales channel consumption experiences will also feel they have been treated equitably by the direct seller (Oliver and Swan 1989). We would thus expect a positive association between perceived value and perceived equity; although prior research has not tested this proposition empirically. Hence:

H15: The perception of value derived from the direct sales consumption experience has a positive effect on perceived equity. That is, the higher the perceived value, the higher the perceived equity.

Perceived Equity–Relational Commitment

A customer is less likely to be strongly attached to the exchange relationship if he or she believes the seller’s procedures are unfair (cf. Anderson and Weitz 1992). Given the importance of these concepts for building positive emotions among customers pertaining to their encounters with sellers, it is surprising that only Johnson et al. (2001) have examined and confirmed the positive perceived equity–relational commitment association. Still, empirical research has advanced a positive association between perceived equity and repatronage behavior (Blodgett et al. 1997), which could be viewed as a form of commitment. Undoubtedly, the salesperson plays a key role in the formation of even-handed buyer–seller relationships and the development of customer loyalty (Macintosh and Locksin 1997; Reynolds and Arnold 2000). Hence, we assert that a customer’s relational commitment is a consequence of his/her perception of equity in the direct sales channel:

H16: In the direct sales consumption system, perceived equity is positively associated with relational commitment.

Relational Commitment–Behavioral Intentions

In line with Zeithaml et al. (1996), we posit that the behavioral intentions construct is comprised of favorable intentions (i.e., repeat purchases, making recommendations, acts of price insensitivity, and cross-buying) and unfavorable intentions (i.e., making complaints and product switching). We posit that customers committed to an exchange relationship will engage in behaviors favorable to the firm. For instance, they may continue to shop through the same consumption channel and make multiple purchases over time. Consistent with this assertion, De Wulf and Odekerken-Schröder (2003) found that commitment has a positive significant effect on customer loyalty toward the retailer, while Morgan and Hunt (1994) and Johnson et al. (2001) unveiled that relational commitment has a direct and negative effect on buyer defection intentions. As such:

H17: In the direct sales consumption system, relational commitment is positively associated with behavioral intentions.

Overall Satisfaction–Behavioral Intentions

Prior research (e.g., Bei and Chiao 2001; Cronin et al. 2000; Söderlund 2002) has consistently and continually confirmed a significant positive relationship between satisfaction and behavioral intentions. Indeed, overall satisfaction is popularly viewed as the principal driver of favorable behavioral outcomes. Thus:

H18: In the direct sales consumption system, overall satisfaction is positively associated with behavioral intentions.

RESEARCH METHODOLOGY

The data for this study were collected in Malaysia using self-administered questionnaires distributed via the ‘drop off and collect’ technique. The target population consists of adult consumers (over 16 years of age) who have purchased beauty or healthcare products from the direct seller within the twelve months immediately prior to the data collection period (May–June 2002), and who live or work within the three designated districts: Petaling, Kelang, and the Federal Territory of Kuala Lumpur. A sample of 400 survey respondents was obtained via a quota sampling technique. The ratio of men to women in the sample was set at 1:3, based on extant empirical work conducted in Malaysia and many other countries that suggested women make up a significantly larger percentage of purchasers through the direct sales channel than men (Endut 1999; Sargeant and Msweli 1999). Further, the specific product categories under study (beauty care and healthcare) have a more direct appeal to women.

RESULTS

The measures employed in this study⁴ initially were purified via item-to-total correlation and exploratory factor analyses. The pool of items was further refined using confirmatory factor analysis (via AMOS 4 and the maximum likelihood estimation technique). To achieve an acceptable ratio of observations to estimate parameters, it proved necessary to run two separate measurement models; the fit indices suggest that these models fit the data well.⁵ Items load heavily on their posited constructs and have t-values greater than 7.09. As a rigorous test of discriminant validity (see Fornell and Larcker 1981), the average variance extracted (AVE) for each construct was computed and found to be greater than the squared

correlation between that construct and any other construct in the model. Table 1 presents the correlation matrix, descriptive statistics, Cronbach’s alpha reliability coefficients, and average variance extracted for the measures. It is reasonable to claim that the measures possess adequate psychometric properties.

Structural equation modeling was utilized to test the 18 hypothesized relationships among the constructs postulated in the conceptual model. Due to sample size constraints, composite means were constructed for all the scales and these indices were used as new variables in the structural model evaluation (Settoon, Bennett, and Liden 1996). The structural model has a significant χ^2 value ($\chi^2=206.94$, $df=66$, $p<0.001$), indicating inadequate fit of the data with the hypothesized model. But this is to be expected as in practice this statistic is very sensitive to sample size (MacCallum et al. 1996). All the other fit indices employed (GFI=.93; CFI=.95; IFI=.95; RMSEA=.07) suggest that the model fits the data satisfactorily. Ultimately, the study’s attempt to establish a plausible model that has statistical and explanatory power, which could permit interpretation of results confidently, was successful. Results for the hypothesized structural paths are reported in Table 2.

DISCUSSIONS AND CONCLUSIONS

Contributions and Implications

Investigations to unravel the determinants of customer satisfaction are crucial to elucidating the role and significance of the construct and advancing management practice (Bloemer and Odekerken-Schröder 2002). In light of this, our study investigated the drivers of customer satisfaction and its impact on behavioral intentions, with the view to enhancing managerial applications of this important concept. We propose a new model of the development and influence of customer satisfaction judgments at the subsystem and overall abstraction levels within direct sales channels. This relationship rich consumption setting has largely been neglected in extant customer satisfaction research. And, unlike in prior study, the present investigation used pertinent theoretical concepts including perceived equity, perceived value, and relational commitment to cross-fertilize and augment the traditional disconfirmation framework.

⁴Multi-item scales were used to capture every construct, bar product satisfaction and direct seller satisfaction, which were both assessed using a single item (Mittal et al. 1999). Our scales were modified from those used in other studies: product performance and disconfirmation items from Chen et al. (1998) and Endut (1999); direct seller performance and disconfirmation items from Peterson et al. (1989) and Raymond and Tanner (1994); overall satisfaction items from Crosby and Stephens (1987); perceived value items from VanScoyoc (2000) and Chen et al. (1998); perceived equity items from Oliver and Swan (1989); relational commitment items from Macintosh and Lockshin (1997); and behavioral intentions items from Zeithaml et al. (1996).

⁵The first measurement model contained product performance, direct seller performance, perceived equity, perceived value, and relational commitment. The fit statistics were $\chi^2=696.40$, $df=338$, $p<0.001$; GFI=0.90; IFI=0.92; CFI=0.92; and RMSEA=0.05. The second measurement model contained product disconfirmation, direct seller disconfirmation, product satisfaction, direct seller satisfaction, overall satisfaction, and behavioral intentions ($\chi^2=611.52$, $df=282$, $p<0.001$; GFI=0.90; IFI=0.94; CFI=0.94; and RMSEA=0.05).

TABLE 1
Correlation Matrix

	Mean ^a	SD	α	X1	X2	X3	X4	X5	X6	X7	X8	X9	X10	X11
ProPer (X1)	3.78	0.47	0.70	0.59										
DsPer (X2)	3.67	0.55	0.90	.562**	0.61									
ProDis (X3)	3.44	0.54	0.84	.537**	.403**	0.73								
DsDis (X4)	3.43	0.54	0.91	.405**	.451**	.604**	0.70							
PerEq (X5)	3.87	0.58	0.78	.310**	.399**	.163**	.252**	0.67						
RelCom (X6)	3.49	0.76	0.86	.466**	.456**	.307**	.296**	.459**	0.74					
PerVal (X7)	3.82	0.55	0.82	.564**	.562**	.459**	.424**	.432**	.481**	0.48				
ProSat (X8) ^b	3.89	0.68	0.90	.557**	.368**	.402**	.263**	.242**	.284**	.435**	-			
DsSat (X9) ^b	3.71	0.73	0.90	.473**	.695**	.347**	.375**	.351**	.377**	.475**	.391**	-		
OvSat (X10)	3.67	0.69	0.84	.407**	.433**	.416**	.339**	.367**	.417**	.548**	.430**	.354**	0.74	
BehInt (X11)	3.87	0.58	0.89	.431**	.377**	.376**	.280**	.374**	.423**	.461**	.351**	.326**	.485**	0.55

X1 (Product Performance), X2 (Direct seller Performance), X3 (Product Disconfirmation), X4 (Direct seller Disconfirmation), X5 (Perceived Equity), X6 (Relational Commitment), X7 (Perceived Value), X8 (Product Satisfaction), X9 (Direct seller Satisfaction), X10 (Overall Satisfaction), X11 (Behavioral Intentions)

AVE is represented on the diagonal

**Correlation is significant at the 0.01 level (2-tailed)

^a Represents a minimum value of 1 and maximum value of 5 (on the basis of five-point scale for each variable)

^b Represents a single item construct; Crobach's alpha and AVE are not relevant

TABLE 2
Results of the Hypotheses Tested

	Hypothesized Path	Standardized Coefficient	Critical Ratio (t-value)	Results
H1	Product Disconfirmation → Direct seller Disconfirmation	0.70	10.59 ****	Supported
H2	Product Satisfaction → Direct Seller Satisfaction	0.19	3.54 ****	Supported
H3	Direct Seller Disconfirmation → Direct Seller Satisfaction	0.05	0.93	Not Supported
H4	Product Disconfirmation → Product Satisfaction	0.07	0.74	Not Supported
H5	Direct Seller Performance → Direct Seller Satisfaction	0.66	12.60*****	Supported
H6	Product Performance → Product Satisfaction	0.79	7.36*****	Supported
H7	Direct seller Performance → Direct seller Disconfirmation	0.23	4.09*****	Supported
H8	Product Performance → Product Disconfirmation	0.73	11.24*****	Supported
H9	Direct Seller Satisfaction → Overall Satisfaction	0.13	1.72*	Supported
H10	Product Satisfaction → Overall Satisfaction	0.20	2.63***	Supported
H11	Direct Seller Performance → Perceived Value	0.32	4.88*****	Supported
H12	Product Performance → Perceived Value	0.64	7.76*****	Supported
H13	Perceived Value → Overall satisfaction	0.80	7.57*****	Supported
H14	Perceived Value → Relational Commitment	0.53	6.61*****	Supported
H15	Perceived Value → Perceived Equity	0.61	9.18*****	Supported
H16	Perceived Equity → Relational Commitment	0.31	3.82*****	Supported
H17	Relational Commitment → Behavioral Intentions	0.20	2.94***	Supported
H18	Overall Satisfaction → Behavioral Intentions	0.79	10.38*****	Supported

****Significant at p<0.001 (t>± 3.29) ***Significant at p<0.01 (t>± 2.57)

**Significant at p<0.05(t>± 1.96) *Significant at p<0.10 (t>±1.65)

The results of the current study contravene basic EDP theory, that is, the disconfirmation–satisfaction links in the product and direct seller subsystems were not supported. These findings are rather surprising, given the substantial empirical evidence demonstrating that disconfirmation plays a significant role in the customer satisfaction process (Churchill and Suprenant 1982; Spreng et al. 1996). However, the performance–disconfirmation link for both subsystems was significant and thus congruent with the EDP. Further, our findings provide empirical evidence that performance (not disconfirmation) holds the pre-eminent role in the formation of subsystem satisfaction in the direct sales environment. Several scholars have recognized that the nature of the relationships among variables in satisfaction models hinges on product characteristics (Churchill and Suprenant 1982; Oliver 1997). To this point, Hong and Rucker (1995) demonstrated that performance alone drives satisfaction in the case of high involvement products. Thus, as our healthcare and beauty care products setting is similarly high involvement, perhaps it is to be expected that performance is the most influential predictor of customer satisfaction at the subsystem level.

A second speculative interpretation of these results is that upon closer examination of the respondents' purchasing patterns it could be that the majority of respondents were experienced buyers with this direct sales channel. It is conceivable that the specific purchase transaction examined by this study might constitute a repeat purchase. As such, evaluations of the product and direct seller were based on performance rather than disconfirmation (i.e., discrepancy between perception and expectation). For experienced customers to base their satisfaction judgments on expectations would imply that they were unable to learn from prior consumption experiences (McQuitty et al. 2000).

Another reason for business practice in the direct sales industry to focus their efforts on achieving direct seller and product performance lies in that these constructs are antecedents of perceived value, which appears to be the most important driver of overall customer satisfaction. Notably, the relationships of direct seller satisfaction and product satisfaction with overall satisfaction were significant, but not as strong. To shed further light on these effects, we ran an alternative theoretical model which excluded completely perceived value. We found that the disconfirmation–subsystem satisfaction relationships remained insignificant, and also that the subsystem satisfaction–overall satisfaction relationships did not strengthen. Hence, perceived value did not detract from the explanatory power of the EDP in the present study.

Our results also establish (for the first time to our knowledge) that perceived value is a strong positive predictor of both perceived equity and relational commitment. Further, perceived equity proves positively related to relational commitment. And we ultimately find that relational commitment and overall satisfaction are predictors of behavioral intentions. As expected, the overall satisfaction–behavioral intentions path is especially strong. Yet it would appear that relational commitment in direct sales settings may provide managers with an alternative to overall satisfaction in terms of stimulating consumers' behavioral intentions. This finding is perhaps unsurprising, given that the direct sales approach for beauty and healthcare products patently emphasizes the development of personalized product services and strong interactions and relations between the seller and customer. It is imperative that direct sales companies understand what customers look for in their consumption experiences and are able to offer them a mutually committed relationship if they desire one. Overall, the findings of the study imply that business practice in the direct sales industry stands to gain from placing extra emphasis on developing and maintaining subsystem performance and perceived value as the substructure of their customer satisfaction management efforts.

Research Limitations and Future Directions

A major criticism of the study concerns external validity, as the respondents were not selected randomly, and may not be an accurate representation of the population of direct sales customers. However, it should be noted that aspects of the respondents' consumption patterns and demographic profiles are consistent with the existing literature (e.g., Endut 1999; Peterson et al. 1989). On this basis, the results and interpretations may be generalizable, specifically with regard to the direct sales consumption context in Malaysia and other South-East Asian countries. In fact, Ferber (1977) suggested there is no place for probability samples in basic or applied consumer research, and quota samples are advantageous as they offer the researcher better insights into the background variables that are suitable for quota characteristics. This specific knowledge acquired by the researcher is essential in assessing the generalizability of one's research findings (Lynch 1999). A second pertinent weakness concerns the cross-sectional research design used. Longitudinal research is required to capture fully the dynamic nature of customer post-consumption. Still, efforts to test the present model through sagacious longitudinal research would require an enormous amount of sustained cooperation by consumers serving as key informants over time. Sample attrition through time could be considerable.

It may be fruitful for future research to replicate and validate all or parts of the current model, in order to determine the robustness of the findings in other consumption contexts. First and foremost, comparative cross-national studies are essential in order to examine the generalizability of the model. This research direction appears to be potentially fertile because direct selling is considered a 'universal' phenomenon; apparently, most top direct selling companies, such as Tupperware, Avon, Amway, and Mary Kay, have global business operations. In addition, our evidence of the plausibility of the two new links—perceived value to relational commitment and perceived value to perceived equity—would require validation in other consumer industries, not least conventional in-store retailing and financial services. It is also deemed particularly important that future study assesses whether the focal high touch context was predictive of the role of relational commitment as an alternative to overall satisfaction in increasing consumers' behavioral intentions. And the allied issue of whether the concept of relational commitment, rather than direct seller satisfaction, reflects the nature of relationship rich consumption environments generally, could be fruitfully investigated in future study. On the other hand, the current model might be extended usefully in further research work through the inclusion of behavioral loyalty as a consequence of behavioral intentions (Mittal et al. 1999).

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Perceived Service Quality, Customer Satisfaction, and Intentions

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EXTENDED ABSTRACT

Research has examined a) the conceptual distinction between customer satisfaction (CS) and perceived service quality (PSQ) (c.f. Oliver 1997); b) the causal ordering between them (e.g., Teas 1993); and c) their relative impact on intentions (e.g., Cronin and Taylor 1992). Both PSQ and CS have been conceptualized as transaction specific and cumulative evaluations that result from a number of transactions. However, much confusion remains. The purposes of this paper are to (1) review the conceptual distinctions and causal ordering between PSQ and CS both at the transaction and cumulative levels; (2) develop and test a model that includes both performance and behavioral intentions as well as PSQ and CS.

We adopt the widely accepted proposition that PSQ is primarily a *cognitive* concept, while CS is more *affective*. Parasuraman, Zeithaml, and Berry (1988) and Oliver (1997) defined PSQ as a global judgment of the service, thus treating it as a cognitive construct. In contrast, CS is usually considered to be a more affective concept. There are empirical findings supporting both views. Oliver (1994) found that PSQ was influenced by performance (cognitive judgments) alone, not by affective constructs, whereas CS was affected by both cognitive (disconfirmation) and affective antecedents.

There is considerable debate concerning the ordering of PSQ and CS. Some contend that CS→PSQ based on the assumption that CS is a result of disconfirmation for a single transaction and PSQ is a result of multiple service transactions (Bitner, 1990). Others contend that PSQ→CS. Oliver (1993) suggests that CS is a function of the disconfirmation of expectations, and therefore specifies PSQ as an antecedent of CS. Several studies proposed reciprocal relationships between CS and PSQ, but found only the PSQ→CS ordering to be significant (e.g. Cronin and Taylor 1992). We adopt the view that PSQ is an antecedent of CS. Oliver (1997) suggested a model in which transaction constructs lead to cumulative constructs since cumulative constructs are based on a series of specific transactions.

Model To Be Tested And Hypotheses

Cumulative PSQ and CS are proposed antecedents of intentions. The more satisfied the customer is and the higher the perceived level of service quality over a series of transactions, the higher the level of intentions to repurchase. Several studies found that CS has a stronger effect on intentions than PSQ (e.g., Taylor and Baker, 1994). We therefore hypothesize:

- H1a: Cumulative PSQ will have a positive effect on intentions.
- H1b: Cumulative CS will have a positive effect on intentions.
- H1c: Cumulative CS will have a stronger relationship with intentions than will cumulative PSQ.

Oliver (1997) proposed a model in which transaction PSQ affects cumulative PSQ, and transaction CS affects cumulative CS.

- H2a: Transaction PSQ will be positively related to cumulative PSQ.
- H2b: Transaction CS will be positively related to cumulative CS.

- H2c: Cumulative PSQ will be positively related to cumulative CS.

Research has found a strong direct effect of performance on CS (e.g., Churchill and Surprenant 1982) and PSQ (e.g., Cronin and Taylor 1992). Therefore, we hypothesize:

- H3a: Performance will be positively related to transaction PSQ.
- H3b: Performance will be positively related to transaction CS.
- H3c: Transaction PSQ will be positively related to Transaction CS.

Method

Data were collected from customers of a distribution center of a large state agency. The distribution center is responsible for purchasing and distribution of equipment and supplies. A total of 306 usable responses were obtained. Commonly accepted measures from previous studies were used to measure all constructs.

Results

The reliability and validity of the measures were assessed using CFA and were found to be acceptable based on common standards. The full model was found to have an acceptable fit (GFI=.92; CFI=.98; RMSEA=.07). H1a and H1b were both supported. H1c stated that cumulative CS would have a stronger relationship with intentions than will cumulative PSQ. A chi-square difference test found that there was a marginally significant difference ($p=.091$), partially supporting H1c. H2a, H2b, and H2c were all supported. H3a was also supported. H3b stated that performance would have a positive effect on transaction CS, but this was not supported. Given the common finding that performance is a strong antecedent of satisfaction, we suspected that the effect of performance on transaction CS was completely mediated by transaction PSQ. The criteria for mediation were examined and indicated complete mediation of the effects of performance on transaction CS by transaction PSQ. H3c was supported.

Discussion

The results indicate that the four CS/PSQ constructs can predict intentions, and cumulative CS has a marginally stronger effect on intention than cumulative PSQ. Furthermore, we show that the four constructs are distinct. Our findings also show that transaction PSQ completely mediates the effect of performance on transaction CS.

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The Fading of Optimism: Temporal Changes in Expectations about Product Performance

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EXTENDED ABSTRACT

Product expectations refer to predictions about how good a product's performance will be (Boulding, Kalra, Staelin, and Zeithaml 1993). Consider a consumer trying to choose a disposable camera from a set of competing alternatives. For the chosen camera, the consumer can have expectations about the quality of photographs. Moreover, these expectations can exist both before and after choice. The actual performance, in terms of photograph quality, will be revealed only after the consumer takes pictures and gets the film roll processed. In this paper, we try to understand whether expectations about product performance (e.g., about photograph quality) change over time, from the pre-choice stage to the post-choice stage, before actual product performance is revealed. This paper therefore adds to post-choice research like that on satisfaction (e.g., Oliver 1980) by studying how expectations might change after choice, before performance is revealed.

If no new product information is available after choice (but before performance revelation), the normative answer would be that pre-choice and post-choice expectations should be the same. We challenge this normative notion by drawing predictions from two seemingly divergent theories. On the one hand, dissonance theory (Festinger 1957) suggests that expectations ought to increase after choice since consumers would try to reassure themselves that they chose the right product. On the other hand, research on strategic management of expectations (Kopalle and Lehmann 2001) suggests that expectations ought to decrease after choice since consumers would try to reduce potential disappointment from their products. We show that both these theories hold, but at different points of time. Consistent with dissonance research, we make the prediction that product expectations will increase soon after it is chosen from a set of competing alternatives. Strategic reduction (Kopalle and Lehmann 2001) will occur later, when product performance is about to be revealed. This prediction follows from research showing that optimism fades away when the moment-of-truth arrives (Gilovich, Kerr, and Medvec 1993). For instance, Shepperd, Ouellette, and Fernandez (1996) found that, as the time for exam feedback approached, students' forecasts changed from optimistic to pessimistic. Also, as graduation day drew near, college seniors became less optimistic about the salary they will receive.

A series of three experiments test our theorizing about fading optimism in products. These experiments were conducted using disposable cameras as the product category and photograph quality as the performance dimension for which expectations were measured. A product-by-attribute ratings table comparing three (fictitious) cameras was provided as the sole piece of information. On the basis of this information, participants formed expectations and chose the disposable camera they would like to receive. The performance of this camera would purportedly be revealed when participants see the actual photographs. At the end of the study, participants were debriefed and gifted a branded disposable camera.

Experiment 1 measured expectations about photograph quality at different points in time. Expectations were measured just before choice, just after choice, and just before performance revelation (two days after choice). For half the subjects, expectations about the chosen product were tracked. For the other half, expecta-

tions about the rejected products were tracked. While no pattern emerged for the rejected products, the chosen product showed an inverted-U over time. People became optimistic (i.e., product expectations increased) after choice but this optimism faded away when performance was about to be revealed.

Experiment 2 manipulated the time of performance revelation and provided further evidence for fading optimism in products. On day 1, participants marked pre-choice expectations. Then, on day 8, they chose one product and marked post-choice expectations for it. Before marking expectations however, half the participants believed that they would see the sample photographs (i.e., know the actual performance) a month later, whereas the other half believed that they would get to see the photographs right after the study. The former, performance-distant group, showed optimism after choice. This optimism had faded away for the latter, performance-imminent group.

Experiment 3 tested the hypothesized process. The setting was similar to that of experiment 2 but the manipulation was different. Without changing the temporal distance from performance revelation, participants were made to be concerned either about the choice they made, or about the performance they are going to witness. The former, past-choice group, showed optimism after choice. This optimism had faded away for the latter, future-performance group. Cognitive responses presented additional evidence for our theorizing. When people were concerned about having made the right choice, they tried to re-assure themselves, in line with dissonance theory (Festinger 1957). However, when people were concerned about the performance being disappointing, they tried to keep expectations low, in line with research on strategic management of expectations (Kopalle and Lehmann 2001) and fading optimism (Gilovich et al. 1993).

In addition to helping managers better understand the varying expectations of their consumers, our research also contributes to various theoretical areas. First, we contribute to post-choice research within the marketing area, which has been limited to post-performance processes like that of satisfaction (Oliver 1980). We demonstrate that interesting expectation processes occur post-choice, but pre-performance. Variation in expectations has implications for understanding the expectation-satisfaction relation. Predictions about eventual satisfaction will differ depending on when expectations are measured—just before choice, just after choice, or just before performance revelation. Second, we add to research that suggests that a focus on anticipated satisfaction, rather than choice, can change preferences (Shiv and Huber 2000). We demonstrate that a similar variation in cognitive focus (future-performance vs. past-choice) can also change post-choice expectations. Along similar lines, we also add to temporal construal theory (Liberman and Trope 1998) by demonstrating that predictive judgments like expectations can change based on whether the performance revelation is in the near or the distant future. Finally, we add to the literature on fading optimism (Gilovich et al. 1993) by demonstrating how fading can occur in product situations in which the time of performance revelation marks the moment-of-truth.

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Consumer Categorization and Evaluation of Ambiguous Products

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EXTENDED ABSTRACT

Many new products that are launched in today's marketplace are ambiguous with respect to the product categories that they belong to and possess features of multiple categories (Moreau, Markman and Lehmann, 2001; Business Week, 2002). From a consumer perspective, ambiguous products provide consumers with a choice in terms of the category in which they can place these products. The selection of a product category is very important since categorization impacts the expectations that consumers will hold about the product and these expectations in turn will determine how the product is evaluated.

Despite the prevalence of ambiguous products and the criticality of the categorization decision for these products, little research has examined how consumers categorize ambiguous products. Even less research has examined how categorization impacts the set of beliefs that consumers hold about these products and how these product beliefs drive product evaluations. In the absence of a clear understanding by marketers of the processes that consumers adopt to understand and evaluate ambiguous products, there is little that marketers can do to increase their chances of product success. This article therefore aims at examining the issues associated with consumer understanding and evaluations of ambiguous products and to suggest ways by which marketers can render consumer evaluations of their ambiguous products more favorable.

We begin by examining the interactive nature of different variables on categorization. Specifically, cue type (label versus non-label) and cue order were the two variables considered. We hypothesize that:

- H1: If a category label is provided for an ambiguous product, categorization of and inferences about the product will be based on the category cued by the label regardless of the order of the categories cued by other attributes.
- H2: When no category label is provided, categorization of and inferences about the product will be based on the order of categories cued through attributes.

Further, we examine the linkage between categorization and evaluations and predict that categorization will impact evaluations through product inferences. Hence, only category-consistent attributes will have an impact on evaluations. Specifically:

- H3: Product evaluations will be sensitive to the quality of category-consistent but not category-inconsistent attributes.

Finally, we examine how product inferences about both label consistent and inconsistent categories can be increased. Based on the psycholinguistics literature, we predict that the induction of a property interpretation strategy as opposed to a relational interpretation strategy will lead to multiple category inferences. Specifically:

- H4: Under property interpretations, inferences about the ambiguous product will be from both the head and modifier categories while under relational interpretations, inferences about the product will be restricted to the head category.

Three empirical studies were conducted to test our research propositions. Study 1 examines the interaction of cue type (labels versus non-label attributes) and cue order on product categorization and inferences. We find that category labels dominate other attributes in terms of their impact on categorization and inferences. We also find that in the absence of a label, consumers tend to categorize the product into a single category and make inferences about the product that are consistent with only that category. Hence, simultaneous categorization of an ambiguous product into two categories is not found.

Study 2 examines the impact of product inferences on product evaluations. We find that inferences about label-consistent categories alone drive product evaluations and that the label-inconsistent category attributes play no significant role in evaluations.

Study 3 draws on literature in psycho-linguistics (e.g. Hampton, 1988; Wisniewski, 1997) to overcome this problem of low weighting of inconsistent attributes. We prime respondents with different interpretation strategies and find that when primed with a property interpretation strategy, respondents weight attributes associated with both categories of the ambiguous product during evaluations. When primed with a relational interpretation strategy, respondents do not weight both sets of attributes during evaluations.

From a theoretical standpoint, this research contributes to the literature on categorization and evaluation of ambiguous objects by providing a better understanding of the interactions between various variables (cue order and category labels) in the categorization and evaluation of these products. Further, we combine research from two different literature streams—traditional categorization theories and psycholinguistics—to examine how inferences about one category can be influenced by inferences from other categories. The finding that all product inferences are not derived solely through categorization, but also from the type of interpretation strategy used is a radical departure from traditional categorization theory findings, which predict that inferences are derived from categorization.

From a managerial perspective, this research provides an understanding of the relative impact of different marketer controlled cues on categorization of ambiguous products. We demonstrate that it is possible to prime consumer interpretation strategies so as to control the inferences made about the product by consumers and the evaluations of such products. This research provides a better understanding of the comprehension processes of ambiguous products by consumers and suggests ways by which marketers can promote acceptance of their products.

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The Self Presenter's Paradox: Motivated Reasoning in Impression Formation

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EXTENDED ABSTRACT

One of the most robust findings in impression formation is weighted averaging (Anderson, 1968; see Eagly & Chaiken, 1993, for a review). Although adding mildly favorable to highly favorable information increases the absolute amount of positive information, it produces lower evaluations via the weighted averaging mechanism. Past work, for instance, shows that participants give less favorable evaluations to targets possessing six positive traits, three of which are highly positive and three of which are mildly positive, than they give to targets described with only the three highly positive traits (Anderson, 1968). Mildly favorable information similarly waters down consumers' judgments of household products. Expectant parents, for instance, gave lower ratings to car seats described as "High" in Design Quality and "Above Average" in Convenience than they gave to car seats described only as "High" in Design Quality (e.g., Troutman & Shanteau, 1976).

In the studies reported here, we address the question of whether self-presenters anticipate how evaluators form impressions. In other words, do self-presenters who are trying to present themselves in the best possible light really understand the impressions they are making? Across three studies, we examined the possibility that there are important judgmental asymmetries between evaluators and self-presenters. Based on previous work on impression formation, we predicted that evaluators would use weighted averaging strategies when forming evaluations of targets. In contrast, we hypothesized that psychological factors such as loss aversion would lead individuals in self-presentational roles to fail to intuit evaluators' information processing mind set when designing portfolios. We hypothesized that this inferential failure would lead self-presenters, to their detriment, to include mildly favorable information in their portfolios.

Results across three studies were consistent with predictions. While participants in evaluative roles used averaging strategies to judge manuscripts, job candidates, and consumer products, participants taking the perspective of manuscript authors, job applicants, and marketers made their presentational decisions using "additive" models, leading them to expect to be evaluated more highly after presenting both mildly and highly favorable information.

For instance, in one demonstration participants ($N=102$) in a between-subjects design adopted either the evaluative viewpoint of a selection committee member or the self-presentational role of a job applicant. "Evaluators" judged resumes and "applicants" created resumes. We predicted that evaluators would make favorability judgments that reflected use of weighted averaging. In contrast, we hypothesized that individuals in the applicant's role would make inclusion choices consistent with an "additive" decision rule.

Evaluators read a scenario asking them to take the perspective of a selection committee member judging applicants for a new junior faculty position at a Law School. Evaluators were informed that applicants had submitted portfolios consisting of selected articles they had published in the past. Evaluators then rated portfolios that varied in the quality and quantity of Law Review publications. Those in the one publication condition saw a portfolio with one article published in the Georgetown Law Review that was ranked "7." Those in the two publications condition saw a portfolio with two publications—one in the Georgetown Law Review (ranked "7") and one in the Arkansas State Law Review (ranked "25"). Those in the three publications condition saw a portfolio with three articles, a Georgetown Law Review ("7"), an Arkansas State Law

Review ("25"), and a Ball State Law Review ("32"). Evaluators then judged the overall favorability and intellectual sophistication of the candidates (1=not very; 9=very). Ratings were highly correlated and thus were combined to form a Favorability index.

Applicants read a similar scenario that referenced the applicant's mind set. They were told they had published the three law review articles used in the evaluator/three publications condition and were given ranking information (Georgetown 7; Arkansas State 25; Ball State 32). Applicants were told that they needed to design a portfolio for the position. They were further told that portfolios consisted of selected articles along with the ranking information. "Applicants" then indicated which articles they would include in the portfolio.

Consistent with an averaging prediction, results showed that adding second tier to top tier publications lowered evaluators' favorability ratings. Participants gave the highest ratings to the candidate with only one top tier publication (Georgetown rank 7) ($M=6.68$; $SD=1.55$), gave intermediate ratings to the candidate with one top tier and one second tier publication (Georgetown rank 7; Arkansas State ranked 25) ($M=6.33$; $SD=1.32$), and gave the lowest ratings to the candidate with one top tier and two second tier publications (Georgetown, rank 7; Arkansas State, rank 25; Ball State, rank 32) ($M=5.83$, $SD=1.50$). A regression analysis showed a significant negative linear relationship between the number of publications included and the Favorability index, $b=-.43$, $p<.05$.

In stark contrast, self-role participants failed to anticipate averaging and, to their detriment, overwhelmingly chose to include mildly favorable information (second tier publications) in their portfolios. Out of the 26 people in the applicant condition, a sizeable majority, 69.23%, included all three publications in their portfolio, 19.23% included the top two publications, and only 11.54% included only the top publication, $\chi^2=15.31$, $p<.01$. To uncover the psychological processes underlying evaluators' judgments and applicants' inclusion decisions, participants also explained in a few sentences how they made evaluations/choices. These explanations portrayed an interesting dynamic that was consistent with hypotheses. Evaluators' descriptions suggested a concern with constructing coherent and internally consistent impressions. While the evaluators focused on parsimony, self-presenters tended to explain their choices by focusing on prolixity. Most seemed unaware that the lower ranked articles could possibly detract from their portfolios. Results showed that the majority of applicants did not anticipate the impression formation strategies used by those taking an evaluative role, and begin to address the psychological mechanisms that underlie these asymmetries.

Additional studies extend these results to evaluation and presentation of consumer products while also including process measures that begin to uncover the psychological processes that underlie evaluators' and self-presenters' impression formation processes. Implications of these results for the study of consumer behavior, motivated reasoning, and impression management are also considered.

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My Pet Rock and Me: An Experimental Exploration of the Self Extension Concept

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ABSTRACT

We examine Belk's (1988) construct of self extension experimentally. Participants were given a small rock and randomly assigned to design the rock for themselves or to sell. The participants who designed the rock for themselves were more likely than sellers to say the rock symbolized themselves. Participants whose rock symbolized themselves rated its personality more similarly to their ratings of themselves than did other participants, and were less agreeable to making their rock into a product line of pet rocks. We explore process explanations for our results.

In a compelling essay, Belk (1988) posited that possessions can be extensions of the self. He argued that body parts, ideas, personal possessions, group possessions, people, and places can be woven into one's sense of self. He stated, "The functions that possessions play in the extended self involve the creation, enhancement, and preservation of a sense of identity. Possessions help us at all ages to know who we are" (1988, page 150). The self extension concept has far-reaching implications for consumer research and as such, Belk's essay presents intriguing research possibilities.

Belk's self-extension concept has been widely cited but has not received much empirical attention. It may have received little empirical attention because the self extension concept is amorphous. Cohen (1989) addressed this issue in a response to Belk's essay. Cohen argued that the concept of self extension lacks a concise definition as well as explanatory power. To address this complaint, and to contribute to the possible usefulness of the self extension concept in consumer research, we present the results of an empirical examination of self-extension. In this experiment, we theoretically derived and investigated one possible cause of self extension and two possible consequences. In brief, we gave participants a "pet rock," and examined how designing the rock for themselves, or to sell, affected their attitudes about it.

Theoretical Definition of Self Extension

Several theories suggest that self extension can be defined independently of other concepts that represent people's attachment to, liking for, or admiration of, a product. Self extension also is not the same as the possession of a product or the value attached to a product that one possesses. Rather, self extension implies that a possession has symbolic meaning associated with a person's self identity and definition of self. Belk's argument suggests that a self-extended product symbolizes or represents aspects of the self that the person considers relevant. Likewise, Wicklund & Gollwitzer (1982) discussed the self-symbolizing role that products assume. In Burris and Rempel's (2004) amoebic self theory, possessions can become part of the so-called spatial-symbolic self. Examples of self-extended possessions might be clothing that represents a person's role within a reference group, services (such as hair stylist) that represent the person's unique self presentation to others, or art objects that represent personally significant events in the person's life. In the study we carried out, we explored a simple operational definition of a self extended product—whether or not the participants agreed that the rock we gave them symbolized themselves.

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Sources of Self Extension

Belk suggested several processes that might lead one to extend the self to include possessions, such as controlling a product, becoming attached to a product, creating a product, imitating others, and so forth. A common theme in many such discussions of self extension is that the likelihood of self extension is greatly enhanced if the product is both (a) possessed and (b) personalized. For instance, embellishing a product with personal symbols, using it in personal spaces such as the bedroom, or decorating it with self-relevant messages, should increase self extension. In this study, we held the presence or absence of possession constant—all participants possessed the rock for one week—and we varied participants' instructions to decorate the rock either for themselves or to sell to others. Decorating the rock for themselves, we predicted, increases the likelihood that the participants would embellish the rock with personally meaningful symbols. In turn:

- H1: Participants in the Self condition will be more likely than those in the Seller condition to experience self-extension with the rock.

Consequences of Self-Extension

Cohen (1989) argued that the self extension concept, as articulated in Belk (1988), lacked explanatory power. With this in mind, we examined two plausible consequences of self-extension. First, if possessions are indeed perceived as extensions of the self, then one would expect overlap between peoples' descriptions of themselves and descriptions of possessions that are part of the extended self. For example, people who think of themselves as lively and outgoing might describe clothing or furnishings that are part of their extended selves as lively and outgoing as well. Cohen (1989, pg. 127) suggested that self extension might be revealed in "a substantial perceived linkage between a possession and the . . . representation of [the possessor's] values." In that consumers can bestow brands with personalities (Aaker 1997), and consumers' self-schemata have been shown to influence their perceptions of a brand's personality differentially (Sentis and Markus 1986), we argue that people can project their personalities onto possessions that are part of the extended self. In this study, if the rock were an extension of self then we would predict the personality attributed to the rock would be more similar to the participant's self-described personality than if the rock were not an extension of the self. Thus:

- H2: Participants who feel the rock symbolizes themselves (self extension to rock) will perceive the rock to be more similar to themselves than those who do not feel the rock symbolizes themselves.

Our next hypothesis addressed the boundaries of self-extension, an issue raised by Cohen (1989). Cohen argued that to have explanatory power, the self extension concept would need to put boundaries around the self and differentiate possessions that were part of the extended self from those possessions that were merely highly valued. (For example, people might resist a superior substitute if they feel a possession is part of the extended self but not if the possession is valuable in other respects.) In a recent article on their theory of amoebic self theory, Burris and Rempel (2004) explored individual differences in sensitivity to self-boundary threat for

three levels of self—bodily self, social self, and spatial-symbolic self. In their theory, possessions can be part of the spatial-symbolic self. Although Burris and Rempel did not specifically examine product possessions, through a series of studies they showed that people are differentially sensitive to threats to the boundaries of the spatial-symbolic self. Although measurement of the boundary of the self was beyond the scope of our study, we derived the prediction from the Burris and Rempel work that self-extended possessions are thought to be uniquely ours, and taking a possession that is part of the extended self outside the self-boundary will be perceived as a threat. For example, we might feel threatened if a self-extended possession were moved or copied, just as we sometimes feel this way about ourselves. In the context of our study, we predicted:

H3: Participants who feel the rock is an extension of the self will be reluctant to copy and extend their rock design to a product line.

Alternative Explanations

In our analyses we evaluated four alternative explanations for our hypothesized results. We examined whether the mere ownership effect (Beggan 1992; Nesselrode, Beggan and Allison 1999) and the endowment effect (Thaler 1980) could account for our hypothesized self-extension results. We also examined the role of negative and positive emotional responses to the rock as well as the role anthropomorphism (giving the rock human-like characteristics, such as a head, a body, or a personality) might play on self-extension.

METHOD

One hundred and thirty two undergraduate students were invited to take part in the study for extra credit in an introduction to marketing course. They were each given a manila envelope containing instructions and a Mexican river rock to design as a pet rock during the following week. They were randomly assigned to one of two conditions: the Self condition or the Seller condition. In both conditions respondents were told the history of the pet rock product. Those in the Self condition were instructed to design a pet rock for themselves to keep. Those in the Seller condition were instructed to design a pet rock to sell to others in class.

One week later, all participants returned with their rocks. At that time, they filled out a survey. The variables measured in the survey are outlined in Table 1 along with the theoretical construct each question was designed to measure.

RESULTS

Of the 132 students invited to participate in the pet rock marketing assignment, 108 participants, 54 in the Self condition and 54 in the Seller condition, completed the assignment by turning in a decorated rock and completing the posttest survey. Two participants (one in each condition) failed to read the instructions and did not complete the manipulation check so were removed from the analyses, leaving 106 participants. Many rocks were elaborately and cleverly decorated. Over half of the students gave their rocks a humanlike face; about a quarter of the rocks were designed as animals (e.g., butterfly, mouse, bug), and another 15 percent were turned into statements (e.g., Stars and Stripes, “Free Michael Jackson” sign, a menorah). Figure 1 illustrates these themes. The experimental conditions did not affect the subject matter of the rocks. Also neither gender nor age predicted any of the results reported below.

Check on the manipulations

An item ending the survey checked on the manipulations; participants were asked if their instructions had been to “design a rock to keep” or “design a rock to sell.” The manipulation was highly effective according to a nominal logistic regression testing the effect of condition on responses to this item (L-R $\chi^2=23$, $p<.0001$).

Self extension

As predicted in Hypothesis 1, those in the Self condition ($n=53$) were more likely than those in the Seller condition ($n=53$) to agree, “The rock symbolizes me” (32% versus 15%). A nominal logistic regression indicated these differences are statistically significant (L-R $\chi^2=4.31$, $p=.03$). This measure of self extension is consistent with the view of valued possessions as identity markers “that symbolize who people are, where they have come from, where they belong, and why they are here” (Burris and Rempel 2004, p. 21). Accordingly, “The rock symbolizes me” response was correlated ($r=.32$) with “The rock symbolizes my beliefs.” Correlations were lower between “The rock symbolizes me” and “The rock symbolizes others’ beliefs” ($r=.16$) and “The rock symbolizes a loved one” ($r=.16$). There were no differences between conditions (self/seller) on the other measures of rock symbolization, that is, whether the rock symbolized the participants’ beliefs, others’ beliefs, or a loved one.

We also asked participants whether the rock was special to them personally or special to others. A mixed between (conditions) and within-subjects (item) analysis of variance showed those in the Self condition rated the rock as more special to themselves personally (5.0 vs. 4.7) and as less special to others (2.9 vs. 3.5) as compared with those in the Seller condition (Interaction $F(1, 104)=4.5$, $p<.05$).

Consequences of self extension

We hypothesized that participants who were experiencing feelings of self extension about the rock (defined as rating the rock as symbolic of themselves), would perceive the rock to be more similar to themselves than those who were not experiencing feelings of self extension about the rock. Twenty-four percent of the participants, across both conditions, said the rock was symbolic of themselves. We measured similarity of the participant and the rock as the absolute difference between each participant’s self ratings and rock ratings on 18 personality traits.

Some of the 18 personality traits were drawn from each of Aaker’s (1997) five dimensions of brand personality (sincerity, excitement, competence, sophistication, and ruggedness). We also drew some items from Costa and McCrae’s (e.g., Costa, Terracciano, and McCrae 2001) “Big Five” personality dimensions (cf. Piedmont 1998). Aaker’s competence dimension overlaps with conscientiousness from the Big Five personality dimensions and Aaker’s excitement dimension overlaps with openness to experience from the Big Five. Therefore, we used Aaker’s five dimensions and the three remaining dimensions from the Big Five, namely extraversion, agreeableness, and neuroticism.

We examined Hypothesis 2 by analyzing the effect of the Rock Symbolizes Me (self extension) variable, controlling for experimental condition, on the difference between each participant’s trait ratings of the rock and of himself or herself. We used the log of these difference scores to normalize across the trait items. As can be seen in Figure 2, the difference between the trait rating differences in all scales was in the direction predicted, and overall a repeated measures analysis of variance showed that the self extension effect was

TABLE 1
Dependent Variables and Process Variables

	Dependent variables	Theoretical construct
1	Like rock (7 pt scale)	Mere ownership effect
2	Enjoy decorating rock (7 pt scale)	Mere ownership effect
3	Enjoy arts and crafts (7 pt scale)	Control question
4	Time spent decorating rock (minutes)	Mere ownership effect
5	Desire to sell (y/n)	Mere ownership effect
6	Price if sell (\$)	Endowment bias
7	Rock symbolizes you (y/n)	Self extension
8	Rock symbolizes your beliefs (y/n)	Control question
9	Rock symbolizes loved one (y/n)	Control question
10	Rock symbolizes others' beliefs (y/n)	Control question
11	Rock special for you (7 pt scale)	Self extension
12	Rock special for someone else (7 pt scale)	Control question
13	Rock vs. own trait differences (18 traits, 7 pt scales)	Self extension consequence
14	Rock vs. own trait correlation	Self extension consequence
15	Agreeable to extending rock to product line (y/n)	Self extension consequence
	Process variables	Process construct
16	Rock has face (y/n)	Anthropomorphism
17	Rock has body (y/n)	Anthropomorphism
18	Rock has personality (y/n)	Anthropomorphism
19	Rock can make someone happy (7 pt scale)	Emotional significance
20	Rock can make someone sad (7 pt scale)	Emotional significance
21	Rock can make someone laugh (7 pt scale)	Emotional significance
22	Rock can hurt someone (7 pt scale)	Emotional significance
23	Gender (female=0/male=1)	Demographic
24	Age (yrs)	Demographic

statistically significant ($F(1, 98)=5.5, p=.02$). Those who felt the rock symbolized themselves rated themselves as more similar to the rock than those who did not feel the rock symbolized themselves. There were no significant interaction effects and no effects of experimental condition apart from the self extension variable, suggesting that although being in the Self condition predisposed more participants to adopt a feeling of self extension with their rock (Hypothesis 1), it was the perception that the rock symbolized themselves that led the participants to rate their rock in ways similar to the way they rated themselves.

Another approach to evaluating this hypothesis is to examine the correlations between self trait ratings and rock trait ratings. The higher the correlation, the greater is the similarity of the pattern of ratings between these two rating targets. Because people tend to use

scales alike, regardless of the target rated (response bias) we should expect a positive correlation between ratings of the self and ratings of the rock. Even so, the difference between groups is striking. Among those participants who said the rock symbolized themselves ($n=25$), the correlation between self trait ratings and their ratings of the rock was $r=.51$ whereas among those ($n=81$) who did not say the rock symbolize themselves, the correlation was just $r=.12$.

A third hypothesis, drawn from Burris and Rempel (2004) was that participants would be reluctant to copy and extend their rock design to a product line. We evaluated this hypothesis in the context of a question about marketing the rock: "Consider the rock you decorated. Do you recommend Mr. Dahl [the founder of pet rocks] sell a rock like yours as a single, special pet rock or do you think he

FIGURE 1
Examples of Pet Rocks Designed by Participants

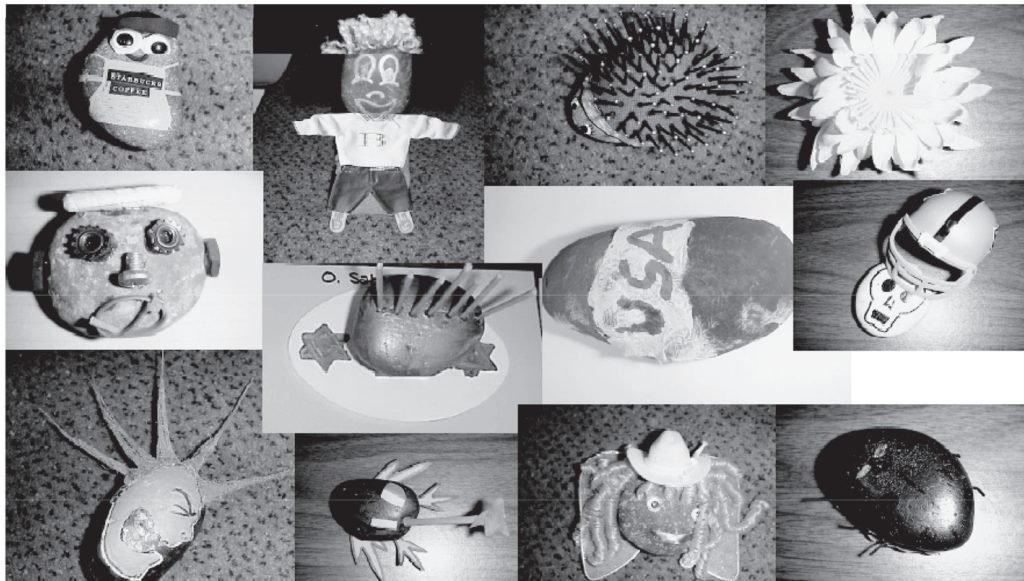
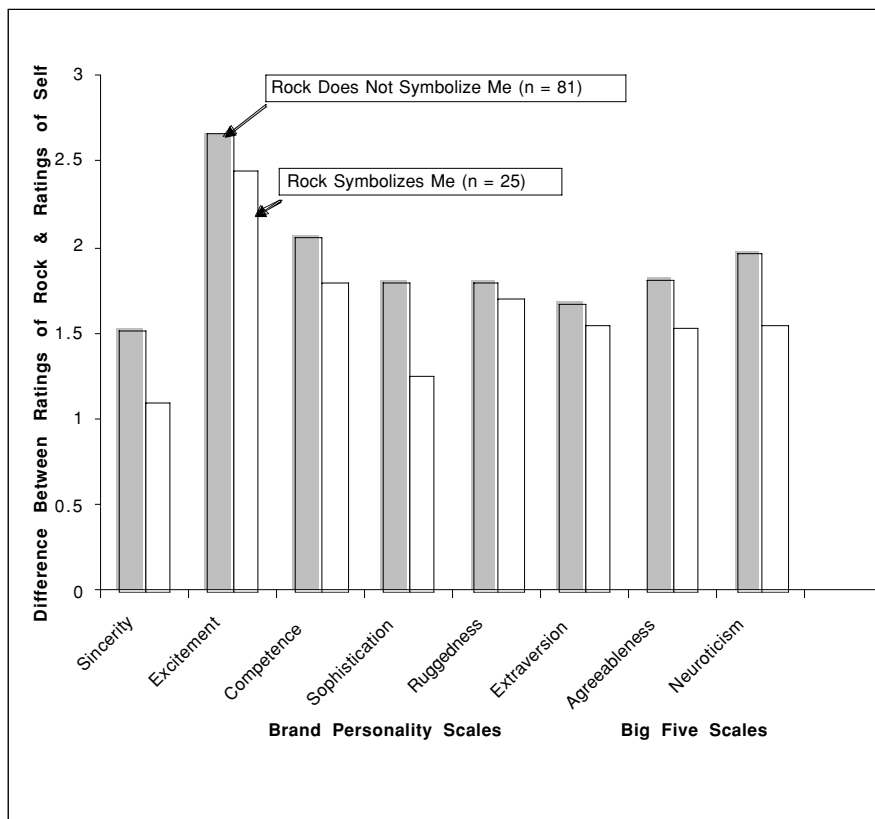


FIGURE 2
Personality Trait Difference Scores, Self vs. Rock



NOTE.—Scales are the mean scores on items. Brand Personality Scale items: Sincerity (cheerful, domestic), Excitement (exciting, daring, imaginative), Competence (reliable, efficient), Sophistication (sophisticated, charming), Ruggedness (outdoorsy, rugged); Big Five Scale items: Extraversion (energetic, outgoing), Agreeableness (trusting, considerate), Neuroticism (moody, nervous). One score (inventive), included in overall analyses but not in these scales, is not shown.

should use your rock as a basis for a special product line of pet rocks? Check one of the following two alternatives. (a) My rock is so unique, you can't extend my rock to a product line. So mine should be sold as a stand alone pet rock. (b) My rock can be extended to become one in a line of similar pet rocks." We predicted that those who had feelings of self extension (Rock Symbolizes Me) would be more likely to choose the first alternative, that is, to say the rock could not become a line of similar pet rocks. The nominal logistic regression analysis showed a highly significant effect of self extension, controlling for experimental condition, on the likelihood of participants saying their rock was so unique, it could not be extended to a similar product line (L-R $\chi^2=12.3$, $p<.01$).

Alternative Explanations

We evaluated several alternative explanations of the results by examining variables that might reasonably explain the effects of the experimental conditions in ways that would not require the self extension concept.

Mere Ownership and the Endowment Biases. Beggan (1992) argues that owners of objects evaluate these objects more favorably than do nonowners. He refers to this effect as the mere ownership effect and he shows that this tendency may result from a self-serving bias (1992, Study 3). Judgments about the self are often enhanced (Ross and Fletcher 1985; Taylor and Brown 1994) and this bias may extend to judgments about objects owned by one's self. Thus, if individuals think of their possessions as extensions of the self then these possessions might be viewed more favorably than if they are not perceived as extensions of the self. Similarly, the endowment effect (Thaler 1980) describes situations in which possession of an object leads to perceptions of higher value by those who possess an object. In a typical experiment, items (e.g., mugs) are randomly given to half of the participants. The participants are then given the opportunity to sell (if they possess a mug) or buy (the nonowners of mugs). The owners/sellers of the mugs place a higher dollar value on the mugs than do the nonowners/buyers. If the endowment effect is related to self-extension then the participants designing a rock for themselves will place a higher dollar value on the rock than will the sellers.

The variables we used to check on these effects were liking of the rock, enjoyment of decorating it (versus enjoyment of arts and crafts more generally), time spent decorating the rock, willingness to sell the rock, and selling price (see Table 1). The analyses of variance on the effects of condition (Self vs. Seller) on these variables did not show any condition effects nor any effects of self extension. These findings suggest that all of the participants valued their rocks about equally, but that those in the Self condition had a more self-relevant perception of the rock and gave the rock a more self-centered value. The findings do not support these two alternative explanations of our results.

Anthropomorphism. Research suggests that people often attribute human-like qualities to their pets. For instance, people readily credit their pet dogs with intentions, emotions, personalities, and preferences (Sanders 1993). The participants in the pet anthropomorphism research have self-selected their pet companion status (e.g., dog owner vs. not a dog owner). In our study, participants all possessed the rock and were randomly assigned to design their pet rock for themselves or to sell. A possible explanation for the self extension results could lie in the form factor of the rock itself. That is, perhaps the spherical rock suggested a head, which in turn led participants to anthropomorphize the rock and attach personal meaning to it that they would not have attached to another less humanlike product. However, experimental conditions did not affect the design of the rock, and putting a face on the rock was

negatively correlated with the measure of self extension ($r=-.15$) and was uncorrelated with putting a body on the rock ($r=-.03$). To evaluate this explanation further, we tested the simultaneous effects of experimental condition and of decorating the rock with a head and/or body, or of giving it "personality" on the self extension dependent variable, Rock Symbolizes Me.

The results of this nominal logistic regression analysis showed that adding these variables only enhanced the effect of the Self vs. Seller condition on the likelihood of self extension (L-R $\chi^2=6.5$, $p=.01$). Decorating the rock with a head independently reduced the likelihood of self extension (L-R $\chi^2=7.1$, $p<.01$), decorating the rock with a body had no effect, and giving the rock a personality independently increased the likelihood of self extension (L-R $\chi^2=6.8$, $p<.01$). These results suggest that imbuing a product with personality may increase the likelihood of self extension but it does not explain the results of our experimental independent variable.

Emotional significance. Emotional processing is implicated in Belk's (1988) discussion of self extension, as well as in studies of the self-symbolizing role of possessions (Wicklund & Gollwitzer, 1982), and more recently in studies of role identity importance (Laverie, Kleine, and Kleine 2002) and in Burris and Rempel's (2004) notion of possession as part of the spatial-symbolic self. Emotions come into play in two ways. First, the possession as extended self can act as an identity and status marker (who am I, how important I am, and so forth). Second, it can head off uncertainty or threat, especially in crisis, by surrounding the person with reassuring trappings.

To explore the role of emotional responses to the rock in this study, we asked the participants if the rock could make someone happy, make someone laugh, make someone sad, or hurt someone. The factor analysis of these items (using Eigenvalues over 1) supported two factors accounting for 64% of the variance: positive emotional response (make happy, laugh; 38% of variance), and negative emotional response (make sad, hurt; 26% of variance). Combining the items into two scales (and using a log transformation to normalize the scores), we explored the role of these emotional responses in self extension. Self extension (Rock Symbolizes Me) was modestly correlated with the positive emotion items ($r=.17$) and uncorrelated with the negative emotion items.

We then pursued a mediation analysis, to test whether emotional responses accounted for effects of the independent variable (Self/Seller) on self extension. For mediation to occur, the independent variable must first be shown to affect the mediator (emotions) and the mediator (emotions) must predict the dependent variable (self extension). The independent variable (Self/Seller) did affect the rock's emotion ratings, according to a test of the between-subjects independent variable and within-subjects test of both emotion scales ($F(1, 104)=5$, $p<.05$). Also, positive emotions (but not negative emotions) affected the dependent variable, self extension (L-R $\chi^2=3.8$, $p=.05$). The next step was to examine whether the attribution to the rock of causing positive emotions could explain effects of the independent variable. This analysis showed that the attribution of positive emotion may be a partial mediator. That is, the effect of experimental condition was reduced when the positive emotion scale (rock can make someone happy, laugh) was added to the logistic regression; the effect of the independent variable (Self/Seller) is reduced to L-R $\chi^2=3.3$, $p=.06$ and there is a marginal effect of the positive emotion scale (L-R $\chi^2=2.9$, $p=.09$). Because we did not manipulate the perception that the rock could affect emotions, there are several plausible interpretations of this finding but it suggests further research on the role of emotional product effects in self extension.

DISCUSSION

There has been some concern that the concept of extended self lacks meaning, empirical identification, and explanatory power (Cohen 1989, page 126). In this study we operationalized self-extension as an individual's judgment that a focal possession "symbolizes me." With this measure, we were able to explore potential causes and effects of one's extended (symbolic) self.

We showed that the simplest of activities, creating a design on a "pet rock," can lead to feelings that the object symbolizes the self. Participants who created the rock for themselves were more likely to say that the rock symbolized them than were participants who created it to sell. When self-extension occurred, we found that personality characteristics were given to the object consistent with the self-rated personality of the self. Consistent with Burris and Rempel (2004), the results suggest that the self has boundaries, within which the self-extended rock fell. These boundaries were represented by the participants' desire to refrain from extending the self-symbolic rock to a product line of pet rocks.

The process by which people extend the self to include objects still needs further exploration. Participants did not significantly differ in the price they placed on the rock (the endowment bias) nor in their evaluations of the rock (the mere ownership effect). We received mixed evidence of the effects of anthropomorphic processes on self-extension. The modest relationship between self-extension of the rock and positive emotions suggests further work is needed, with more than four items to assess the emotional significance of a possession. Finally, further validation of the measurement of self extension is needed.

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Revisiting the Malleable Self: Brand Effects on Consumer Self-Perceptions of Personality Traits

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ABSTRACT

Four experiments examined the relationships between dimensions of brand personality and consumer self-perceptions of personality traits. We hypothesized and found that when consumers are exposed to brands, brand personality dimensions may affect individual assessments of personality traits. Study 1 found evidence that brand sincerity had an effect on ratings of consumer agreeableness. Study 2 showed that brand excitement affected self-perceptions of hedonism, moderated by brand exposure intensity. In Study 3, brand competence had an impact on self-perceptions of sophistication. Finally, in Study 4 results showed that brand ruggedness had an effect on extroversion, again moderated by brand exposure intensity.

INTRODUCTION

The relationship between brands and people has a longstanding history of being a “hotspot” of attention for marketing practitioners and academics alike. Marketing professionals have been interested in the issue in order to “strike the right cord” with the target group (e.g., Ogilvy 1983). Academic interest has evolved around the issue of why people use brands and what role they may play in symbolic and social interaction (Belk 1988). Research efforts have largely focused on the role of brand attributes and their relationship to consumer attitudinal functions (Fishbein and Ajzen 1975). More recently, this line of research has culminated in the development and testing of the concept of brand personality (Aaker 1997). Furthermore, research has since examined the role of these brand personality dimensions in consumer brand choice (e.g., Aaker 1999).

What is unclear, thus far, is whether and under what conditions brand personality dimensions may affect consumer self-perceptions of personality traits. Stated differently, are brands capable of affecting the self-concept, when consumers are exposed to them? In this paper, we will argue that they are. More specifically, evidence will be presented to support the notion that brands with different salient personality dimensions have different effects on consumer self-assessments of specific aspects of their self-concept. In short, we propose the existence of a transfer effect of brand personality traits to consumer personality traits.

In the following section, we briefly review the (limited) empirical evidence on the relationship between brand personality and consumer personality, based on the notion of the malleable self (Aaker 1999; Markus and Kunda 1986). Next, we report a pilot study and four experiments that test the potential of brand personality dimensions to affect the self-perception of consumer traits.

HUMAN PERSONALITY AND BRAND PERSONALITY

A longstanding research tradition in personality (and social) psychology has resulted in the identification of a host of traits that encompass the human personality. Within this plethora of traits, research has identified 5 basic traits that are assumed to constitute a stable and robust structure of personality. This “Big-Five” factor structure includes the traits of extroversion, agreeableness, conscientiousness, emotional stability (or neuroticism) and intellect (Goldberg 1992). In analogy to this factorial composition, Aaker

(1997) has developed and tested a scale to tap dimensions of a brand’s personality. In a series of studies, this author has demonstrated that brands, too, can be imbued with personality traits and that, similar to the Big-Five of human personality, five basic traits can be discerned comprising the personality of a brand, namely sincerity, excitement, competence, sophistication, and ruggedness. Can these brand personality dimensions exert an influence on perceptions of the self-concept? Research on the malleable self (Markus and Kunda 1986) suggests that it can. More specifically, Markus and Kunda (1986) have refuted the traditional view of the self as a stable construct that is invariant across situations and have, instead, suggested that the self is ‘impressionable’ and highly susceptible to situational influence. More in particular, these authors argue that the self-concept functions as a cognitive structure (i.e. a self-schema), much like any other cognitive structure, in which information about the self is organized along several dimensions (e.g., introvert-extravert, individualistic-collectivistic, masculine-feminine etc.). This cognitive structure is sensitive to external activation. For instance, self-presentation concerns may shape the self-concept in different social situations. In a consumer context, Aaker (1999) has found evidence for this notion. Especially for high self-monitoring individuals (highly prone to social cues), her results showed that traits that are made accessible by situational cues may affect consumer brand choice and that different traits that are made salient, can have different effects on brand attitudes. Note that in these studies brand choice and brand attitudes constituted the dependent variables. Research thus far has left unaddressed whether brand personality can act as an independent variable and have a direct impact on aspects of the self-concept. The idea of malleability of the self, put forward by Markus and Kunda (1986), certainly doesn’t rule out this possibility. Moreover, recent research (Donahue and Harary 1998) has found more direct evidence for the influence of external factors on the Big-Five personality structure. That is, these authors have shown that the Big-Five factor structure is not invariant across situations, but instead that different social roles for individuals resulted in different self-perceptions on the Big-Five. In addition, research suggests that consumers can make spontaneous inferences about a brand’s personality (e.g., DeRosia 2001), which supports the notion that brands can function as salient social cues. Translated to the present context, this research suggests that brand personality dimensions, to the extent that they are salient to consumers, can act as situational cues and can highlight (or “prime”, see Bargh 2002) different aspects of the self.

In sum, a transfer effect of brand personality traits on the salience of specific consumer personality traits can be expected. This will be the key hypothesis for the present series of studies. In addition, research on the brand personality itself (Aaker 1997) suggests a more fine-grained set of hypotheses based on conceptual similarities between brand personality dimensions and human-related traits. Aaker (1997) has proposed certain direct links between brand personality dimensions and Big-Five personality factors. More specifically, she has argued (but not tested) that brand *sincerity* is related to consumer *agreeableness*, because both pertain to the aspects of warmth and acceptance. Also brand *excitement* has been posited to be related to consumer *extroversion* since both “connote the notions of sociability, energy and activity” (Aaker

1997, p. 353). Furthermore, *competence* and *conscientiousness* are expected to be related because both encompass concepts such as responsibility, dependability and security (Aaker 1997). In addition, when examining the specific items of the brand personality scale and those of personality inventories such as the Big-Five (Goldberg 1992) and Malhotra's (1981) scale to measure self-concepts, person concepts, and product concepts, a relationship between *competence* and *intellect* is expected, since both encompass markers such as 'intelligent', as well as a relationship between a brand's *ruggedness* and *extroversion* since there is an obvious kinship between the ruggedness items of 'outdoorsy' and 'tough' and the extroversion indicators of 'adventurous' and 'bold'. In the present series of studies we will focus on four of the five dimensions of brand personality (for reasons outlined below).

In sum, this leads to the following hypotheses for each study.

- H1: brand sincerity has an effect on self-perceptions of agreeableness. This hypothesis is tested in study 1.
- H2: brand excitement has an effect on self-perceptions of extroversion. This hypothesis is tested in study 2.
- H3: brand competence has an effect on self-perceptions of conscientiousness and intellect. This hypothesis is tested in study 3.
- H4: brand ruggedness has an effect on self-perceptions of extroversion. This hypothesis is tested in study 4.

For each of these hypotheses an additional interaction hypothesis can be formulated. Earlier it was suggested that brands may affect personality traits if they are made salient as a situational cue. This yields the moderation hypothesis that each of the main effects postulated above, will be stronger under conditions of high salience, that is, when the intensity of exposure to these brand personality dimensions is high rather than low. This interaction hypothesis will also be tested in each of the four experiments.

PILOT STUDY

As a first step in examining the causal relationships between brand personality and human personality, a pilot study was conducted to identify brands from different product categories that varied along the 5 dimensions of the Brand Personality scale (Aaker 1997) and could serve as stimulus material in the series of experiments. To this end, a rating study was conducted in which a total of 100 judges (undergraduate students with a mean age of 24.5 years, $SD=3.33$) were asked to rate a total of 125 familiar brands from four product categories (soft drinks, magazines (titles), automobiles, and clothing). The brand personality scale (Aaker 1997) was used to rate each brand. This scale consists of 42 adjectives (on 5-point scales ranging from 'not at all descriptive' to 'highly descriptive'), encompassing the five basic dimensions of the brand personality construct: sincerity, excitement, competence, sophistication and ruggedness. Sample adjectives include 'down-to-earth' (sincerity), 'daring' (excitement), 'intelligent' (competence), 'charming' (sophistication) and 'outdoorsy' (ruggedness; see Aaker 1997 for a complete listing of the adjectives). With the exception of sophistication, inter-judge reliability (Cronbach's alpha) for these dimensions was sufficiently high to proceed with the analysis (.84, .87, .90, .67, respectively). Because of the failure to obtain a satisfactory reliability for sophistication, this dimension was dropped from further analyses. Hence, in the actual experiments, only the influence of the remaining brand personality dimensions was assessed (i.e., sincerity, excitement, competence, and ruggedness). On each of these dimensions, each of the brands in the pilot study was assigned a score, obtained through summing and averaging the

scores on the adjectives that formed each dimension. The mean scores of all brands for each category were then ranked for each brand personality dimension, which enabled us to select the highest and lowest rated brands for each of the dimensions and across each product category. As a sample of the brands used in the experiments, the results of the pilot test showed that 'Jeep' scored highest and 'Nissan' scored lowest on the brand personality dimension of excitement in the product category of automobiles. For the product category of clothing, 'Pall Mall' clothing scored highest and 'Esprit' lowest on the ruggedness dimension. The selected brands would serve as stimulus material in the series of four experimental studies described next.

STUDY 1

Based on suggestions by Aaker (1997), it was hypothesized that brands that varied in the brand personality dimension of *sincerity* would affect the Big-Five dimension of consumer *agreeableness*. Study 1 was designed to provide a test of this hypothesis. In addition, it was expected that exposure intensity would moderate this effect such that the impact of brand sincerity was larger under high exposure intensity conditions. Moreover, for exploratory reasons, Malhotra's (1981) self-concept scale was included in the current experiment as an auxiliary measure of consumer personality dimensions.

METHOD

Participants and Design

A total of 64 undergraduate students (32 males, 32 females) with an average age of 21.5 years ($SD=2.54$) acted as participants for this study. These individuals were randomly assigned to the experimental conditions. Participation was voluntary. No monetary incentive or course credit was provided. The design of the study consisted of a 2 (brand sincerity: high/low) x 2 (exposure intensity: high/low) between-subjects design. Dependent variables included the agreeableness dimension of the Big-Five personality structure and the Malhotra (1981) self-concept scale.

Procedure

All four experiments followed the same procedure. Upon arrival at the lab, subjects were told that they participated in a study on human differences and similarities. As a first stage in the manipulation of the independent variables, participants were offered a soft drink and a magazine, ostensibly to make them feel more comfortable during their wait for the actual study to begin. Next, they were handed a description of a scenario involving the preparation for a weekend trip. In this description, brand names from several product categories, rated in the pilot test figured prominently. Moreover, the brands described in the scenario were also depicted at the bottom of the scenario. Participants were instructed to imagine themselves in the situation that was outlined to them. This combined procedure enabled us to expose participants to brands from the product categories of soft drinks, magazines, clothing and automobiles. Note that participants were simply exposed to the focal brands but were not presented with any other information regarding the brand personality dimensions to rule out the possibility of contingency awareness on the part of the respondents.

After this, they were handed a booklet containing the dependent measures, a question on the true purpose of the experiment (to control for demand characteristics) and several demographic questions. No participant guessed the real objective of the study. Finally, they were thanked for their participation, debriefed and dismissed.

Independent Variables

Brand Sincerity. In the low sincerity condition, the brand of soft drink and the magazine title were both rated as the least sincere brands in these product categories in the pilot test. The high sincerity brands were the most highly rated brands on this dimension in the pilot test. Furthermore, the brands featured in the situation description were also selected on the basis of their ratings in the pilot test.

Exposure Intensity. In the high intensity conditions, participants were handed two sincere or insincere brands of soft drinks (the two top or bottom ranked brands) and two sincere or insincere magazines (also the two top or bottom ranked brands). They were told that they could use both if they wanted to for a prolonged period of time. In the low intensity conditions, they were provided with only one brand of soft drink and one magazine. Furthermore, in the high intensity conditions, the situation description featured two brands from each described product category, whereas the low intensity conditions featured only one brand from each of the product categories involved. Hence, in the low intensity conditions, participants were exposed to four brands, compared to eight brands in the high intensity conditions. Finally, in the low intensity conditions, participants were exposed to all the brands for 5 minutes. In the high intensity conditions we doubled this exposure time to 10 minutes.

Dependent Variables

Agreeableness. This factor in the Big-Five personality structure was measured using seven 5-point semantic differential scales, derived from the 35-item instrument developed by Goldberg (1992) to measure the Big-Five personality structure. These items were: cold-warm, unkind-kind, uncooperative-cooperative, selfish-unselfish, disagreeable-agreeable, distrustful-trustful and stingy-generous. Cronbach's alpha of this instrument indicated a fairly reliable instrument, although less satisfactory than intended (Cronbach's alpha=.52). Items were summed and averaged to form one agreeableness index.

Self-concept. For exploratory reasons, Malhotra's (1981) scale to measure the self-concept was included in the present study, as well as in each of the following three experiments. This scale consists of fifteen 7-point semantic differential scales (rugged-delicate, excitable-calm, uncomfortable-comfortable, dominating-submissive, thrifty-indulgent, pleasant-unpleasant, contemporary-noncontemporary, organized-unorganized, rational-emotional, youthful-mature, formal-informal, orthodox-liberal, complex-simple, colorless-colorful, modest-vain).

Although the original scale was intended as a multidimensional scale and items belonging to specific dimensions were not reported, a factor analysis was performed on the data of all four experiments for data-reduction purposes. This factor analysis resulted in a 5-factor solution accounting for 56% of the variance in the items. Reliability for four of the five factors was generally satisfactory. These five factors were labeled as "hedonism" (pleasant-unpleasant, uncomfortable-comfortable, contemporary-noncontemporary, colorless-colorful, orthodox-liberal, Cronbach's alpha=.62) "assertiveness" (excitable-calm, modest-vain, dominating-submissive, Cronbach's alpha=.54), "maturity" (youthful-mature, organized-unorganized, formal-informal, Cronbach's alpha=.55), "sophistication" (rugged-delicate, rational-emotional, complex-simple, Cronbach's alpha=.64) and "indulgence" (thrifty-indulgent). Based on the questionable reliability of the indulgence dimension, which was indicated by only one item, it was decided to drop this from further analyses, and to retain only the hedonism, assertiveness, maturity and sophistication dimensions in each of the

present four studies. Although not identical to the Big-Five, a comparison between the items of the Malhotra (1981) scale comprising each of the 4 dimensions with the items that comprise the Big-Five personality traits, revealed some kinship between both instruments. More in particular, assertiveness is akin to what Goldberg (1992) termed the introversion-extroversion dimension, and maturity appeared similar to conscientiousness. Finally, sophistication is related to the trait of intelligence from the Big-Five (alternatively termed sophistication as well by Goldberg 1992).

RESULTS AND DISCUSSION

To test the hypothesis that brand sincerity affects the consumer's assessment of his/her own agreeableness, a full factorial ANOVA was conducted on perceptions of agreeableness. This analysis yielded a main effect for brand sincerity ($F(1,60)=5.57, p<.05$), no other main or interaction effect was significant. Inspection of the means revealed that, as expected, exposure to sincere brands resulted in subjects rating themselves as more agreeable ($M=3.9$) than when they had been exposed to less sincere brands ($M=3.6$). On the self-concept dimensions, no significant main or interaction effect emerged.

These findings provide direct evidence corroborating the notion that a brand's salient personality can act as a social cue and can affect perceptions of the self-concept. Contrary to expectations, exposure intensity did not moderate this effect, suggesting that sincerity affects the self-concept regardless of whether the individual is exposed minimally or intensively to the focal brands.

STUDY 2

Previous research (Aaker 1997) has suggested a relationship between the brand personality attribute of excitement and the human (Big-Five) personality trait of extroversion. Hence, the present experiment was designed to assess whether brands that varied in the brand personality dimension of excitement would affect self perceptions of the Big-Five dimension of extroversion. Moreover, and similar to Study 1, we assessed whether exposure intensity would moderate this effect. In addition, based on Malhotra's (1981) self-concept scale, the dimensions of hedonism, assertiveness, maturity, and sophistication were included to examine whether any of these dimensions would be influenced by brand excitement. Since excitement directly pertains to a product's hedonistic value, this would constitute a plausible candidate dimension to be affected by this dimension. Moreover, we expect this effect to be particularly strong under conditions of high exposure intensity.

METHOD

Participants and Design

The sample for this study consisted of 64 undergraduate students (32 males, 32 females; $M_{age}=22.1, SD=2.93$) that participated in a 2 (brand excitement: high/low) x 2 (exposure intensity: high/low) between-subjects design. Dependent variables included the extroversion dimension of the Big-Five personality structure and the dimensions of hedonism, assertiveness and maturity from the Malhotra (1981) self-concept scale.

Procedure

The procedure was similar to Study 1 with participants first being offered a soft drink and a magazine and then asked to imagine oneself in the scenario that was presented to them next. Finally, participants completed the questionnaire containing the dependent measures, a question on the true purpose of the experiment (which no one guessed) and several demographic questions.

Independent Variables

Brand Excitement. Similar to Study 1, the low excitement condition featured brands of the four categories that were rated as the least exciting brands in these product categories during the pilot test and the high excitement brands were the most highly rated brands on this dimension.

Exposure Intensity. Manipulation of this independent variable was identical to the procedure used in Study 1. Hence the number of brands was varied (one vs. two per product category) as well as exposure time (5 vs. 10 minutes) to create conditions of low versus high exposure intensity.

Dependent Variables

Introversiion-Extroversion. This Big-Five personality factor was measured using seven 5-point semantic differential scales, derived from the 35-item instrument developed by Goldberg (1992) to measure the full Big-Five personality structure. These items were: introverted-extraverted, unenergetic-energetic, silent-talkative, timid-bold, inactive-active, unassertive-assertive, unadventurous-adventurous. The reliability was highly satisfactory (Cronbach's $\alpha=.79$). Items were summed and averaged to form one agreeableness index.

Self-concept dimensions. In similar vein to the procedure used in Study 1, the present experiment included the four dimensions derived from Malhotra's (1981) self-concept scale: hedonism, assertiveness, maturity, and sophistication.

RESULTS AND DISCUSSION

Contrary to expectations, on the Big-Five dimension of introversion-extroversion, no main or interaction effect emerged. However a MANOVA on the four self-concept dimensions yielded a significant multivariate interaction effect between brand excitement and exposure intensity ($F(4,57)=2.47, p<.05$). Additional inspection of the univariate results, revealed that the interaction occurred on the self-concept trait of hedonism ($F(1,60)=6.34, p<.01$). More specifically, especially under conditions of high exposure intensity, the exposure to exciting brands induced higher ratings of one's hedonism ($M_{\text{High excitement brand}}=5.75$) than exposure to less exciting brands ($M_{\text{Low Excitement brand}}=5.36$). This differential impact was less pronounced under conditions of low brand exposure intensity ($M_{\text{High excitement brand}}=5.43$ vs. $M_{\text{Low Excitement brand}}=5.71$). Simple main effect analyses showed that only the first contrast was significant ($F(1,60)=4.18, p<.05$), but the second was not ($F(1,60)=2.30, n.s.$). Hence, we may conclude that brand excitement did not have an impact on extroversion, but only affects ratings of the self-concept dimension of hedonism when individuals are heavily exposed to brands with a salient excitement personality dimension, not when this exposure intensity is low.

STUDY 3

In addition to previous research (Aaker 1997) that has suggested a relationship between a brand's competence and the Big-Five dimension of conscientiousness, an inspection of the markers that make up the competence dimension in the Brand Personality scale, suggests a relationship with the Big-Five dimension of intellect (or sophistication). Hence it is expected that competence affects both conscientiousness and intellect. In addition, based on the analogy of this latter personality dimension to the self-concept dimension of sophistication derived from the Malhotra (1981) scale, an effect on this dimension is also plausible. Similar to Studies 1 and 2, we will assess whether these causal relationships are moderated by the exposure intensity of the brands.

METHOD

Participants and Design

Similar to the previous two studies, 64 undergraduate students (32 males, 32 females) participated voluntarily in the present investigation. The sample had an average age of 22.2 years ($SD=2.99$). These individuals were randomly assigned to the conditions in the 2 (brand competence: high/low) x 2 (exposure intensity: high/low) between-subjects factorial design. Dependent variables included the conscientiousness and intellect dimensions of the Big-Five personality structure and the four dimensions of the Malhotra (1981) self-concept scale (hedonism, assertiveness, maturity and sophistication).

Procedure

The procedure was identical to the procedure in the previous two experiments with participants being asked to imagine a scenario, after offering them a softdrink and magazine. This was followed by completion of the dependent measures and the question checking for demand characteristics and contingency awareness. Similar to the previous studies, no participant guessed the real objective of the study.

Independent Variables

Brand Competence. In line with the previous two experiments, the low and high competence conditions featured brands of the various product categories that were rated as the most and least competent brands in their respective categories.

Exposure Intensity. Manipulation of this independent variable was similar to the previous two experiments by varying both the number of brands (one vs. two per product category) as well as the exposure time of the focal brands (5 vs. 10 minutes).

Dependent Variables

Conscientiousness. In analogy to the procedure used in the previous two studies, this factor in the Big-Five personality structure was assessed using seven 5-point semantic differential scales, derived from the 35-item instrument developed by Goldberg (1992): disorganized-organized, irresponsible-responsible, negligent-conscientious, impractical-practical, careless-thorough, lazy-hardworking, extravagant-thrifty (Cronbach's $\alpha=.87$).

Intellect. This Big-Five trait was also measured using seven 5-point semantic differential scales derived from Goldberg (1992): unintelligent-intelligent, unanalytical-analytical, unreflective-reflective, uninquisitive-curious, unimaginative-imaginative, uncreative-creative, and unsophisticated-sophisticated (Cronbach's $\alpha=.59$).

Self-concept dimensions. In similar vein to the procedure used in the previous studies, the present experiment included the four dimensions derived from Malhotra's (1981) self-concept scale: hedonism, assertiveness, maturity, and sophistication.

RESULTS AND DISCUSSION

A MANOVA was performed on both Big-Five dimensions (conscientiousness and intellect) with brand competence and exposure intensity as factors. However, this analysis did not yield any significant main or interaction effect, although the main effect of brand competence on intellect approached significance ($F(1,60)=2.53, p=.11$). However, a second MANOVA on the four self-concept dimensions revealed a significant (univariate) main effect for brand competence on sophistication ($F(1,60)=5.88, p<.05$), although the multivariate effect failed to reach significance ($F(4,47)=1.42, n.s.$). No other main or interaction effects were signifi-

cant on these dimensions. This main effect demonstrated that, regardless of exposure intensity, highly competent brands yielded higher ratings of sophistication ($M=3.63$) than exposure to less competent brands ($M=3.08$).

Again, the present findings, although not entirely unequivocal, indicate that exposure to brand attributes, even symbolic ones like brand personality factors, have an impact on consumer personality trait assessments. However, similar to the findings of experiment 1, the impact of brand personality on consumer personality was not moderated by exposure intensity, suggesting that high exposure intensity is not a 'conditio sine qua non' for the transfer effects of brand personality to occur.

The final brand personality dimension which impact will be examined will be the ruggedness of the brand. Its effect on consumer personality trait assessments will be tested in the next study.

STUDY 4

To examine whether the ruggedness of brands can be transferred to an individual's assessment of his/her own personality traits, we tested the impact of this brand personality dimension on the introversion-extroversion dimension of the Big-Five. In addition, since it was argued that the concept of assertiveness, as derived from the Malhotra (1981) scale, appears related to this Big-Five dimension, there may also be an impact on the self-perception of assertiveness. Finally, and similar to the previous three studies, we expect these effects to be particularly strong under high brand exposure intensity conditions.

METHOD

Participants and Design

Similar to the previous studies, 64 undergraduate students (32 males, 32 females) acted as voluntary participants for the present study. The sample had an average age of 22.6 years ($SD=3.76$). These individuals were randomly assigned to the conditions and participated voluntarily. The design for the present study was in line with the previous three experiments and consisted of a 2 (brand ruggedness: high/low) x 2 (exposure intensity: high/low) between-subjects factorial design. Dependent variables included the extroversion factor of the Big-Five personality structure and the four dimensions of the Malhotra (1981) self-concept scale (hedonism, assertiveness, maturity and sophistication).

Procedure

The procedure was identical to the previous three studies. Hence, subjects were again told that the objective of the study was to gain insight in human differences and similarities. After being seated, participants were first offered a soft drink and a magazine and then exposed to the same weekend-trip situation description employed in the previous three studies, accompanied by the imagery instruction. Next, participants completed the questionnaire containing the dependent measures, a question on the true purpose of the experiment and the demographic questions. As in the previous three experiments, no subject guessed the true purpose of the study.

Independent Variables

Brand Ruggedness. In line with the previous three experiments, the low-ruggedness condition featured brands of the various product categories that were rated as the least rugged brands in their respective categories (i.e., soft drinks, magazines, automobiles and clothing). Likewise, the high-ruggedness brands were the most highly rated brands on this dimension in the pilot test.

Exposure Intensity. Manipulation of this independent variable was similar to the previous experiments. Hence the number of brands was varied (one vs. two per product category) as well as exposure time (5 vs. 10 minutes) to create conditions of low versus high exposure intensity.

Dependent Variables

Introversion-Extroversion. To measure Introversion-Extroversion, the same instrument and procedure as employed in Study 1 was used.

Self-concept dimensions. In similar vein to the procedure used in the previous studies, the present experiment included the four dimensions derived from Malhotra's (1981) self-concept scale: hedonism, assertiveness, maturity, and sophistication.

RESULTS AND DISCUSSION

An ANOVA performed on the Introversion-Extroversion dimension of the Big-Five with brand ruggedness and exposure intensity as factors yielded only a significant interaction effect ($F(1, 60)=5.17, p<.05$). On the self-concept dimensions no main or interaction effects were found. Inspection of the means of the Introversion-Extroversion dimension indicated that, especially under high exposure intensity conditions, exposure to rugged brands yielded higher ratings of consumer extroversion ($M=3.71$) than exposure to less rugged brands ($M=3.30$). Under low exposure intensity this difference was less pronounced ($M_{\text{High brand ruggedness}}=3.42$ vs. $M_{\text{Low brand ruggedness}}=3.59$). Similar to the results of Study 2, simple main effect analyses indicated that the differential impact of brand ruggedness was only significant under conditions of high exposure intensity ($F(1, 60)=5.25, p<.05$) but not under conditions of low exposure intensity conditions ($F<1$).

These findings indicate that exposure to the symbolic brand attribute of ruggedness, may affect a related aspect of the personality structure of the consumer, i.e. that of his/her extroversion. Contrary to expectations, the related aspect of assertiveness was not affected. A rather straightforward reason for this, may be that the reliability of assertiveness was markedly lower (.54) than that of the Big-Five extroversion dimension (.79). The present findings underscore the role of exposure intensity, similar to the results of Study 2. That is, the impact of ruggedness was stronger when subjects were exposed quite intensively with a relatively large number of rugged brands for a prolonged period of time.

GENERAL DISCUSSION

In a series of four experiments, the present research extends research on the malleable self in persuasion. More specifically, our findings support the notion that the self is not a static, invariant phenomenon, but instead, is malleable and hence susceptible to situational influence (Markus and Kunda, 1986). The present findings show that brands with certain personality dimensions can perform the role of situational stimuli and as such can have an influence on assessments of different aspects of the self-concept. In sum, we found that there exists a transfer effect from brand personality traits to consumer personality traits. Evidence was reported that the brand personality dimension of sincerity affected self-perceptions of the Big-Five factor of agreeableness, and the brand personality dimension of competence affected the self-concept aspect of sophistication (related to the factor of intellect of the Big-Five). Moreover, in two studies, an interaction effect between brand personality dimensions and brand exposure intensity were observed. That is, a brand's excitement dimension only affected the self-assessment of a consumer's tendency for hedonism when exposure intensity was high. Likewise, the impact of

brand ruggedness on the Big-Five factor of extroversion was especially pronounced under high exposure intensity conditions.

The present set of findings attests to the conceptual viability of the brand personality construct developed by Aaker (1997) in that its domains of operation appear to reach beyond the spheres that this author had designed for the concept. More specifically, Aaker (1997) has argued that brand personality dimensions may affect consumer choice behavior as a result of self-expressive needs (i.e., one chooses the brand that is a logical extension of the actual or ideal self). In Aaker's (1997, 1999) research, a person's self-concept remained in its role of independent variable. In present case, this role was reversed and the human personality structure served as a dependent variable. Thus, the present findings point to the – possibly provocative- possibility that the concept of malleability may stretch even further in that brands may directly affect the personality structure of the consumer.

Although these findings underscore the conceptual value of the malleable self (Markus and Kunda 1986) as well as Aaker's (1997) brand personality construct, a few issues need to be addressed. For one, support for the moderating role of exposure intensity was mixed in the present research, since only in two out of the total of four studies, an interaction effect between the focal brand personality dimension and exposure intensity was observed. In retrospect, the type of personality trait and the product attributes it refers to, might explain why the relationship between brand and consumer personality was sometimes moderated and sometimes more straightforward. Brand ruggedness and brand excitement only affected personality assessments under high intensity conditions, whereas sincerity and competence were effective regardless of intensity. It may well be that traits such as brand ruggedness and excitement refer to product attributes that are imagery provoking (e.g., yielding visualizations of outdoor camping and trekking), whereas sincerity and competence have a more pallid, abstract quality. Cognitive psychological research on visual imagery (e.g., Sternberg 1985) has shown that careful imagery processing requires more time than the processing of more pallid information (e.g., it takes time to mentally "scan" a complex object or a series of concrete events, Sternberg 1985). This may explain why both dimensions only affect personality traits when the time for processing was relatively extended (as in the high intensity conditions). Future research might explore this line of reasoning by directly assessing the extent of vividness that each brand personality dimension evokes. Another issue pertains to the fact that in two studies an effect was observed on dimensions adapted from Goldberg's (1992) Big-Five scale and in two other studies on dimensions derived from Malhotra's (1981) self-concept scale. This might be due to reliability indices on some dimensions being less high than is sometimes observed, which decreased the sensitivity of these measures to detect effects of the brand personality dimensions. Although the alpha levels observed in the present research are not uncommon for personality research (see Nunnally and Bernstein 1994), future research might employ other measurement instruments as well as include plausible mediating concepts such as (positive or negative) affect and mood in order to obtain more insight on the internal validity, mediating constructs and external validity of the present findings. On a more conceptual level, qualitative differences between several of the examined personality traits may account for the fact that some of the expected effects were not observed. More specifically, in a recent study on personality structure and job performance, Licata, Mowen, Harris and Brown (2003) argued for a hierarchical model of personality in which some traits (i.e. 'elemental' or 'compound' traits) are more stable (and hence less susceptible to situational influence) than others (i.e., 'situational' or

'surface' traits, see also Mowen, 2004). Following this reasoning, the Big-5 factors may be considered more elemental, which could account for the fact that some of the hypothesized effects were either not observed (i.e., the effect of brand excitement on self-perceptions of extroversion and the effects of brand competence on self-perceptions of conscientiousness and intellect) or demonstrated only to the extent that exposure intensity was high (i.e. the effect of brand ruggedness on extroversion). Conversely, some of the concepts derived from the Malhotra (1981) scale may be viewed as situational traits, which explains their susceptibility to influence from salient brand personality dimensions regardless of exposure intensity (e.g., the effect of brand competence on sophistication). Disentangling the stability or malleability of these different dimensions constitutes an interesting venue for future research. Finally, with regard to the concept of brand personality, recent studies have not always been able to replicate the 5 factor structure proposed by Aaker (1997) which has given rise to alternative classifications of brand personality dimensions (see Azoulay and Kapferer 2004; Caprara, Barbaranelli, and Guido 2001). These conceptual issues may in part provide an alternative explanation of why some of the proposed relationships could not be established.

A final thought pertains to the practical implications of our findings. First, it remains an open question whether and to what extent the results of the present research can be replicated outside the confines of the experimental lab. However, to the extent that they can, the combined results of the present series of studies suggest that brands are capable to "make us who we are", at least in part. That may be more than marketers have bargained for. That is, not only are brands chosen by us as consumers because they highlight some aspect of who we are or want to be, they also *shape* or *highlight* these aspects. Is that troublesome? Possibly. Although this may seem a harmless observation at first glance, practitioners should be cautious in applying these results to market their brands among populations with "immature", or "vulnerable" personality structures such as children and young adolescents. Future research might therefore explore the effect potential of brand personality dimensions among other (vulnerable) populations than those used in the present studies.

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The Influence of Affect on the Perceived Similarity of Preferences Between the Self and Others

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EXTENDED ABSTRACT

Predicting the preferences and attitudes of other people is an important aspect of marketing and consumer behavior. The importance of predicting about others highlights the need for a better understanding of the factors that impact how people predict attitudes and preferences about other people. Despite an increasing interest in how people predict the preferences of others, there has been little effort to investigate how people are affected by the context in which a certain mood is induced. Thus, this paper aims to demonstrate how a person's affective state can influence his or her predictions of others' preferences and aims to investigate the mechanism by which affect influences his or her predictions of other people's behaviors and attitudes.

Two research streams may shed light upon this question. According to research on the interplay of affect and cognition, people in whom a positive mood is induced tend to be better at integrating information, finding relationships among stimuli and generating creative solutions (e.g., Isen and Daubman 1984; Lee and Sternthal 1999). In particular, there is substantial evidence that is in accordance with the view that positive mood affects the extent of relational elaboration and promotes flexibility in categorization. This notion is enforced by the observation that people in a positive mood came up with more similarities between product pairs than did those in a neutral mood.

Another stream of research relevant to our theorizing is that people often allow their own behaviors and attitudes to exert undue influence over their predictions of other people's behaviors and attitudes. In this vein, the self appears to play a pervasive role in people's judgments of others, in that people often assume that others will behave in the same or similar ways as themselves. Thus, they tend to project onto others their own beliefs, attitudes, and predispositions.

Given that the preferences of the self influence how we predict the preferences of other people, this research speculates that mood might have an effect. This speculation is true because positive affect has been shown to prompt relational elaboration and perceptions of similarity more often than negative affect. In other words, happy people can detect similarities better or can perceive broader category membership better than sad people. Therefore, rethinking the process of predicting the preferences of other people (which starts from examining their own preferences and the nature of elaboration for those in a positive mood), we expect that people in whom positive affect is induced will exhibit a greater degree of assumed similarity in preference than will people in whom negative affect is induced.

In addition, a positive mood that enhances relational elaboration will make it possible for people to see the similarities between the self and others. Based on this perception, people will consider that the preferences of others will be similar to their own. Specifically, it is reasonable to theorize that moods affect the overall perceptions of similarity between the self and others. This assumed similarity, then, influences the specific perceptions of similarity in preferences. Therefore, people who are in a positive mood (and thus employ relational elaboration) will most likely be better at finding similarities between the self and others than will people in a negative mood. This constructed perception of similarities (i.e., decreased psychological distance) will have an impact on the

similarity between preferences of the self and others (e.g., "This person is quite a bit like me. I like this product. Therefore, this person will also like this.").

Two experiments were conducted to test the above hypotheses. Experiment 1 aimed to demonstrate whether different types of mood (positive vs. negative) produce variations in the extent to which people assume the similarity of preferences between the self and others. A 2 (affect: positive vs. negative) X 2 (product type: function-based vs. emotion-based) between-subjects design was employed. The results from experiment 1 provided support for our hypothesis. More specifically, people in whom positive affect was induced showed smaller differences between preferences of the self and preferences of others than did people in whom negative affect was induced. Product type did not affect the prediction of the preferences. However, since Experiment 1 did not investigate the process by which positive affect facilitates social projection when people predict the preferences of other people, Experiment 2 was conducted to address this question.

In Experiment 2, a 2 (affect; positive vs. negative) X 2 (question order; psychological distance first vs. similarity of preferences first) analysis of variance was employed, and a mediation analysis was run to shed light on whether the effect of Affect (positive vs. negative) on the similarity of preferences between the self and others would continue to be significant when psychological distance is introduced as a mediator. The results replicated the findings in experiment 1, and more importantly, showed that psychological distance mediates the relationship between affect and the similarity of preferences between the self and others.

By integrating the research on mood and social projection, this research represents the first attempt to understand how a person's affective state can influence his or her prediction of others' preferences. By showing that a positive mood enhances the assumed similarity of preferences when predicting the preferences of other people, and that psychological distance mediates the relationship between affect and the assumed similarity of preferences, this research contributes to the growing body of literature on mood and judgment.

This research can provide several managerial implications for sales strategies, persuasion, and advertising. Because firms have the opportunity to make use of mood to their advantage by employing tactics in advertisements and interpersonal sales designed to enhance consumers' mood states, the findings of this research suggest that the use of positive affect in sales or advertising can be an effective strategy when targeting people who are making purchases for other individuals.

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SPECIAL SESSION SUMMARY

Current Research on the Role of Inferred Motives in Consumer Reactions to Influence Agents

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SESSION OVERVIEW

A ubiquitous phenomenon in attribution research is the notion that individuals make inferences about the underlying motives of those who are trying to persuade them (Friestad and Wright 1994). When consumers believe that an individual or firm has an ulterior or profit-making motive, evaluations of the individual/firm are likely to be negative (e.g., Campbell 1999; Campbell and Kirmani 2000). In this session, we delve more deeply into the antecedents and consequences of inferences of ulterior motives in marketing situations. Illustrating the wide applicability of the phenomenon, the papers span a variety of contexts, such as pricing, bargaining, and interpersonal persuasion.

The first paper by Lee and Monroe establishes that inferences of ulterior motives affect variables that are of interest to marketers. Specifically, the paper shows that consumers' inferences about a firm's self-interested motives affect their perceptions of the firm and its products, which in turn influence purchase intentions and willingness to pay. In the context of (un)fair pricing, consumers' inferences about the firm's motives are manipulated both directly (study 1) and indirectly (study 2). In the first study, participants who learned about the social responsibility of a firm were more likely to buy and willing to pay more for the product than those who learned that the firm had a profit-making motive. In the second study, products were being sold by auction, and two cues were used to manipulate consumers' inferences about the firm's motives: the minimum bid amount and whether the proceeds would go to charity or to the firm. Participants evaluated the firm more favorably when the auction proceeds went to charity. Surprisingly, however, participants were willing to pay more for the product when the minimum bid was high rather than low, even though the high minimum bid was perceived to be less fair.

The second paper by Valenzuela, Srivastava, and Lee examines both the antecedents and consequences of inferred motives in the context of an ultimatum bargaining game. Specifically, the paper investigates the impact of cultural orientation (individualist vs. collectivist) on inferences and behavior under incomplete information. The fundamental attribution error suggests that bargainers will be more likely to perceive a low offer as being motivated by self-interest than as the result of situational constraints. If bargainers in Western cultures are more susceptible to the fundamental attribution error than those in East Asian cultures, then Western bargainers should be more likely to reject relatively low offers when they do not know the total size of the pie than East Asian bargainers, who are more likely to consider the other party's situational constraints. In a series of four studies, the authors show that when situational constraints are not made salient, there is no difference in Western and East Asian participants' willingness to accept a low offer. However, when situational constraints are made salient, East Asian participants are more likely to accept a low offer than Western participants. The authors conclude that differences in participants' inferences about the other party's self-interested behavior were moderated by the participants' implicit theories about the relative impact of the person and the situation.

The third paper by Hamilton and Kirmani examines whether inferences of ulterior motives necessarily lead to negative evaluations of an interpersonal influence agent, e.g., a financial planner. The authors identify several factors that may moderate the effects

of inferred motives on attitude toward the agent, including the respondent's goals, the degree of ambiguity about the agent's ulterior motive, and the timing of ambiguity resolution. In two studies, the authors show that when an agent uses a deceptive tactic to gain a customer, respondents infer that the agent has an ulterior motive, leading to negative agent evaluations. However, agent evaluations are less negative when respondents are focused on the agent's competence rather than on the agent's honesty; a deceptive tactic that successfully lands a client may also indicate a competent agent, thereby increasing evaluations. When respondents focus on the agent's honesty, agent evaluations are more favorable when they are "disarmed," that is, when ambiguity about the agent's motives is resolved at the beginning of the scenario, reducing counterarguments. These findings suggest that, counter to previous studies, inferences of ulterior motives do not necessarily generate negative agent evaluations.

Amna Kirmani briefly summarized the similarities across the three papers and their contributions. Together, the three papers show that inferences about an agent's motives—whether this agent is a firm, another party in a negotiation, or a salesperson—have a strong impact on consumers' responses. They identify several factors that moderate the effect of inferred motives, such as beliefs about market prices, implicit theories about human behavior, and goals. Each paper focuses on a different marketing context and on a different manipulation of ulterior motives, which makes for a rich investigation of the phenomenon. After this summary, the audience participated in a discussion on areas for future research on inferred motives.

"The Joy of Being a Good Citizen"

Angela Y. Lee and Kent B. Monroe

Consumers' assessment of a firm's motives may have important implications for the firm's long term success. Campbell (1999), for example, shows that people are more likely to shop at a retailer who engages in fair versus unfair business practices, with (un)fairness inferred from the profit-taking motives of the firm. The objective of the current research is to further examine the impact of the firm's reputation on people's evaluation of a firm's standard and non-standard pricing practices. The results of two studies show that consumers' inferred motive of a firm affects their perception of the firm, which in turn influences evaluation of products. However, consumers may sometimes be willing to pay *more* when the price is perceived to be unfair versus fair.

In Study 1, we examine how a firm's positioning of efficient business operation versus social responsibilities may influence consumers' perception of the firm and the pricing of its product. We propose that even when a firm is not perceived to be engaging in unfair pricing practices, its reputation (and the corresponding inferred motives) may still affect consumers' evaluation of the firm's products, and in turn influence their likelihood of purchasing the products. In particular, individuals are more likely to perceive a firm that emphasizes social responsibilities more favorably than one that focuses on efficient business operation.

Participants in Study 1 were either informed that a new line of skin and hair care products or a new shaving system would be introduced in local stores. Half of the participants then read a paragraph describing the efficient operation of the company, while

the remaining half read about the culture of a socially responsible company. Then all participants were presented with the description of a body wash or a shaving system that was priced at \$8.49. Our results show that participants in the social responsibility condition who are more involved with the product (i.e., female participants in the body wash condition and male participants in the shaving system condition) evaluated the firm and the product more favorably relative to those in the efficient operation condition. They were also more likely to buy the product. Positioning of the company did not make a difference for the uninvolved participants (i.e., male participants in the body wash condition and female participants in the shaving system condition). Consistent with our hypothesis, the study shows that a firm positioned as socially responsible may enjoy a more positive reputation among consumers. The goodwill from its reputation in turn translates to more favorable evaluation and higher purchase intentions for its products. It is important to note that the higher purchase intention is not driven by participants' differential perception of the price, but by the enhanced value of the product that is mediated by the favorable opinion that the participants held for the firm. Interestingly, these effects were observed only among participants who were involved with the product. These results provide evidence that the inferred motive effect requires cognitive resources.

In Study 2, we examine how a firm's profit motive may affect individuals' willingness to bid in an auction. In this study, profit motive is operationalized in two different ways: by varying the designation of the proceeds (charity or the firm) and by varying the minimum opening bid (below or the same as retail price). Participants were either told that all proceeds would go to Toys for Tots (a charitable foundation that gives toys to poor children during the holidays), or there was no mention of where the proceeds would go. Participants were also told that the minimum opening bid was either the same as or lower than the retail price (\$27.75) and the last bid was \$29.50. The results show that the firm's motive makes a difference. Specifically, participants considered the firm's practice of operating an auction site to be fair when the proceeds were to go toward charity but unfair when the proceeds were to go to the firm. Further, a low minimum was considered more fair when the proceeds were to go to charity, but not when the proceeds were to go to the firm. However, a fair minimum bid did not lead to higher willingness to pay. Participants' bid was highest when the minimum bid was high than when it was low, suggesting that being "fair" is not necessarily the dominant strategy.

"The Good, the Bad and the Cheap: The Impact of Cultural Orientation on Inferred Motives Behind Bargaining Offers"

Ana Valenzuela, Joydeep Srivastava, and Seonsu Lee

The main purpose of this research is to examine the role of cultural orientation on inferences of motives and outcomes in a bargaining context. Specifically, this research examines how, in incomplete information bargaining situations, differences in cultural orientation influence inferences of ulterior motive and therefore the likelihood of accepting a relatively low offer.

Based on recent literature in cultural psychology, the general premise is that many judgments and decisions are the result of culturally imposed cognitive processes (e.g., Chiu et al., 2000). In terms of inferences of motives, the dispositional view of culture recognizes that inferences reflect implicit theories acquired from induction and socialization and thus vary with the perceiver's cultural orientation. For example, in individualistic cultures, behavior may be based on inferences of competitive (ulterior) motives because individuals are viewed as autonomous entities and are socialized to behave according to personal priorities. In contrast, in collective cultures, behavior may be more likely to be shaped by

situational factors (e.g., the possibility that the proposer was just reacting to a small available surplus) because individuals are part of a social collective and socialize according to situational constraints and group norms.

Recent research suggests a more dynamic view of culture. Research shows that both East Asians and Westerners tend to attribute observed behavior to competitive (ulterior) motives rather than external situational constraints. Further, Choi and Nisbett (1998) found that when situational constraints were made salient, Korean subjects were more sensitive to the situational constraints than U.S. subjects. Therefore, we propose that behavioral outcomes will change due to cultural differences in inferred motives only when there is a need to draw upon the implicit theories that differ across cultures or when these theories are activated.

Four ultimatum bargaining experiments examine the dynamic role of cultural orientation in affecting inferences and behavior under incomplete information. The experiments compare bargaining outcomes between subjects from the U.S., a highly individualistic Western culture, and Korea, a highly collectivistic East Asian culture. In ultimatum bargaining, rejection of a positive offer has been explained by the intent to punish a proposer with ulterior motives. As such, the more an opponent's behavior (i.e., a relatively low offer) is attributed to the proposer's competitive (ulterior) motives (i.e., the opponent's intention to take advantage of a responder's disadvantageous position), the higher the probability of rejection. We propose that there will be no difference in attributions for an opponent's behavior across cultures when no information about an opponent's situation is available to discount competitive motives. However, when information about an opponent's situation is accessible, implicit theories that differ across cultures are activated, leading to differences in behavioral outcomes. It is predicted that while Western subjects will continue to focus on motives for behavior based on the proposer's competitiveness, East Asian subjects will be more sensitive to external constraints, leading to higher acceptance rates of the low offer.

Experiment 1 showed that in an incomplete information setting, ultimatum bargainers from both U.S. and Korea were equally likely to attribute a low offer to opponents' competitive motives. However, when situational constraints (e.g., the possibility that the proposer was just reacting to a small available surplus) were made salient, Korean bargainers were more likely to accept a low offer relative to U.S. bargainers. Experiment 2 links the inferred motives to the behavioral outcomes and suggests that East Asian cultures are more likely to discount ulterior motives when situational constraints are made salient. These results also suggest that cultures perhaps differ in their implicit theories of the influence of external constraints rather than in their implicit theories of personality dispositions.

Experiment 3 shows that while there was no difference in bargaining outcomes between U.S. and Koreans in an individual decision context, Korean bargainers were more likely to accept low offers when the proposer was supposedly making the decision in a group context. The reason has to do with the interdependent self-construal in collectivist societies. Individuals in collectivistic cultures are more likely to give the benefit of the doubt to the proposer and attribute a relatively low offer to the need to comply with group prerogatives, which deserves a less punitive behavior than mere ulterior motives. As a consequence, a relatively low offer of \$7.50 is more likely to be accepted by bargainers in Korea than in U.S. in a group decision context.

Finally, experiment 4 unambiguously shows that differences in inferred motives mediate the influence of cultural orientation on bargaining outcomes when the group context is salient. Together, these results indicate the influence of culture on inferences of

motives behind behavior. Penalization of apparent competitive (ulterior) intent seems to be a universal phenomenon. However, Korean bargainers are more likely to recognize and acknowledge alternative motives for observed behavior, which results in potentially more efficient outcomes.

“Twist My Arm: It’s Not So Bad If the Agent Has an Ulterior Motive”

Rebecca Hamilton and Amna Kirmani

In Campbell and Kirmani (2000), a salesperson’s use of “negative” tactics such as flattery led consumers to draw inferences that a salesperson had an ulterior motive; in turn, inferences of ulterior motives resulted in negative evaluations of the salesperson. In this paper, we examine conditions under which consumers may react less negatively to agents perceived as having an ulterior motive. Specifically, we investigate the effects of goals and resolving ambiguity about the agent’s motives on observers’ reactions to an interpersonal influence agent who engages in deceptive behavior.

An observer’s goals may direct their attention to different dimensions of the agent’s behavior (Huffman, Ratneshwar, and Mick 2000), potentially changing their reactions to the same behavior. For example, we predict that if the observer’s goal is to find a competent agent, successful persuasion by using a deceptive tactic may be viewed more positively than if the observer’s goal is to find an honest agent. If the goal is to find an honest agent, the agent’s use of a deceptive tactic is less compatible with this goal and more harmful to attitudes toward the agent. Moreover, dwelling on the use of this tactic while reading the scenario may be particularly detrimental to evaluations of the agent. Thus, we predict that when the goal is to find an honest agent, attitudes toward the agent will be more favorable when the agent is “disarmed,” i.e., when ambiguity about the agent’s motive is resolved at the beginning of the scenario rather than at the end. In contrast, if the observer’s goal is to find a competent agent, the timing of ambiguity resolution should matter less.

In two studies, respondents read a scenario in which an influence agent, a financial planner, rigs a lottery to win the business of a potential client, the target. The target wins a lottery for a free consultation with the agent and subsequently hires the agent. Study 1 was a 2 (Motive ambiguity: high vs. low) X 2 (Need for cognition: high vs. low) between subjects design. The agent’s rigging of the lottery was either low in ambiguity (at the end of the scenario, an observer comments that the agent rigged the lottery to get a customer) or high in ambiguity (no comment at the end of the scenario, requiring the respondent to make his or her own inferences from the agent’s behavior). ANOVA revealed a significant interaction effect on attitude toward the agent. Respondents with low NFC had more favorable attitudes toward the agent when the motive was more ambiguous rather than less ambiguous; this is consistent with the notion that persuasion knowledge was activated more when the motive was less ambiguous. More interestingly, respondents with high NFC reacted *less* negatively to the agent when the motive was less ambiguous. Thus, making the agent’s ulterior motive salient led to more positive perceptions of the agent! Consistent with our theorizing, making the ulterior motive less ambiguous shifted high NFC respondents’ focus from suspicion to thoughts about the agent’s competence. Because the deceptive tactic was successful in getting the client, the agent was perceived as competent.

In Study 2, we examined whether the respondent’s goals (i.e., searching for a competent vs. honest agent) and the timing of the ambiguity resolution (i.e., before or after they were told that the agent may have engaged in deceptive behavior) affected agent

evaluations. According to the forewarning literature (Petty and Cacioppo 1977), resistance to persuasion may be decreased under low involvement when the persuader’s intent is revealed prior to hearing a persuasive message. Therefore, we hypothesized that when the agent’s motive was revealed prior to the agent’s behavior, respondents would be less suspicious and dwell on the positive aspects of the agent. This would be more likely when the respondent’s goal was to search for an honest agent than when it was to search for a competent agent. In a 2 (Goal: competence vs. honesty) X 2 (Ambiguity: resolved before or after behavior) between subjects design, ANOVA revealed a significant interaction effect on attitude toward the agent. As expected, when participants sought an honest agent, attitudes toward the agent were more favorable when they were “disarmed,” that is, when ambiguity was resolved at the beginning of the scenario. In contrast, when participants sought a competent agent, the timing of ambiguity resolution did not affect attitudes toward the agent. Consistent with this explanation, the degree to which persuasion knowledge was activated mediated the effect of timing on attitudes toward the agent.

Together, these studies demonstrate that negative evaluations based on inferences of ulterior motives of a marketing agent may be mitigated. Consistent with the other two papers in the session, we show that inferences of ulterior motives do not always lead to negative outcomes.

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ROUNDTABLE
ACR Latin America: Fostering Research Opportunities in the Region

Silvia González, I.T.E.S.M. – Campus Monterrey
David Luna, Baruch College

Latin American researchers have rich insights to contribute to the area of consumer research in a global context. This roundtable provided the opportunity to bring together researchers with interest in Latin America to share the value of our diverse experiences doing consumer research. Specifically, the roundtable provided us with a forum to continue the discussion successfully started in the last ACR about a possible ACR Latin American conference in Monterrey, Mexico, to be held in January, 2006. This project has generated a great deal of interest among Latin American researchers as well as among members of the ACR family. The Latin American Conference project is aimed toward the creation and diffusion of consumer behavior knowledge.

We addressed the following main issues:

- **Networking:** Although 4000 universities and more than 100 graduate programs offer programs related to the area of consumer behavior; we lack a formal association to promote the networking among the groups interested in this area. There is a need to create a forum where researchers can discuss state of the art consumer behavior knowledge. The roundtable provided us with the opportunity to bring together researchers with similar interests and identify future projects.
- **ACR LA conference:** The round table provided us the space to continue working on the ACR Latin America project. In particular, we discussed the agenda for the tentative ACR LA 2006 conference as well as the organization of workshops, talks, and events designed to fulfill our needs.
- **Training and mentoring:** This roundtable also enabled us to share training materials relevant to the promotion of consumer behavior research in our regions and implement mentoring programs, faculty and doctoral student exchange and doctoral consortiums.
- **Promotional activities:** In the roundtable we discussed promotional ideas to attract talented Latin American researchers who do not regularly participate in ACR events.

SPECIAL SESSION SUMMARY

The Influence of Choice Sets and Screening Processes on Decision Quality

Amitav Chakravarti, New York University

SESSION OVERVIEW

Decision makers are often confronted with a large number of alternatives during the course of their decisions. In order to simplify decision making in such information intensive environments, the set of available alternatives are often divided into subsets by some external (e.g., a product display format at a retail store) or internal (e.g., a screening or decision rule) factors. The primary purpose of these subsets or choice sets is to categorize and organize information in order to facilitate better decision making. For example, retailers organize shelf displays in a manner so as to reduce the effects of information overload, websites often provide screening tools that help consumers order the available options and better match their preferences, and consumers screen alternatives in order to improve the quality of their decisions during the relatively effortful choice stage. In fact, a fairly large body of work supports the intuitive notion that the ability to create and structure these choice sets has a beneficial effect on consumer decision making (e.g., Alba et al. 1997, Haubl and Trifts 1999, Lynch and Ariely 2000). In contrast with this prevailing sentiment, a recent, albeit nascent, body of research (e.g., Iyengar and Lepper 2000, Diehl, Kornish and Lynch 2003, Moorman et al. 2005) provides evidence to the contrary. These papers posit that although the ability to create and structure choice sets allows for easier search, it can often lead to lower decision quality.

The three papers in this session contribute to this debate in two very specific ways. First, these papers add to this nascent body of research by providing further evidence that screening mechanisms can be deleterious to decision quality, irrespective of whether these screening mechanisms are internally generated by the consumer (Chakravarti, Janiszewski, and Ülkümen paper) or externally provided by the retailer (Diehl paper; Iyengar and Mogilner paper). They provide strong evidence that activities undertaken at an early stage of decision making, like structuring choice sets and using screening mechanisms, can often have a greater impact on the quality of the final decision than the nature of the deliberations during the final choice phase. Second, and perhaps more importantly, these papers also add to this body of literature by uncovering specific conditions under which these choice sets ameliorate or attenuate the quality of the final decision.

Chakravarti, Janiszewski, and Ülkümen show that the task of screening alternatives (e.g., during consideration set formation) induces a non normative tendency to “discard” the screening information in subsequent stages of decision making. This tendency to “discard” the screening information often leads to sub optimal, and systematically different, final choices. In a similar vein, Diehl argues that improving the quality of consumers’ consideration sets will have a bigger impact on decision quality than improving how consumers decide among considered options. Finally, contrary to previous research (Iyengar and Lepper 2000) that cautions against the provision of “too much choice,” Iyengar and Mogilner present evidence that the allure of large product displays can be maintained while alleviating the detrimental consequences of choice overload by delineating smaller consideration sets within large option displays. These papers also benefited immensely from the comments offered by S. Ratti Ratneshwar, the discussant, who helped highlight the commonalities between the different findings.

EXTENDED ABSTRACTS

“Preference Reversals Induced by Screening: Biasing Effects of a Two-Stage Decision Task”

Amitav Chakravarti, *New York University*

Chris Janiszewski, *University of Florida*

Gülden Ülkümen, *New York University*

The current, and most broadly held view of the role of pre-choice screening of options (or consideration set formation) is that it serves to reduce the decision maker’s workload by paring down the number of alternatives to be examined at the final choice stage. In many ways this role can be interpreted as that of being a “facilitator,” an intermediate cognitive mechanism that helps the decision maker in choosing the optimal alternative. In short, screening is seen as an important step in avoiding information overload and making better choices. Consistent with this notion, a fairly large body of work shows that the ability to create consideration sets has a beneficial effect on consumer decision making (e.g., Roberts & Nedungadi 1995). Thus decision tools and aids that allow consumers to structure and organize their decision environments (e.g., web based screening tools) have been strongly endorsed by both the popular press and the consumer decision making literature (e.g., Alba et al. 1997, Haubl and Trifts 1999, Schlosser 2003, Lynch and Ariely 2000). While the role of screening in reducing information overload is hardly disputable, we provide fairly strong evidence that pre-choice screening of alternatives can often lead to sub optimal decisions.

We show that the seeds of lower decision quality often get sown at the screening stage itself. In two experimental studies we show that the task of screening alternatives (e.g., during consideration set formation) induces a non normative tendency to “discard” the screening information in subsequent stages of decision making. This tendency to “discard” the screening information often leads to sub optimal, and systematically different, final choices for decision makers who screen alternatives, in comparison to decision makers who do not engage in screening. This leads to a breakdown in the traditionally assumed (e.g., Hauser 1978) correspondence between consideration likelihood and the likelihood of choice. Thus the strength of consideration (i.e., how strongly an alternative is considered) may often not have any bearing on the likelihood of getting chosen in the final choice stage.

In all studies subjects were given six brands (A-E) of microwave popcorn to choose from. Three of these brands (A, C, and E) were the target brands of interest. The stimuli matrix was designed so as to create a negative correlation between the attractiveness of these three brands on the screening and post-screening attributes. Thus, in terms of the screening information the attractiveness ratings of the three brands followed a pattern (i.e., $A > C > E$) that was opposite to that of the attractiveness ratings of the three brands in terms of the post-screening information (i.e., $A < C < E$). These three brands were also designed so that they were highly likely to survive the screening process. Such a stimuli matrix is ideally suited to test whether subjects tend to discard the screening information. If subjects did indeed discard the screening information and paid more attention to the post screening information, then their choices should be systematically different from choices made by subjects who do not follow a two-step decision task.

Experiment 1 not only documents this basic effect (i.e., the tendency to “discard” the screening information), but also shows that the effect persists even when the screening information is regarded as more important than the post screening information. Experiment 2 shows that pre-choice screening encourages decision makers to put an inordinate emphasis on the post screening information, so much so that variations in the final choice shares can largely be explained by variations in the attractiveness of the post screening attributes. Experiment 3 shows that once the screening stage is completed, decision makers perceive very little variance between alternatives on the pre screening information, and consequently, feel licensed to ignore the pre screening information at the final choice stage. Together, the results show that a brand’s strength of consideration (i.e., how highly an option ranks on screening criteria) may have little influence on the likelihood it is chosen in the final choice stage.

“Improving Decision Quality by Altering Consideration Sets”

Kristin Diehl, University of South Carolina

Research in consumer behavior and decision making has tried to understand how consumers make decisions among a set of options and also what determines the quality of their decision (e.g. Payne, Bettman and Johnson 1993). The one overarching conclusion from research on decision making has been that decision makers are subject to a host of biases and that their decisions are often suboptimal (e.g. Gilovich, Griffin, Kahneman 2002). Therefore an important area of research has been trying to improve the decision making process. Researchers have investigated different ways of improve the decision making process for example by encouraging the use of decision support tools (e.g. Hoch and Schkade 1996).

Prior research has focused heavily on improving how consumers choose from a given set of options. While it is very important to understand these processes, the research presented here argues that, when trying to improve decision quality, improving the quality of consumers’ consideration set will have a bigger impact on decision quality than improving how consumers decide among considered options.

The decision making process has been conceptualized as a hierarchical, two stage process (e.g., Howard and Sheth 1969; Nedungadi 1990; Roberts and Lattin 1991). The overall quality of a decision can be affected by choices made in either stage. Consumers can be selective in terms of which options to include in the consideration set (stage 1) and/or can be selective among the options they choose from that set (stage 2). Selectivity at either stage should improve decision quality. However, since being part of the consideration set is a precondition for choice, I argue that decisions pertaining to stage one of the decision making process will have a stronger impact on overall decision quality than those affecting stage two of the decision process.

Hauser’s (1978) analysis from the ASSESSOR database supports this proposition. He shows that uncertainty in final choices is explained mainly by whether an item is included in the consideration set accounts, not by relative preferences among the considered options. Findings by Moorman et al. (2005) also support the idea that improving the quality of the consideration set will have a stronger effect on decision quality than improving decision strategies from that set. They show that boosting subjective but not objective knowledge can improve choice quality if subjective knowledge can lead to better consideration sets. The research presented here builds on these findings and investigates the impact of accuracy motivation on consideration set quality and overall decision quality.

Research on accuracy goals has shown that such goals can stimulate more systematic processing and decrease consumers’ susceptibility to biases (e.g. Payne, Bettman and Johnson 1993). However, Tetlock and Boettger (1989) demonstrate that greater accuracy motivation also encourages people to take a wider array of information into account. This behavior introduces non-diagnostic information into the decision process and can lead to worse decisions. The former finding suggest that greater accuracy motivation improves choice quality among alternatives (stage 2), while Tetlock and Boettger’s work suggests that such motivation decreases the quality of the consideration set (stage 1). I predict that if non-diagnostic information can easily enter the decision process, the negative effect of greater accuracy motivation on consideration sets will outweigh the positive effect on selectivity among those options. However, if accuracy motivation cannot affect the consideration set, greater accuracy motivation may improve decision quality.

These predictions were tested in a laboratory experiment that asked participants to select a MP3 player on behalf of a target consumer (principal-agent task). Quality of the consideration set and the chosen option were determined by how well the target’s preferences were met. The study followed a 2 (accuracy) by 2 (search cost) between subjects design. Accuracy motivation was manipulated by telling participants that the five people that chose best on behalf of the target consumer would receive a monetary reward of \$10 (high accuracy) or \$1 (low accuracy). In order to vary the degree to which non-diagnostic information would enter the decision process options were always ordered by decreasing expected utility and search costs were manipulated. Greater search due to lower search cost increased the likelihood that non-diagnostic information, i.e. inferior options, would enter the decision process. Participants were required to enter at least one option into a shopping cart before making a decision, imposing a two stage decision process on participants. This procedure allows us to investigate the effect of accuracy on the consideration set, measured by the average quality of options included in the cart, as well as on the quality of the option chosen from that set.

As predicted, when search costs were low, greater accuracy motivation decreased the quality of the consideration set and also led to significantly worse choices. However, when search costs were high, high accuracy motivation did not affect the quality of the consideration set. Greater accuracy goals, however, did improve overall choice quality. Findings from this study support the idea that the effect of accuracy motivation on consideration sets supersedes its effect on choosing from that set.

Researchers have long tried to improve the quality of consumers’ decisions. The research presented here suggests that it may be more worthwhile to improve consumers’ consideration set than trying to improve the decision strategies used to choose from among those sets.

“When More Choice Motivates: Considering the Benefits of Perceived versus Actual Choice on Outcome Satisfaction”

*Sheena S. Iyengar, Columbia University Business School
Catherine Mogilner, Stanford Graduate School of Business*

While psychology research has shown that people do experience empowerment through the exercise of choice (Deci and Ryan 1985, deCharms 1968), the implications of this research have been limited by more recent work which suggests that the amount of information that accompanies an increasing number of options may in fact impair the exercise of choice (Schwartz 2000, Iyengar and Lepper 2000, Iyengar and Jiang 2004). The studies of Iyengar and Lepper (2000) demonstrated that customers were drawn to displays providing larger choice sets but that once faced with the task of

choosing from amongst the extensive number of options, these customers were less likely to purchase and less satisfied with their selected item than those who had experienced a smaller choice set. Iyengar and Jiang (2004) further demonstrated that an increase in the number of options led choosers to make objectively dysfunctional choices. It thus appears that when choosers are unable to fully process all of the options available to them, their confidence in their decision and their ability to choose the best option is likely to diminish. Additional options seemingly thwart rather than enhance consumer empowerment.

The "too much choice" phenomenon stems from humans' limited ability to assimilate and process information during a given amount of time (Broadbent 1971, Driver and Streufert 1969, and Miller 1956). An increased number of competing alternatives presented at the same time decreases choosers' ability to distinguish between the options, therefore, decreasing their ability to recognize preferred choices (Shafir, Simonson, Tversky 1993, Tversky and Shafir 1992). However, choosers' ability to distinguish between options and to evaluate options' attributes is affected by the information structure embedded in the option display (Hoch, Bradlow, and Wansik 1999). Thus, categorizing items in a display may help forgo the cognitive overload associated with having to process the attributes of every option by highlighting particular attributes. Categorization would in effect limit choosers' consideration sets at multiple stages throughout the choice process leading them to arrive at attribute-informed, optimal choices.

The present research examines whether the allure of large product displays can be maintained while alleviating the detrimental consequences of choice overload by delineating smaller consideration sets within large option displays. In the context of magazine displays, we examined the relationship between satisfaction and the perception versus the provision of choice. We hypothesized that perceived choice would drive satisfaction rather than the actual number of options, and that perceived choice would be influenced by option categorization. Unlike past work, this research distinguishes between focused choosers looking for a familiar option and unfocused choosers who utilize the array of options to discover an unfamiliar preference. We further hypothesized that those seeking variety within the choice set would be more susceptible to display manipulations. The findings of a field study and two lab experiments support these hypotheses.

The field study took place in the magazine aisles of 10 branches of an upscale American supermarket chain known for its remarkable provision of variety. Each of the 10 aisles offered between 331 and 661 different magazine options. The observations and interviews of approximately 500 customers verified consumers' predicted high valuation of choice. The amount of choice that customers felt the display provided correlated positively with customers' stated satisfaction, and consequently their likelihood to purchase. Interestingly, however, customers' perception of choice was significantly more correlated with the number of magazine categories than with the actual number of magazines in the display. Irrespective of the actual number of magazine options available, customers who picked an unfamiliar magazine perceived more choice when the display was divided into a greater number of magazine categories. Conversely, the perceived choice of customers who were looking for a particular, familiar magazine remained unaffected by the display of the options.

Findings from two subsequent lab experiments provided further support for the hypothesis that choosers seeking an unfamiliar option would perceive more choice when the options were further categorized, whereas the perceived choice of choosers seeking a familiar option would remain unaffected by display manipulations. Half of the participants chose from a display divided into three

broad categories, while the other half chose from a display that was divided into 18 more specific categories. In one experiment subjects chose a familiar or unfamiliar magazine based on their own volition, whereas in the other experiment the choice goal was experimentally manipulated. As in the field study, all choosers were more satisfied with the display when they perceived there to be a greater amount of choice. Furthermore, the perceived choice of participants who chose an unfamiliar magazine was higher when the display was divided into 18 categories than when the same display was divided into three categories. The perceived choice of those who chose a familiar magazine remained unaffected by the layout of the display. For an unfamiliar chooser a larger number of more specific categories presumably creates smaller, more cognitively manageable consideration sets.

Thus, the findings of these field and laboratory experiments validate that people desire choice, but that their perception of choice may be unrelated to the actual provision of choice. This disjuncture is a consequence of humans' limited ability to exhaustively process the attributes of every option in an extensive choice set. Categorization, however, helps narrow large choice-sets by making the preference criteria more salient to choosers. By helping customers to cognitively locate their preferred option within exorbitant choice sets, retailers could potentially alleviate the detrimental effects of choice overload.

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SPECIAL SESSION SUMMARY

The Many Routes to Price Unfairness Perceptions

Kent B. Monroe, University of Illinois
Lan Xia, Bentley College

SESSION OVERVIEW

The issue of price unfairness has attracted considerable attention of consumer researchers in recent years. However, many questions remain unanswered. The three papers included in this special session try to extend the existing research in several important ways.

While most of existing research has focused on moderating variables of price unfairness perceptions such as cost-profit distributions between the comparison parties, or the rationale for price discrepancies including sellers' inferred motive, and buyers' attributions of whether sellers are responsible for the price discrepancies (Campbell 1999; Vaidyanathan and Aggarwal 2003; Bolton, Warlop, and Alba 2003), the first paper focuses on the comparison processes and consequences of such perceptions. A price comparison is a necessary although not sufficient condition for price unfairness perceptions to occur. However, no prior research has examined the price comparison processes in the context of price fairness. Results showed that how similar the two transactions are is the key mediating variable between various transaction characteristics and whether unfairness perceptions will arise and how serious they are. In addition, results also demonstrated that the influence of price unfairness perceptions on various behavior intentions were mediated by perceived value and different types of negative emotions.

The second paper focuses on the moderating variables of price unfairness perceptions. Different from existing research which examines the effect of one specific moderating variable, this paper uses an inductive approach and tries to identify a set of cues or moderating variables that potentially may lead to price unfairness perceptions. This approach enriches the existing research by uncovering a wider scope of factors that influence price unfairness perceptions. In addition, this paper complements the first paper by adding some rich moderating effects of price unfairness perceptions.

Finally, the third paper examines price fairness issues in the context of a specific pricing practice (i.e., price matching guarantees). While the first two papers focus on the issue of price fairness in the context of specific transactions, this paper examines price fairness from both a procedural aspect (i.e., what is the process specified for consumers to obtain a lower price) and a potential transaction aspect (i.e., given a task of purchasing a specific product). Results from two experiments show that consumer perceptions of the fairness of a price-matching policy influence price fairness perceptions, and that they both in turn influence consumers' shopping intentions at the price-matching retailer. Factors specific to the price-matching retailer were found to influence price-matching fairness either directly or indirectly through inferred motives. In addition, the three papers are complementary in that we may find common comparative processes (i.e., self comparison vs. comparing with other customers) as well as common moderating variables (i.e., amount of discount or product assortment).

Meg Campbell summarized the similarities among the three papers. Together the three papers showed that price fairness is an important issue and unfairness perceptions may be evoked by various factors including cost perceptions, unfair pricing procedures, and comparative parties involved. The audience participated

in the discussion and raised questions for future research such as the conditions when equal prices may evoke unfairness perceptions and the changes of unfairness perceptions overtime.

“Comparison Process and Consequences of Price Fairness Perceptions”

Lan Xia, Bentley College

Kent B. Monroe, University of Illinois at Urbana-Champaign

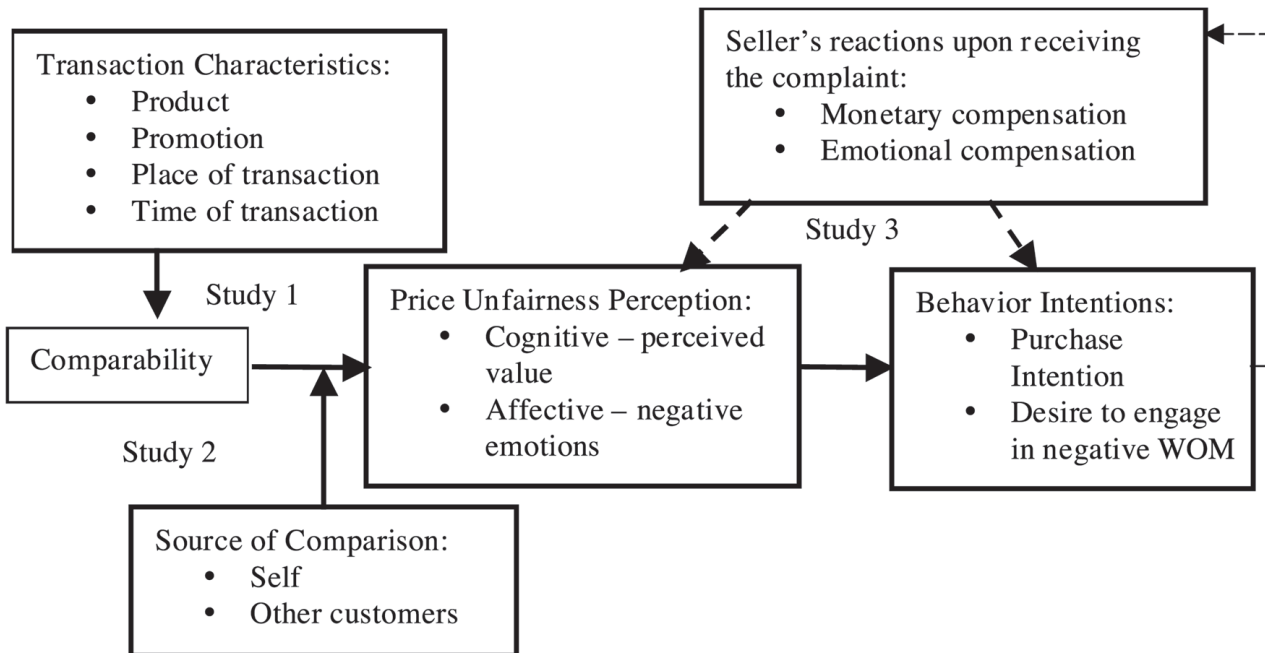
In this research we extend existing research on price fairness in several ways. First, although research has indicated that perceptions of price fairness are based on a comparison process, no consumer research has specifically examined such processes. Based on social comparison processes (Major 1994; Wood 1989), we introduce the concept of comparability between the two comparative transactions and suggest that the degree of price unfairness perceptions will vary relative to consumers' perceptions of the comparability of the two transactions. Differences in products, promotional terms, and time of transaction all influence the comparability of the two transactions. Also, the influence of comparability on price unfairness perceptions is moderated by the source of comparison (i.e., self vs. other customer).

Second, price unfairness has been defined as a judgment of whether a price is just and reasonable, which focuses mainly on the cognitive aspect (Bolton et al. 2003). Adding affect to the concept we propose that unfairness perceptions are accompanied by negative emotions. Thus, besides a perceived unfair price enhancing perceived monetary sacrifice (Martins 1995), consumers also experience an emotional sacrifice (upset, disappointment, anger or outrage). Conceptualizing monetary and emotional sacrifices is important because different emotions may lead to different actions (Bougie, Pieters, Zeelenberg 2003; Bechwati and Morrin 2003).

Third, although existing research indicates that perceptions of price unfairness will lead to negative word-of-mouth, complaints, and reduced purchase intentions, there has been no systematic analysis of what the purposes of these consumer actions are and how sellers can effectively handle these behaviors. Corresponding to the cognitive and affective components of a unfair price perception, we propose that consumers may take different actions to cope with these two types of consequences. Hence, potential actions induced by price unfairness may be mediated by either the cognitive aspect or the affective aspect. Finally, these behavioral intentions need not be the end of price unfairness perceptions. Sellers may offer remedies when unfairness perceptions arise, especially when buyers express their concerns to the sellers. Hence, sellers' reactions to buyers' concerns may lead to subsequent perceptions of price fairness, enhancing future behavioral intentions. Figure 1 depicts the overall framework of the research.

As indicated in Figure 1, Study 1 investigated the effect of comparability. Results show that when characteristics of two transactions vary, subjects perceive the price as less unfair compared to when the characteristics of the two transactions are the same or very similar. Among the four characteristics we investigated (product, promotion, store, and timing), product variation had the largest effect on perceptions of unfairness. Study 1 showed that the effects of different transaction characteristics were mediated by perceptions of transaction comparability.

FIGURE 1



Study 2 examined the source of comparisons. Although research suggests that consumers may use different references when they make price fairness judgments (Bolton et al. 2003), no research has studied the relative effect of different comparative parties. Based on social comparison processes, we propose that comparing oneself to another customer produces the largest effect relative to either consumers' self-reference or comparing one store to another. Study 2 was a comparative (self, other customer, or other store) x price outcome (equal, advantaged price, disadvantaged price) design. There was an interaction between price outcome and comparative party. Comparing with another customer led to the most unfairness perceptions when one is disadvantaged and the fairest perceptions when prices are equal. Study 2 also show that purchase intentions were mainly mediated by perceived value while desire to spread word-of-mouth and report it to a third party was mainly mediated by the negative emotions.

Study 3 examined the influence of post-purchase interactions between buyer and seller on adjusted price fairness perceptions as well as future behavior intentions. Results showed that both psychological and financial compensation influences adjusted fairness perceptions. There was an interaction between the two factors on intention to keep the current order. Emotional compensation had a large effect when participants only received partial compensation. In fact, those who only got partial monetary compensation but were treated nicely by the representative were as equally likely to stay with the seller as those who got full monetary compensation. In addition, emotional compensation (when combined with partial or full monetary compensation) significantly reduced future switching behaviors while monetary compensation alone will be less likely to keep them in the future. The results correspond to the partial mediating effects observed in study 2.

"Consumers' Perceptions of Pricing Unfairness"

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In this research, we address the following research question: What are the tools (heuristics or signals) that consumers use to judge the fairness (or unfairness) of a price? To build our model, we adopt an inductive approach where we draw on consumers' experiences and perceptions. Our approach differs from that of most previous researchers. Instead of using experiments with hypothetical scenarios to test the influence of pre-determined factor(s) on consumers' perceptions (see, e.g., Bolton, Warlop & Alba 2003; Campbell 1999; Cox 2001), we are led by common themes emerging from actual consumer experiences. This approach allows us to uncover important factors that have yet to be considered by previous researchers. It also enables us to have a more vivid picture of consumers' thinking and conceptualizing.

Survey data were collected from 969 consumers. In the survey, respondents were asked to provide their perceptions of pricing practices for fifteen products or services, such as airline tickets, clothes, computers, grocery items, legal services, medical drugs, inkjet cartridges and razor blade cartridges. The items were chosen to represent a varied basket of products including products of high and low item prices, necessities and luxury products, industries known for their low versus high profit margins, and industries known for substantial price fluctuations versus stable prices. In addition to rating pricing practices for each product or service, respondents were asked to comment on the rating they provided. Moreover, respondents were asked with an open-ended question to "provide an example of what they consider unfair pricing or price gouging."

A content analysis of the comments provided by respondents in answer to both the industry-specific questions and to the general price gouging question was performed. The analysis confirms a wide array of antecedents to price unfairness discussed by researchers. In addition to known reasons for price unfairness, the analysis

uncovers few other antecedents and provides insights concerning the mechanisms underlying perception formation. A main prevailing reason for price unfairness stems from comparing a product price to a "reference" price. Previously under researched reference figures are uncovered by the analysis. Consumers also use a variety of cues to estimate the cost of a product. Cases of extreme negative affect, e.g., outrage, are reported when consumers feel that moral/ethical standards are violated.

To make a judgment about price fairness, consumers compare a product price to a reference figure. Scores of our respondents concluded unfairness after comparing a product's price to its price at a different point in time (e.g., during sale periods or off-season). Similar conclusions were drawn when prices were compared to those in other locations (stores or countries), to prices paid by other customers (e.g., for airline ticket on the same flight), to perceived cost of the product (e.g., ink cartridges), or to one's income (e.g., drugs). Those findings are in line with previous research showing that perceptions of price fairness are based on a comparison process. Previous researchers have pointed to different possible reference values. For instance, Bolton et al. (2003) argue that consumers compare prices to several reference points including past prices, competitor prices, and cost of goods sold.

Respondents to our survey also compared prices of products to values that are less revealed by previous research. The price of a complementary product was compared to that of the "main" product. For example, prices of ink cartridges were perceived as unfair because they were considered excessively high relative to prices of printers. Similarly, razor blades cartridges were seen as unfairly priced because their prices are close to those of the blades. This finding is intriguing as it might imply that consumers approach a purchase decision as problem solvers. Hence, the costs of alternative ways to solve a problem are compared to make judgments of price (un)fairness. Accordingly, thinking that, to be able to print, replacing a printer costs a bit more than replacing the ink cartridge leads to the conclusion that prices of ink cartridges are unfair.

Interestingly, respondents compared a product's current price to future sale price, i.e., to its price when the consumer wants to dispose of it, a value known as the product's salvage value. As a result, cases of potential significant appreciation (e.g., houses) and depreciation (e.g., cars) were seen as indicators of price unfairness. This finding is in line with previous research showing that consumers do not favor price fluctuations caused by shifts in supply and demand (Dickson and Kalapurakal 1994; Kahneman, Knetsch and Thaler 1986). Our respondents used fluctuations as indicators of unfairness even when they were in their favor (e.g., with their house prices appreciating).

To estimate costs, consumers use several cues. Respondents evaluated raw materials, e.g., plastic used to make razor cartridges. In cases of services, time invested by the service provider, e.g., a lawyer, was used as indicator of cost. Price of generic drugs was used to estimate costs of branded ones. In estimating costs, many of our respondents tended to neglect research and development costs as well as overhead costs. Bolton et al. (2003) reported a similar tendency among consumers to neglect certain costs. The few respondents who acknowledged such costs were more understanding and more receptive of the prices offered. It is worth investigating whether educating consumers on the costs involved in making a product can impact their perception of price unfairness.

Negative affect accompanied cases of perceived price unfairness. Outrage was salient particularly in cases where consumers felt that moral rules were broken. Those cases included situations where consumers felt that they were taken advantage of because they had no choice but to buy the product. An example of such cases

is the price of food at convention centers. Consumers who perceived prices of necessities to be too high to be affordable by the poor were angered by this fact. Pharmaceutical products, whose high prices were blamed on patents granted by the government, resulted in high negative emotions. In a comprehensive model of price unfairness, Xia, Monroe and Cox (2004) had violation of social norms as an antecedent of price unfairness. Xia et al.'s (2004) model also pointed to the possibility of affective consequences to price unfairness.

Different consumers reacted differently to the same pricing phenomenon. While many consumers welcomed deals and sales, other consumers saw them as the proof for pricing unfairness. Investigating whether consumers shopping styles and personality traits affect what they conclude from pricing practices is worth further research.

"Effect of Price Matching Guarantees on Consumers' Perceptions of Fairness"

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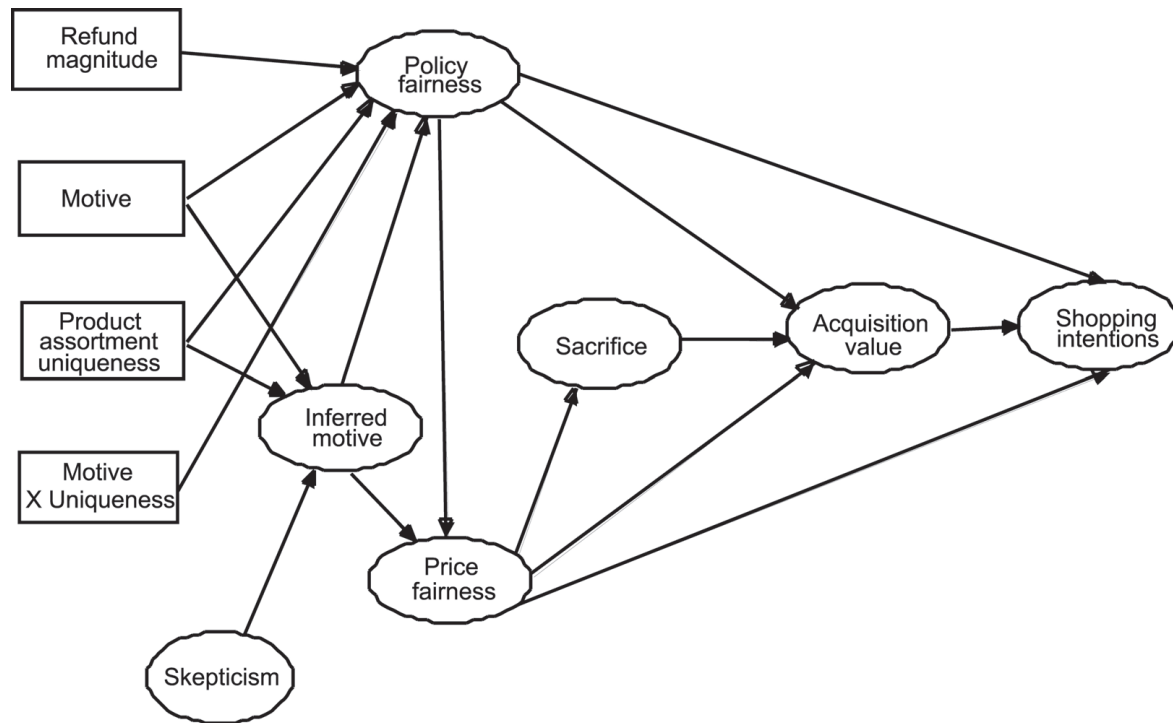
No known research examines the fairness perceptions of store-wide pricing policies, such as price-matching guarantees. Price-matching guarantees are retail promises to meet or beat competitive prices at the time of purchase or within a specified period after purchase if the consumer finds a lower competitive price. Due to the prevalence of their usage and evidence that price-matching guarantees influence consumers' store price perceptions and purchase behaviors (Biswas et al. 2002; Jain and Srivastava 2002; Kukar-Kinney and Walters 2003; Srivastava and Lurie 2001) it is important to investigate the perceived fairness of these policies.

Price-matching guarantees are store-level policies applying to identical items sold at competitive outlets, which may influence the final price consumers pay for products. For example, a consumer who buys a product for \$100 at a store with the price-matching policy, and who later finds the same product selling for \$10 less at a competitive store and returns to the price-matching store, pays a net price of \$90 after the refund. Another consumer, who does not check competitive prices, pays the price of \$100 instead. Thus, price-matching guarantees effectively permit differential pricing.

The present research investigates the drivers of consumer perceptions of the fairness of price-matching guarantees (i.e., the pricing policy fairness), as well as the effects of pricing policy fairness on price outcome fairness, and consequently, on consumer perceived value and shopping intentions at the price-matching retailer. The proposed antecedents of pricing policy fairness perceptions include the magnitude of the promised refund, the retailer's motive for the price-matching guarantee (either expressed or inferred), and the product assortment uniqueness (see Figure 2). Based on the fair process effect, a positive relationship between the pricing policy fairness and price outcome fairness is expected. Furthermore, both pricing policy fairness and price outcome fairness perceptions are proposed to affect consumer shopping intentions at the price-matching retailer, both directly and indirectly through the perceived value.

Two experiments were conducted to test the proposed hypotheses. The refund magnitude, amount of product assortment subject to the price-matching policy (assortment uniqueness), and the retailer's motive for offering the price-matching guarantee were manipulated in a 2x2x2 between-subjects design. The price-matching policy promised to either match the lower price or beat the lower price by 10 percent. Amount of product assortment subject to price-matching varied between 20 percent and 80 percent of the store's

FIGURE 2
Antecedents and Consequences of Fairness of Price-Matching Refund Policies



total assortment. Finally, the retailer's motive for offering the price-matching policy was described as either self-oriented (negative) or as customer-oriented (positive).

The two experiments differed in the purchase objective of the respondents and therefore the perceived degree to which the price-matching policy would apply to their purchase. In the first study, the purchase scenario involved respondents considering buying a national brand product that was widely available locally (hence, the price-matching policy was applicable to the purchase), while in the second study, the respondents considered purchasing a brand that was available only at the price-matching store (hence, the price-matching policy did not apply to the purchase).

The results of study 1 showed the assortment uniqueness and the retailer's motive (both expressed and inferred) to be the key drivers of consumer perceptions of the pricing policy fairness, while the effect of refund magnitude was not significant. Moreover, a significant interaction between the expressed motive and the assortment uniqueness existed, indicating that when the two messages are inconsistent (specifically, positive expressed motive and high assortment uniqueness), consumer evaluations of the policy fairness are more negative than when the messages are consistent. Further, as expected, a positive link between pricing policy fairness and price outcome fairness existed. Finally, both types of fairness exerted a significant effect on shopping intentions directly, as well as indirectly through value, as proposed.

Given that in study 2 the price-matching policy did not apply to the purchase under consideration, we expected that pricing policy fairness perceptions would exert weaker influence on consumer shopping intentions. Indeed, we found that the direct effect of pricing policy fairness on shopping intentions was weaker, while the indirect effect through perceived value became insignificant.

However, the link between the pricing policy fairness and price outcome fairness still existed, indicating that when the policy is not applicable to the purchase, it may still signal the level of store prices, possibly by alerting consumers to the fact that the price-matching retailer does not have to compete with other stores on the price of such a product. The results of study 2 with respect to showing that the retailer's motive and the assortment uniqueness were the main antecedents of consumer perceptions of price-matching policy fairness were largely consistent with the findings from study 1.

SPECIAL SESSION SUMMARY

Reactance Revisited: Why Absence Makes the Heart Grow Fonder

Yael Zemack-Rugar, Duke University
Gavan J. Fitzsimons, Duke University

“Is Reactance Intentional or Instinctual: Nonconscious Aspects of Reactance Response”

Yael Zemack-Rugar, Duke University
Gavan J. Fitzsimons, Duke University

The phenomenon of reactance in consumer behavior is well established (see Cleo and Wicklund, 1980) and is observed in response to stockouts (Fitzsimons, 2000), unsolicited recommendations (Fitzsimons and Lehmann, 2004), and many actions on the part of vendors/suppliers that are perceived as a limitation of freedom. As these papers demonstrate, the effects of reactance on consumer choice are often negative, resulting in irrational or non-optimal decisions. For example, people may go against expert advice or end up preferring an unavailable option even if it was not their first choice. Given that reactance has been established as such an important motivation (Brehm, 1966) and has been shown to have some detrimental effects on consumer behavior, it is necessary to try and understand its nature and essence more deeply. Specifically, we examine whether reactance is an instinctual or deliberative response. Additionally, we examine the strength of this motivation and its effects on consumer choices.

Two theories regarding this motivation could be brought forth. On the one hand, reactance might be an almost instinctual, immediate response to a perceived threat to freedom. On the other hand, reactance may be a deliberative cognitive process resulting in the overriding of other motivations. For example, after some deliberation one might substitute the urge to conform (e.g., with a recommendation), and reassert one's freedom with a reactance response. Reactance would in this case be a deliberative response, part of a principled decision, if you will.

To first examine whether reactance is an instinctual or a deliberative response in consumer behavior we use the construct of ego depletion (Baumeister et al., 1998). Ego depletion is a reduction in resources of the self resulting from previous exertion of self control. The literature shows that ego depleted individuals are unable to control their urges; they are often unable to substitute their instinctual responses with more socially appropriate ones (Baumeister et al., 2000; Baumeister and Exline, 1999). If reactance is instinctual, then depleted people should exhibit a high level of reactance, since they are unable to substitute it with a more rational, thought out response. However, if reactance is deliberative, depleted people should be able to suppress it, since depletion does not affect cognitive capacity (Baumeister et al., 1998). We also add a manipulation of passive vs. active. Depleted people are known to be generally passive (Baumeister et al., 1998). Thus we expect that when reactance is passive and participants are depleted, reactance levels will be particularly high. The level of reactance when it requires active choice from depleted participants will depend on how strong the impulse is. If it is strong enough to cause even depleted people to take action, then levels of reactance in the depleted/active cell will be higher than those in the non-depleted/active cell. This latter cell is predicted to be particularly low, as individuals have both the resources and the opportunity to consider their reactance (i.e., often irrational) response.

In a 2 (depleted/non) by 2 (passive/active) between participants study we find strong evidence that reactance has a strong impulsive component. Participants who are depleted (i.e., unable to overcome the reactance “itch”) and for whom reactance required no

effort (i.e., passive condition), exhibited the highest level of reactance ($M=82\%$). Moreover, even participants who were depleted in the active condition, exhibited relatively high levels of reactance ($M=33\%$) when compared to their non depleted counterparts ($M=15\%$).

In a second study we examine the same questions using a manipulation of cognitive load. While load taxes resources much like depletion, it is different in that participants are aware that their mental resources are taxed, and thus may use deliberation and choose to utilize the recommendation as a decision aid. Such a deliberative choice would reduce reactance under load. In a 2 (load/no load) factor between participants design we find that indeed, reactance is significantly lower under load ($M=22\%$) than under no load ($M=45\%$). Alternative explanations for this finding may be that: (1) participants under load did not process the recommendation, (2) PKM consideration caused them to use the recommendation source as a cue under load, but not under no load.

We thus conduct a third 2 (load/no load) by 2 (expert vs. random recommendation) between subjects study, with a measured factor of individual reactance proneness. If individuals under load use the recommendation as a decision tool, they should do so only if the recommendation is from an expert. Thus, if the recommendation is from an expert, reactance should be generally low; if recommendation is from a random source, reactance should be higher in particular under load. The load-random condition is one where participants are both inclined to express reactance (impulses uninhibited due to load) and have a reason to do so (recommendation cannot serve as a decision aid). This pattern will be particularly true for individuals with a high reactance proneness. We indeed find a Load*Recommendation*Reactance level interaction. Participants low in reactance proneness respond equally in all cells; participants high in reactance proneness respond equally to the expert recommendation under load and no load ($M=29\%-32\%$) but increase their reactance significantly to the random recommendation under load ($M=39\%$ vs. $M=78\%$). PKM cannot explain this interaction with reactance proneness. Additionally, manipulation checks confirm the recommendation was equally processed under load and no load.

Thus we conclude that reactance has strong impulsive elements but can be controlled by a deliberative element to avoid over-exercising of this impulse in a way that might hurt choices.

“Reactance and Choice: The Role of the Timing of Information”

Kyeong Sam Min, University of South Dakota
Patricia M. West, Ohio State University
Joel Huber, Duke University

This paper examines the role of the timing of information in the context of product unavailability. Prior research has found that when consumers encounter an attractive but unavailable product prior to making a choice, they are more likely to select the most similar alternative. This is based on the assumption that the presence of the unavailable product increases consumers' attention to the similar alternative or the attribute for which the unavailable product and the similar alternative excel.

However, such cognitive accounts fail to fully explain why consumers switch to a dissimilar alternative when they are notified after making a choice and thus experience negative affect. Building

on reactance (Brehm, 1966; Wicklund, 1974) and coping literature (Lazarus, 1991), we argued that reactance can be manifested by negative affect and tested a new motivational account that explains choice reversal. We predicted that consumers are more likely to switch to a dissimilar alternative when they are notified after, rather than before, they make a choice, because consumers can cope with their negative affect by selecting an avoidant alternative (e.g., Luce, 1998), in this case, the dissimilar alternative. Thus, we expected to find that consumers who select a dissimilar alternative are less likely to feel negative affect than those who select a similar alternative. We also expected to show that the effect on choice of the timing of information is more likely to occur when the unavailable product is the consumers' preferred product, because consumers care about a product's availability if it is relevant to their decision making (Fitzsimons, 2000).

To test these predictions, we ran an experiment with a 2 (timing of information) \times 2 (preference) \times 2 (measurement order) between-subjects design. First, we manipulated the timing of information during the choice task. In the 'before' condition, the participants were notified about product unavailability prior to choice. In the 'after' condition, the participants were notified after they had made an initial choice. Each choice set consisted of two core products with the same moderate quality rating but from a different product type (e.g., 3-star Italian vs. 3-star Chinese restaurant) plus a high quality but unavailable product (e.g., 4-star Italian restaurant). A control condition, where only the core set was offered, was included to serve as benchmark. Second, we measured each individual's preference for product alternatives, one week prior to the main study. In the 'high preference' condition, the unavailable product was the participants' preferred product. In the 'low preference' condition, the unavailable product was their less preferred product. Third, we varied the order of measuring affect and final choice. In the 'choice measure first' condition, the participants were notified of unavailability, and then they were asked to make a final choice from the remaining alternatives. Their affect were measured afterward. In contrast, in the 'affect measure first' condition, the participants were not asked to make their choice until after they provided their affect ratings. Negative affect were measured by a semantic differential scale that was modified from Mano and Oliver (1993). It included frustrated, upset, agitated, discouraged, annoyed, and distressed.

We first tested the impact of the timing of information on choice. Because the analysis indicated no interaction between the timing of information and product categories as well as between the timing of information and the measurement order, we pooled the data. As predicted, we found in the high preference condition that the participants were less likely to select a similar alternative, when informed about product unavailability after ($M = 63.6\%$), rather than before ($M = 86.2\%$), making a choice. It is important to note that individuals who were notified prior to making a choice were more likely to select a similar alternative, compared to the control condition. The individuals who were notified after making a choice were less likely to select a similar alternative, compared to the control condition ($M = 79.9\%$). These two findings also imply that we not only successfully replicated prior research, but also documented a strong boomerang effect. Additionally, as predicted, choice reversal was weak in the low preference condition. The participants' choices were only marginally influenced by the timing of information ('after': $M = 9.7\%$, 'before': $M = 22.4\%$).

We also tested whether consumers who selected a dissimilar alternative would be less likely to elicit negative affect than those who selected a similar alternative. Consistent with our prediction, we found a significant main effect of choice on negative affect. The

participants who chose a dissimilar alternative ($M = 2.17$) exhibited less negative affect than those who chose a similar alternative ($M = 2.80$). This finding confirms that consumers' motivation to reduce their negative affect contributes to an increase in the choice probability of the avoidant dissimilar alternative.

In sum, we demonstrated that adding an attractive but unavailable product results in an increase in the choice share of a similar item if unavailability is revealed before the consumer makes a choice, but has the opposite effect if product unavailability is revealed after the consumer has made a choice. This choice reversal effect persisted, regardless of the product category and measurement order between choice and affective states. By examining the impact on choice of the timing of information, which has not been explored previously, we provided new insights into the mechanism that underlies the choice reversal phenomenon. None of the cognitive explanations put forth in earlier research can adequately account for the entire pattern of results observed in this study. We confirmed that it is an individual's desire to cope with negative affect that impacts choice reversal.

"Promotion Reactance: The Role of Effort-Reward Congruity"

Ran Kivetz, Columbia University

Marketing promotions and incentives can be a double-edged sword. On the one hand, as prior research and common wisdom suggest, consumers are enticed by the proffered benefits and rewards. On the other hand, the present research assumes that consumers may perceive the incentives as intended to influence their consumption behavior and limit their brand choice. Such threats to consumers' perceived freedom arouse promotion reactance.

Building on a synthesis of reactance theory (Brehm 1966) and research on intrinsic motivation (Lepper 1981), it is proposed that consumers may proactively protect their sense of individual agency and freedom by choosing rewards that are congruent with the required consumption effort (e.g., choosing reward R_x over reward R_y when expending effort E_x and vice-versa when expending effort E_y). Selecting effort-congruent rewards can reduce promotion reactance by enabling consumers to perceive themselves as engaging in the effort activity for its own sake and not in order to attain some extrinsic goal. In contrast, choosing rewards that are incongruent with (i.e., unrelated to) the required effort emphasizes an external attribution for one's behavior (e.g., "I do x in order to earn y "), and hence, cannot reduce promotion reactance.

In addition to reactance reduction, a preference for effort-reward congruity might have other possible explanations. First, consumers may prefer rewards that are classified in the same mental account as the required effort activity or sponsor of the reward (O'Curry 1999; Thaler 1985). Second, the required effort activity may prime (i.e., increase the cognitive accessibility of) congruent rewards (e.g., Herr 1989). Third, consumers may infer their tastes from the effort activity, such that they presume that they want or need the required consumption activity, and therefore, choose a similar or identical reward. These alternative accounts, as well as the reactance-based explanation, are examined in a series of five studies.

Study 1 demonstrates a robust preference for effort-reward congruity. Study 2 shows that the preference for effort-reward congruity is stronger among consumers who experience greater psychological reactance. Study 3 employs a manipulation (rather than measurement) of reactance and demonstrates that the congruity preference can be attenuated and even reversed when consumers read (i.e., before making reward choices) supposedly scientific

information, in actuality intended to reduce promotion reactance. Study 4 demonstrates that consumers prefer rewards that are congruent with their source or sponsor (e.g., free groceries from a grocery store) only when the rewards require investing effort; the preference for congruent rewards is attenuated when identical rewards are obtained from the same sponsor without any personal effort commitment. Study 5 employs a field experiment using real choices in an actual café loyalty program. The results indicate that customers are significantly more likely to redeem a congruent reward when they explicitly contract to invest effort in order to earn a reward compared to when the (same) effort is incidental to reward attainment. The findings are consistent with the reactance-based account, but not with the alternative explanations.

The results are integrated and their theoretical implications for research on intrinsic motivation are discussed. For example, a question that naturally arises is whether the impact of the effort-reward relation extends beyond reward preferences to the subsequent interest in the promoted consumption activity. Specifically, would engaging in an effort activity for the sake of an effort-congruent rather than incongruent reward lead to greater preference and long-term loyalty for the reinforced activity? It is striking that research on intrinsic motivation has not examined rewards identical to the required effort. Thus, further research could investigate whether the use of effort-congruent rewards attenuates the well-known overjustification effect.

Finally, beyond the theoretical significance of promotion reactance and the related preference for effort-reward congruity, this issue has important implications for the design of incentive systems and motivational plans. For example, while many loyalty programs in the current marketplace offer effort-congruent rewards, numerous other programs use rewards that differ considerably from the promoted consumption (e.g., Kellogg's offers 1000 AAdvantage frequent flyer miles for consumers who buy 10 cereal boxes). The issue of whether or not to provide in-kind (i.e., effort-congruent) rewards is a topic of continuing debate among marketers and consultants. Although multiple factors determine the appropriate rewards for the investment of effort (see Kivetz and Simonson 2002; Kivetz 2003), the present research indicates that, *ceteris paribus*, effort-congruent benefits may engender desirable attributions and better fit consumer preference. Thus, both marketers and consumers may benefit from incentive systems that reinforce the effort activity and emphasize intrinsic motivation rather than extrinsic goals.

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SPECIAL SESSION SUMMARY

Exploring Experiential Processing in Consumer Contexts

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SESSION OVERVIEW

The psychological processes that underlie judgments of persuasive messages, products, and the like are at the core of consumer research. To date, the study of such processes that underlie the formation of judgments has concentrated largely on the content of consumers' thoughts. For example, dual processing theories have focused on differences in the kinds or content of data that consumers generally attend to, elaborate on, and use as a basis of judgment (e.g., central, diagnostic, or detailed content versus readily accessed peripheral or heuristic-fostering content; Chaiken 1980; Petty and Cacioppo 1986). Other researchers have addressed the role of affect, emotion, or mood on judgment formation, yet still such investigation has centered on the effects prompted by the valence and thus content of the affect (Isen 2000). What is critically missing from such inquiry is consideration of and insight into the experiential sensations that consumers commonly undergo in their daily lives and an understanding of both when and how such sensations constitute not idle by-products of information processing, but rather are gainfully employed in the construction of judgments (Clore 1992).

The research presented in this session indeed investigates this experiential component of consumers' processing. Specifically, each of the papers explores different types and consequences of experiential feelings that consumers are privy to—experiences that are distinct from the sort of propositional or conceptual thought that dominates most consumer research. Note that the distinguishing aspect of such experiences is not their valence, but rather their perceptual or sensation-based character (Meyers-Levy and Malaviya 1999; Strack 1992). These experiential feelings include visceral sensations like those involving arousal or excitation, eagerness, familiarity, or resolution (of ambiguity).

The three papers in this session build on and expand our still nascent knowledge of experiential processing, with each making important contributions. The first paper, by Rui Zhu and Joan Meyers-Levy, begins with the notion that conventional heuristic processing may be quite distinct from experiential processing (Meyers-Levy and Malaviya 1999). As such, this work begins by distinguishing between two types of cues that relatively unmotivated consumers may use as a basis of heuristic judgments, namely propositional or conceptual cues versus sensation-inducing, experiential cues. The focal question that is investigated concerns what factors influence which of these kinds of cues such consumers will use as a basis of judgment when both are present in a message. Drawing on regulatory focus theory, these researchers theorize and find that individuals who adopt a promotion regulatory focus are more likely to base their judgments on experiential cues, while those who adopt a prevention focus are more likely to base their judgments on conceptual cues. These outcomes are qualified, however, as they are shown to emerge only when consumers are sufficiently conscious of their self and thus are sensitive to their self regulatory focus.

The second paper, by Ian Skurnik, Carolyn Yoon, Denise Park, and Norbert Schwarz, examines a particular type of experiential feeling, namely the feeling of familiarity. Extant literature suggests that feelings of familiarity may prompt an "illusion of truth" effect, a memory distortion whereby people think that vaguely familiar information is probably true, even when it was

originally identified as false. These authors identify age as a potential moderator of this effect. Based on the distinction between two types or uses of memories, namely recollection versus familiarity, they hypothesize and find that for older adults, false claims tended to be misremembered as true both immediately and after delay. Repeatedly identifying a claim as false helped older adults remember it as false in the short term, but paradoxically made them more likely to remember it as true after a three-day delay. This unintended effect of repetition emerges from increased familiarity with the claim itself, but decreased recollection of the claim's original context. For younger adults, repeated presentation decreased the "illusion of truth" effect both immediately and after delay.

The third paper, by Myungwoo Nam and Alice M. Tybout, explores yet another type of sensation or experiential feeling, namely the feeling of either resolution or frustration that may emerge upon encountering incongruent information. Previous research suggests that a moderately incongruent stimulus tends to be evaluated favorably because the experience of successfully resolving the incongruity is itself rewarding. These authors theorize that both risk associated with a purchase as well as one's consumption goal are potential moderators of this schema incongruity effect. Specifically, they hypothesize and observe that, counter to findings reported previously in the literature, consumers may prefer a moderately incongruent product in high risk purchase situations as long as their consumption goal is compatible with the incongruent product feature.

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EXTENDED ABSTRACTS

“When Do Consumers Rely on Conceptual Versus Experiential Processing Heuristics?”

Rui Zhu, Rice University

Joan Meyers-Levy, University of Minnesota

Existing literature suggests that there are at least two ways in which consumers may render product judgments when their processing motivation is limited. One means entails relying on common-sense implications associated with a salient conceptual cue. For example, research indicates that relatively unmotivated consumers often focus on conceptual cues consisting of salient consensual data (Maheswaran and Chaiken 1991), namely a summary statistic that reflects the general public's views about the focal issue (e.g., 70% of consumers prefer Coke). In such a case, they generally base their judgments on the perceived favorableness of this conceptual cue (e.g., they simply reason that if 70% of consumers prefer this brand, it must be good). We refer to these sorts of logic-based cues that can serve such a heuristic purpose as conceptual heuristic cues.

A second and less investigated means of judgment formation entails relying on individuals' internal, experiential sensations that they feel at the time of judgment formation (Meyers-Levy and Malaviya 1999; Strack 1992). Here, individuals base their judgments on nonsemantic, subjective body sensations that they may experience upon exposure to some data. Frequently this occurs because they (mis)attribute the sensation to the appeal of the focal issue or object. For example, exposure to a product message that contains pictures of highly attractive people may prompt the consumer to experience spontaneously a positive, arousing visceral sensation. This sensation, then, may be misattributed to the actual attributes of the target object, prompting the individual to ascribe a favorable judgment to the product. We refer to the data that engenders such experiential sensations as experiential cues.

The current research explores whether these two mechanisms are indeed distinct and aims to identify factors that moderate when each of the two processes will be employed. Regulatory-focus theory (Higgins, 1987) provides a starting point for anticipating when low motivation consumers are likely to base their judgments on either conceptual or experiential cues. This theory posits that there are two distinct regulatory systems for achieving desired end states. Individuals who pursue a promotion regulatory focus concentrate on achieving their hopes, ideals, and nurturance needs by approaching matches to desired end states, whereas those who pursue a prevention regulatory focus concentrate on satisfying their duties, obligations, and security needs by avoiding mismatches to desired end states. Because a promotion focus prompts aspirations toward abstract ideals that are apt to promote an experiential state marked by sensations of excitement, eagerness, or zeal (e.g., Crowe and Higgins 1997), we reason that individuals who adopt a promotion focus are likely to be more responsive to and use as a basis of judgment experiential rather than conceptual message cues. On the other hand, because a prevention focus encourages the vigilant and cool-headed attempt to avoid a mismatch to a fairly clearly-defined end state (Higgins 1997), we propose that individuals who adopt a prevention focus should be more responsive to and use conceptual as opposed to experiential message cues when forming judgments.

Experiment 1 was developed to assess the preceding notion that under fairly low motivation conditions, individuals who adopt a promotion (prevention) focus will be more sensitive to and base their judgments on the implications of experiential (conceptual) cues versus conceptual (experiential) cues. In all treatments, participants' motivation level was held constant at a low level.

Participants first performed a priming task intended to manipulate their adoption of either a promotion or prevention focus (Higgins et al. 1994). Next, they were shown several ads, including a target ad for a new brand of athletic shoes. The target ad displayed a salient headline, a clear picture of the shoes, several claims about the shoes' features, and several pictures of people who presumably used the shoe, each annotated by a quote that extolled a shoe benefit. Both a conceptual and an experiential heuristic cue were represented in all ads, which were otherwise identical. These two types of cues varied in favorableness such that when the conceptual (experiential) cue was positive, the experiential (conceptual) cue was negative. The conceptual heuristic cue was presented via the ad headline. In the positive conceptual cue condition, it stated that in tests, 7 out of 10 consumers preferred the target brand of shoe. In the relatively negative conceptual cue condition, this statistic was 5 out of 10. The experiential cue was presented via the pictures of the presumed users of the shoe. The favorableness of this cue was manipulated by varying the visual attractiveness of the users. Either the users looked like the type of attractive people typically displayed in ads (e.g., well groomed and fit) or they appeared more average looking and realistic (e.g., less perfect facial and body appearance). Next, participants completed product judgment as well as thought-listing measures. Finally, participants responded to an individual difference scale assessing private self-consciousness (Fenigstein, Scheier, and Buss 1975), which gauged the extent to which one attended to his or her inner feelings or sensations. This scale was taken because we anticipated that the aforementioned predictions might only occur for participants who, by disposition, are relatively high versus low in private self-consciousness.

Consistent with our theorizing, findings revealed that promotion focus individuals based their judgments on the favorableness of the experiential cue and judged the target product more favorably when this cue was more favorable (and the conceptual cue was relatively unfavorable), whereas prevention focus individuals based their product judgments on the favorableness of the conceptual cue, producing more favorable judgments when that cue was more favorable (and the experiential cue was relatively unfavorable). Moreover, such effects only occurred for participants who were chronically high versus low in private self-consciousness. A second study conceptually replicated and extended these results.

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"How Warnings Become Recommendations: Paradoxical Effects of Warnings on Beliefs of Older Consumers"

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Carolyn Yoon, University of Michigan

Denise Park, University of Illinois

Norbert Schwarz, University of Michigan

In everyday life, people are bombarded with consumer information, from a wide variety of sources that differ in credibility (such as news reports, advertisements, web sites, and so on), and in diverse consumption domains (from packaged goods to medical care). A crucial task for people is to determine whether the information they see is true or false. And because people often act on consumer information long after encoding it, their memory for the truth of information should be as accurate as possible.

We argue that when people try to determine the truth of a remembered consumer claim, memory for the original context of the claim can be as important as memory for the claim itself. For example, suppose the claim "shark cartilage will help your arthritis" feels familiar to consumers because they have encountered it recently. They might trust it less if they remember reading it in a tabloid headline than if they remember hearing it as advice from their physician. A weakness of this strategy is that memory for prior exposure to a claim is often much better than, and can be wholly independent of, memory for the context in which the claim appeared (for reviews, see Johnson, Hashtroudi, and Lindsay 1993; Mandler 1980). And, when people find a claim familiar because of prior exposure, but do not recall the original context or source of the claim, they tend to think that the claim is true (e.g., Hasher, Goldstein, and Toppino 1977; Hawkins and Hoch 1992).

Against this background, we document in two experiments some paradoxical effects of warnings for older adults. We reason that repeated warnings about a false claim strengthen a feeling of familiarity for the claim, and improve memory for the truth-specifying context of its presentation after a short delay. However, detailed memory for the warning fades more quickly for older than younger adults. Once the needed contextual details are lost, the remaining feeling of familiarity fosters the paradoxical acceptance of false claims as true, rendering older adults particularly susceptible to this bias. Similarly, repeating a claim without identifying its truth strengthens familiarity without enhancing memory for any truth-specifying context; hence eventual attempts to discredit the familiar claim can backfire.

In experiment 1, we examine effects of age, repetition, and delay on the illusion of truth for health and medical information. Repeated warnings about false information helped both younger and older adults avoid the illusion of truth after 30 minutes. More important, after 3 days, repeated warnings still benefited younger adults, but increased older adults' tendency to call false information "true." Thus paradoxically, after three days had passed, the more times older adults had been warned that a claim was false, the more likely they were to misremember the claim as true. Older adults'

results after a short delay show that they do encode claims and their context better with repetition.

In experiment 2, we also make claims familiar to older and younger adults through repetition, but manipulate the point at which we disclose the actual truth of each claim. Some participants see claims twice without learning if the claims are true or false; they learn this information only on a third and final presentation. This single opportunity to encode truth-specifying context may not be adequate for older adults, and may lead them to think that discredited but repeated claims are truer than discredited claims they saw only once. Other participants see the truth-specifying context every time they have seen the claims. In the condition wherein claims were repeated without their context (i.e., strengthening familiarity but not improving context memory), older adults' memory for truth after 20 minutes was similar to older adults' performance in experiment 1 after three days. Thus, seeing a claim several times before one learns that it is false does not improve memory for its truth value. To the contrary, the repetition merely increases familiarity and hence acceptance of the false claim as true.

The results from the two experiments have the potential to interfere with older adults' ability to make good decisions and choices, rendering it important that we understand the underlying processes and their applied implications. Together, findings from the two studies suggest that people have multiple bases for making constructive judgments about the truth of remembered claims. One basis can be remembered contextual details, such as explicit "true" and "false" designations. A second basis can be partial information about prior exposure, such as experienced familiarity. When incomplete information such as familiarity is the only available cue for judging truth, people generally tend to infer that the information is true. We suggest that repeating claims and truth-specifying contextual cues enhance recall of the information's context as well as its subjective familiarity. Hence repeated warnings have the desired effect on memory immediately. But after contextual information has faded, leaving only enhanced familiarity, more warnings about the falsity of information are paradoxically more likely to make the information seem true. The same enhanced familiarity still helped our participants distinguish between new and old information, even as it biased them to think of the old information as true.

We highlight the risks of communication strategies that merely identify a given claim as unsubstantiated or false. For example, attempts to warn people about an erroneous, outdated, or deceptive claim may increase belief in the claim by raising its familiarity. Older adults may be particularly susceptible to this unintended effect. We discuss potential implications for public policy.

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“The Moderating Role of Goal Compatibility on the Schema Congruity Effect”

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In recent years, evidence for the schema congruity effect has emerged in the consumer research literature. Consumers have been shown to evaluate moderately incongruent products more positively than either congruent products or extremely incongruent products (e.g., Meyers-Levy and Tybout 1989; Peracchio and Meyers-Levy 1994; Peracchio and Tybout 1996).

The schema congruity effect has been explained in terms of Mandler's (1982) theorizing. According to this view, the level of congruity between a stimulus and an evoked schema influences cognitive processing and evaluation of the stimulus. A moderately incongruent stimulus is evaluated favorably because the novelty of the object increases arousal (relative to congruity) and prompts elaboration in an effort to resolve the incongruity between the stimulus and the activated schema. In the case of moderate (but not extreme) incongruity, resolution occurs and evaluation is favorable both because elaboration leads to more polarized or extreme judgments and because the process of resolving the incongruity is itself rewarding.

However, recent work suggests that the schema congruity effect may be of limited interest because it occurs only when consumers perceive the risk in choosing an incongruent product to be low. Specifically, Campbell and Goodstein (2001) report that although the schema congruity effect is observed when respondents think they are participating in a market research (low risk), the effect is reversed and there is a preference for the norm when respondents are asked to choose products for use in social situations (higher risk). The findings of the three studies that they report support this view.

Although Campbell and Goodstein's (2001) findings are provocative, casual observation suggests that consumers do sometimes choose incongruent products over more congruent ones despite high social and monetary costs. For example, Chrysler introduced PT Cruiser, which sports an unusual design compared to other car models on the market. Given that monetary risks of purchasing cars are substantial, we might predict that PT Cruiser would not be accepted by mass consumers based on Campbell and Goodstein's results. However, the car's retro styling made it a standout and Chrysler sold 310,000 cars in the first two years after its launch.

The present work proceeds from the premise that the relationship between schema congruity and risk may be more complex than initially thought. Specifically, we explore the possibility that consumers may embrace incongruent products in high risk situations if the product fits with a consumption goal, such as differentiating oneself through the products chosen.

Two studies were conducted to examine this hypothesis. The experiments employed modified versions of the procedures used by Campbell and Goodstein (2001) in their Experiments 1 and 2. Specifically, the incongruity of a product was varied by changing the product packaging that either fit with or was inconsistent with an activated category schema. All respondents were placed in a high social risk situation and their goal in choosing a product was manipulated. In one condition, selecting an incongruent product had the potential to help the respondent achieve a goal whereas in the other condition, selecting an incongruent product offered no benefit in terms of achieving the goal.

The findings of both studies support our hypotheses. When the incongruity of the product was unrelated to the respondents' goal, the preference for the norm observed by Campbell and Goodstein was replicated. However, when the product was incongruent but the

incongruity could be resolved by considering the goal, respondents preferred the incongruent product to a congruent one.

The major contributions of this paper are two-fold. From a theoretical standpoint, we identify consumption goal as a moderator of the schema congruity effect in high risk situations. Consumers are willing to embrace incongruity provided that they can resolve the incongruity in terms of an activated goal. These findings reveal the important role that consumption goals may play in enabling (or blocking) incongruity resolution.

From a practical standpoint, our research offers direction to marketers launching new products. Our findings suggest that products be designed with points of difference (i.e., incongruities) that fit with latent consumption goals. These goals may be activated through advertisements that depict the product being used to accomplish the goal(s) it may serve.

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SPECIAL SESSION SUMMARY

Loss Aversion: What Is It and What Does It Mean for Marketing

Eric Johnson, Columbia University
Julie Irwin, University of Texas

SESSION SUMMARY

Countless experiments have established that losses loom larger than gains (Kahneman and Tversky, 1979). In most of these experiments, subjects in an experimental auction demand more for an item they possess than they are willing to pay for the same item not in their possession. This robust finding obtains even when buy-low/sell-high strategies are irrelevant (as in incentive-compatible games, experiments where items are traded and no money exchanges hands, etc.).

Usually loss aversion, a more extreme affective reaction to losses versus gains, is invoked as the cause of the preference differences in the two frames. But it is not altogether clear (1) exactly how this affective response works (or if it even exists), and (2) what loss aversion has to do with consumer behavior and marketing. In this session, we explore these issues.

The first paper, by Schkade, Kahneman, and McGraw, isolates loss aversion as an emotion, trying to measure whether consumers actually do respond more strongly to losses versus gains. The authors explore whether previous work on loss aversion uncovered artifacts or actual consumer differences; for marketers, this distinction is especially important. The second paper, by Johnson, et al., explores an issue of special importance to marketers: Individual differences. Yes, loss aversion may exist, but is there heterogeneity across consumers? In other words, are there segments? Finally, the third paper, by Walker and Irwin, recognizes that most market exchanges do not look like the typical gain/loss experiment. In the real marketplace, consumers divest themselves of objects in particular ways: They give them to a friend, donate to a charity, throw them away, etc. How does loss aversion depend on (1) the object being divested, and (2) the manner in which it is divested? This knowledge would help marketers interpret the extant loss aversion research to predict actual divesting behavior.

All of the papers in this session use both cognitive and affective measures to explore actual consumer responses to and manifestations of loss aversion. This approach is supported by research (e.g., Irwin 1994; Lerner, Small and Loewenstein 2004; Peters, Slovic and Gregory, 2004) indicating that loss aversion is driven by differential emotional foci in loss versus gain frames. This session thus would be of interest both to consumer decision researchers with an interest in loss aversion, and to other consumer researchers interested in affect and the interplay of affect and cognition.

SHORT ABSTRACTS

“Loss Aversion and Predictions of Utility”

David Schkade, University of California – San Diego
Peter McGraw, University of Colorado
Daniel Kahneman, Princeton University

We examine loss aversion in affective forecasts. Study 1 investigates how symmetric positive and negative changes due to a relocation influence predicted changes to well-being. In Study 2 people judge the intensity of their feelings about monetary gains and losses. We ask people to match the force they exert on a handgrip dynamometer to the intensity of their anticipated experience. Loss aversion is present in predicted utility; people exert more force for negative events than positive events of the same magni-

tude. Using analyses from psychophysics we find the magnitude of loss aversion is similar to estimates previously derived from choices.

“Individual Differences in Loss Aversion”

Daniel Goldstein, Columbia University
Simon Gaechter, University of St. Gallen
Andreas Herrmann, University of St. Gallen
William Sharpe, Stanford University
Eric J. Johnson, Columbia University

Evidence is emerging that most people are loss averse, that is losses appear to have a greater impact upon choice than the equivalent sized gains. However, this effect leads to three natural questions:

- (1) Are all people loss averse? and
- (2) How do they differ?
- (3) Are there different degrees of loss aversion across different attributes.

In this paper we discuss analysis of two large studies of loss aversion with non-student populations. One is a sample of 360 German speaking respondents who gave selling and choosing prices for 4 auto attributes, a hypothetical choice among lotteries, and actually purchased or sold a small model car. The second data set is a study of 153 respondents reporting on their investments, and completing an innovative tool which allows individual estimates of loss aversion for retirement. Both samples provided a number of demographic, knowledge, and experience measures.

Our basic result is that there are large and systematic differences that are predicted by some theories of loss aversion, and not others. Degree of attribute knowledge increases loss aversion, attribute importance does not. There are also demographic differences in both samples: loss aversion increases with age, and differs across men and women.

“Why What It Is and Who It Goes To Matters: The Emotional and Experiential Antecedents of Product Disposal Choices”

Rebecca Walker, University of Texas
Julie R. Irwin, University of Texas

Although prior research on loss aversion (Kahneman and Tversky 1979) has shown that people value goods more when they have them than when they do not, this work has primarily manipulated the disposal of the good by asking subjects for a minimum selling price for a new good. In the marketplace product disposal rarely takes this form. Consumers have a history with their goods and may dispose of them in a number of ways (e.g., selling them, throwing them away, giving them to charity, giving them to a friend). We show that consumers strongly prefer some product disposal methods over others, and that these preferences depend on (1) product category, and (2) product history. In addition, three emotions: sadness, jealousy, and altruism, play distinct roles in product disposal choices. We explain how these findings render the literature on loss aversion more relevant to marketers, and outline how marketers with a stake in product disposal (e.g., storage companies, charities, flea markets) might capitalize on our results.

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Are Visceral Factors Sensitive to Attentional Focus Manipulation? The Case of Hunger

Catherine Paquet, McGill University
Laurette Dubé, McGill University
Jordan L. Le Bel, Concordia University

EXTENDED ABSTRACT

In the last decade, important efforts have been made to address the need to understand better the operation of “visceral factors” in accounting for behaviors that appear to be out of the strict control of reason. While the bulk of recent research efforts to tackle the effects of visceral factors on consumer behavior has focused exclusively on mood and emotions, visceral factors like drives (e.g. hunger, thirst, sexual desire) have been relatively neglected. The current paper has for object one of such drives namely, hunger.

As part of a complex of short-term feeding control mechanisms, feelings of hunger arise in response to a diversity of bodily signals, such as oral, stomach, gastrointestinal, metabolic, and neural factors. Feelings of hunger are also influenced by factors that have little to do with energy regulation, such as feelings of sickness, emotional and mood changes, variation in social, functional or environmental feeding contexts, as well as perception of sensory cues (Panksepp 1998). For instance, there is evidence showing that a focus of attention on appealing food sensory cues (by comparison to attention focused away from these cues) may impact the intensity of hunger feelings, with more intense pre-consumption hunger being experienced under sensory-focus than under distraction conditions. Research on the physiological responses to sensory stimulation by food (for a review, see Mattes 1997) suggests that the above findings may result from a complex interplay between perceptual/cognitive and bodily/physiological processes. It is indeed well established that, in preparation for eating, visual, olfactory, and gustatory cues stimulate a cascade of physiological processes at multiple sites in the body. These processes, collectively called *cephalic responses*, have been associated with both positive and negative feedback actions on control of eating (Smith 2000). The positive feedback action of sensory stimulation usually occurs at early stages of the meal and is related to the rewarding value of food (Yeomans 1993; 1996) and entices consumption. Negative feedback actions are usually the conditioned result of the association between orosensory and postingestive stimulation during feeding, which sends satiation signals to the brain, thereby creating a negative feedback on food intake (Smith 2000), that eventually overcomes the initial positive feedback.

We suggest that the aforementioned impact of attentional focus on pre-meal hunger most likely entailed an intensification of the early cephalic response and its positive feedback, translating into more intense feelings of pre-meal hunger and consequently into higher motivation to eat and/or increased consumption per se. Consistent with this expectation, heightened responsiveness to sensory qualities of food is thought to promote hunger and slow satiety (Hetherington and Macdiarmid 1995). Similarly, individuals with a high tendency to let eating be primarily guided by the sensory qualities (i.e., taste, smell, color, etc.) of food stimuli have stronger cephalic phase responses to food (Rodin 1985).

The positive feedback of the cephalic response arises prior to or very early in consumption and is believed to be small, transient, and fast in its operation. We argue that such responses can persist over time if attentional focus on sensory cues is maintained during consumption, therefore delaying the shift from positive to negative feedback mechanisms. Since cephalic responses are tied to intensity of hunger feelings, this would suggest that the decrease in

hunger feelings that typically follows consumption and partly determines meal termination, is likely to be smaller under conditions in which the sensory experience during consumption is maintained, compared to when attentional focus is distracted away from the sensory experience.

One can argue that the above expectation is not necessarily tied to bodily/physiological processes, but rather strictly to perceptual/cognitive processes. In order to rule out this alternative account, we consider the moderating effect of external eating, an individual characteristic that defines one's natural tendencies to rely more on perceptual/cognitive processes and less on bodily/physiological factors in guiding their eating behavior. According to a perceptual/cognitive account, we would assume a stronger effect of sensory-focus manipulation (i.e. slower change in hunger) for individuals who are more responsive to such sensory properties (i.e. high external eaters). Alternatively, if sensory-focus effects occur by interfering with natural bodily/physiological processes involved in the shift from positive to negative feedback as consumption unfolds, one can expect the effect to be stronger in individuals who are responsive to both bodily/physiological and perceptual/cognitive signals (i.e. low external eaters).

In the present study, participants are given to eat the same quantity of a pleasurable food (chocolate) according to a given temporal pattern in one of two consumption context conditions, namely, sensory-focus (asked to eat while paying attention to taste, color, texture, mouth-feeling, etc.) and distraction away from sensation (asked to eat while performing a concurrent task). Participants provided self-reports of body weight and height and completed the Dutch Eating Behavior Questionnaire, which includes a measure of the extent to which eating is externally-motivated by sensory cues (external eating).

Results from ANCOVA with repeated analysis measurements controlling for body mass index (weight/height²) were consistent with expectations that the decrease in the intensity of mealtime hunger feelings following consumption is smaller under sensory-focus, compared to task-focus conditions. Moreover, providing support for a role for bodily/physiological processes, the effect was stronger for individuals who showed a natural low tendency to rely on sensory cues in guiding their eating behavior (low external eaters).

The results of the present study suggest that the decrease in hunger occurring over the course of a meal and regulating meal termination is sensitive to contextual manipulations that are under marketers' control. Moreover, the findings seem to indicate that this contextual effect occurs partly through the influence of bodily/physiological factors, rather than strictly through perceptual/cognitive processes. In light of the current findings suggesting that visceral factors can act as mediators between perceptual manipulations and behavioral tendencies, we argue that consumer researchers should pay more heed to visceral factors, such as hunger.

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My Favorite Recipes: Recreating Emotions and Memories Through Cooking

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EXTENDED ABSTRACT

Nostalgia, a yearning for the idealized past (Havlena and Holak 1991; Hirsch 1992; Holbrook 1993), can be evoked by any object (Holbrook and Schindler 2004). Food, with its ability to engage multiple senses, may be particularly effective at transporting consumers back in time. While consumers, marketers, and popular writers, including cookbook authors, connect food with nostalgia and memories, the relationship between food and nostalgia has not been studied in a scholarly fashion in the consumer research literature. This research seeks to help fill that void by exploring why consumers choose recipes as their *favorites*, with a particular emphasis on recipes associated with nostalgia and memories.

Holak and Havlena (1998, p. 218) define nostalgia as “a positively valenced complex feeling, emotion, or mood produced by reflection on things (objects, persons, experiences, ideas) associated with the past.” The “idealized past emotions [characteristic of nostalgia] become displaced onto inanimate objects, sounds, smells and tastes that were experienced concurrently with the emotions” (Hirsch 1992, p. 390). The actual experienced object, or perhaps even its substitute, has the power to re-evolve these emotions. Nostalgia is not only evoked by the personally experienced past, but it may also be evoked by collective understandings of the past, a past which even may have occurred before an individual was born (Baker and Kennedy 1994; Stern 1992). Stern (1992) distinguishes between personal nostalgia and historical nostalgia. Personal nostalgia idealizes “the personally remembered past;” whereas, historical nostalgia “idealizes the imaginatively recreated past” (p. 16).

Consumption artifacts are important cues in concretizing the past (Belk 1991; Havlena and Holak 1991), even when the past is vicariously experienced (Stern 1992). These consumption artifacts, such as recipes or food, may stimulate nostalgic emotions, and may also evoke “webs of associations” and memories (Belk 1991, p. 116). That is, objects may serve as retrieval cues to stimulate memories in storage (e.g., Roediger 1999). Given that there are different types of nostalgia that may be experienced, i.e., personal and historical, different nostalgia types indicate theoretically different memory processes. Autobiographical memory, memory for the personally experienced past, will be in use when personal nostalgia is evoked, and collective memory, a shared interpretation of the past, will be in use when historical nostalgia is evoked. These are not necessarily mutually exclusive as a web of associations may have elements of each.

The objective of this research is to investigate the nostalgic responses and webs of associations linked to favorite recipes. The primary contribution of this research is that it specifies the conditions necessary in the past for nostalgic associations to be evoked in the present.

Based on semi-structured, face-to-face interviews, we analyze nostalgia and memory associated with favorite recipes. Respondents were first asked to describe their cooking habits and then asked to list three of their favorite recipes, after which they were probed as to why these recipes have special meanings to them. The subsequent analysis of the interviews led to the identification of three nostalgia-related associations connected to recipes: recipes as

part of ritual, recipes as part of family construction and continuity, and recipes as part of self.

Ritualistic acts associated with recipes include the celebration of holidays and milestone events, the passing of time, and healing. Many of the informants’ favorite recipes are used only during holidays or special events, such as cinnamon rolls on Christmas Eve, black-eyed peas on New Year’s Day, and corned beef and cabbage on St. Patrick’s Day. The seasonal property of foods, such as blueberry cobbler in the summer, pumpkin bread in the fall, and stew in the winter, also seems to create a propensity for nostalgic association; the recipes help individuals mark the passage of time, yet also provide continuity from season to season. Some informants also had a recipe, commonly chicken-based, that they associated with healing, either because they had been served the dish when ill, or because they served the dish themselves to ill family members or friends.

Recipes also serve to help construct the family and provide intergenerational continuity. Some informants cited recipes that had been part of their families for generations. For many informants, the act of cooking a dish, as well as the smell of a dish, evokes the memory of a particular individual. A number of informants discussed how their children now cook (or that they hope their children will cook) a family recipe. Like cherished possessions and heirlooms (Curasi 1999; Price et al. 2000), recipes are bequeathed to loved ones in the hope that they will be appreciated and recalled as special times with the giver.

Consistent with nostalgia’s role in identity construction, maintenance, and reconstruction (Davis 1979), our informants provide evidence that recipes contain multiple aspects of self. Favorite recipes are often linked to happy or memorable events in childhood, such as birthdays or times spent with a loved one. Many recipes are also related to the informants’ social groups, particularly those associated with ethnic and/or religious heritages, such as Italian, Southern, Mexican, and Jewish recipes. In addition, places of attachments, such as vacation spots or homelands, can be linked to favorite recipes.

In summary, this research shows the nostalgic links and memories that can be evoked by recipes and the symbolic function that recipes can serve in the construction of family and the nurturing of intergenerational ties, the development of rituals, and the creation of self. Recipes encourage retrieval of emotions and experiences from the past that involve an inter-related web of associations across space and time including people, places, and events.

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Hedonistic Rationality: The Duality of Food Consumption

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EXTENDED ABSTRACT

Why do consumers sacrifice long-term goals, and face possible ridicule, rather than control their hedonistic inclinations? For instance, they eat too much of the “wrong” foods, spend money too freely, pile on too much credit card debt, would rather visit with friends than work or study, and prefer watching mindless television to reading, attending cultural events, or exercising. In these cases, consumers satisfy short-term hedonic goals, at the expense of long-term benefits, such as more money and a leaner, healthier body and mind. Situating this study within the context of food consumption clarifies consumer choice surrounding these behaviors.

Americans are fat, and getting fatter (Martin, Robinson, and Moore 2000). But then, so are people in every other developed country (Martin, Robinson, and Moore 2000). Despite this overconsumption, people are not eating healthier (Kim, Nayga, and Capps 2001). Consumers are not happy about this trend—that is why they spend billions of dollars trying to correct the defects caused by overeating (Thompson and Hirschman 1995) and 120,000 each year will die prematurely due to nutrition related ailments (Frazao 1995). Governments are not happy about it either—that is why they spend billions of dollars promoting healthier food consumption, like the 5 a day program (Foerster, et al. 1998; Wansink 2002). Taxpayers and insurance carriers are not happy—since medical costs associated with obesity account for 5 percent of direct and 10 percent of indirect costs, much of it paid by government medical programs like Medicare. The food industry was happy, but that is changing as customers line up to file lawsuits blaming restaurants for their excess weight (Higgins 2003) and states introduce legislation requiring food labeling of restaurant meals (Higgins 2004).

Nothing seems to help. Consumers take off weight through expensive diet programs, pills, surgery, and exercise only to put it back on again—obesity is 74 percent more prevalent today than a decade ago (Higgins 2003). Promotional advertising and educational programs fall on deaf ears (Wansink 2002). Nutritional labeling, once thought to be the panacea for enabling consumers’ desires to eat healthier, does not appear to be having the desired effect (Hill, et al. 2002).

Marketing studies contribute to a more nuanced understanding of why consumers engage in behaviors that thwart long-term goals, like poor food choice, building on existing behavioral theories of consumption. Most of these efforts rely heavily on the image of consumers as rationale individuals engaged in cognitive decisions, while ignoring the experiential factors that might impact food consumption. This ignores the basic duality of food consumption as both a utilitarian product for support of the body and a hedonic product for support and social construction of the soul.

For instance, Bagozzi and various colleagues have developed the theory of trying and more recently the theory of goal directed behavior, which explain more of the variance in observed behaviors by incorporating past efforts, behavioral control, and desires as antecedents of food consumption (cf. Bagozzi and Warshaw 1990; Bagozzi and Edwards 2000). Recently, Wansink (2002) contributed to this understanding by reviewing research related to World War II efforts to modify food consumption. His study underscored the importance of food availability and familiarity in evaluations of food acceptability. Others, such as Huston and Finke (2003), Khare and Inman (2003), and Verplanken and Faes (2000), focus on a relatively narrow range of factors impacting food consumption, such as implementation plans and habits, resulting in relatively low

explanatory ability ($R^2 < .20$). Unfortunately, most of these studies also suffer from narrow sampling—mainly employing students.

This study attempts to create a more comprehensive understanding of factors affecting food consumption behaviors by employing non-student samples using a grounded theory approach to develop theoretical linkages rather than test hypothetical ones. This study uncovers some of the multiple meanings consumers attach to food and how food performs both a utilitarian and self-defining function. Building on previous studies of body image (Thompson and Hirschman 1995), construction of self (Belk 1988), and homeyness (McCracken 1989), data highlight the bifurcation between rational and experiential influence on food consumption.

Semi-structured interviews were conducted with 56 informants between the ages of 11 and 60 to elicit not only cognitive elements of food consumption, but experiential ones as well. This study seeks an understanding of the myriad of forces—informational, social, personal, and cultural—acting on the consumption process. Recognizing that understanding these behaviors involves not only understanding the proto-typical consumer, but embraces differences across consumers, this study is more nuanced than previous ones since it uses informants comprising much of the human life span, from children to the elderly and ethnic groups, including Hispanics, Caucasians, and Asians.

Toward that end, themes developed through the iterative interpretation of depth interviews result in a more textured understanding of food consumption, especially with respect to the multitude of meanings associated with food, such as using food as a definition of self and social influences on consumption. The resulting themes, while developed in the context of food consumption, might be equally valuable in understanding similar purposive behaviors, including other health behaviors such as smoking cessation and exercise, dark-side consumption such as eating disorders (Hirschman 1991), and other process behaviors, like studying (Bagozzi and Edwards 2000).

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Race, Place, and Consumption: The Role of Urban Gardening in the Construction of African American Identity and Community on the West Side of Chicago

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EXTENDED ABSTRACT

An underlying assumption of the interpretive research paradigm is that consumer goods have a symbolic dimension inasmuch as they satisfy emotional and social needs of consumers. Goods can be used to express personal taste and status, or smooth the way from one life stage to another. (Douglas/Isherwood, 1976, Belk, 1988, McCracken, 1990, Sherry, 1998). Goods can also symbolize shared meanings and group identification, the way colors, hand signals, and ritual behavior grant a sense of belonging to groups as disparate as sports teams and street gangs. Public spaces, from parks and gardens to public landmarks and artwork play a similar role in the lives of consumers, inasmuch as they strike a chord in the popular unconscious and link the private self to the needs and aspirations of the group. (Belk, 1988, p.153, Sherry, 1998, 111-112). As Belk observes, “shared consumption sites” are fertile ground for fostering group identity and the call to social action: “Recognition that a part of one’s extended self can be shared, or at least perceived to be shared, with others helps to explain acts of civic responsibility, patriotism and charity.” (Belk, 1988, p.158)

While Belk points out the importance of public spaces and landmarks for “extending” the self into social spaces, Sherry (1998, 111) focuses on mental operations in the consumer that contribute to the cultural significance of public spaces, the “material vehicles of public life.” Sherry refers to these operations as a form of meaning “emplacement,” whereby the attitudes and values of a social group are inscribed and “solidified” in public spaces, which in turn resonate with meanings of community and solidarity.

Urban gardening is a symbolic activity for constructing/reconstructing southern black culture in the inner city—a kind of cultural commodity that African Americans brought north during the Great Migration after World War II. On the West Side of Chicago, gardening is also a vehicle for creating sustainable inner-city economies that would feed the poor, train jobless youth, and transform areas of urban blight into green space. The slash articulating the relation between cultural construction/reconstruction marks the dialectical relationship between culture remembered and culture constructed, two experiences both opposed and implicated in each other in the moment-to-moment performance of culture. This dialectic also points to the problematic relation of African Americans to their native culture, since links to the African cultures from which they came were disrupted if not destroyed by slavery.

The current study reveals a dynamic, performative dimension of shared consumption sites, inasmuch as community gardens not only inscribe the urban landscape with oases of green space and symbols of social pride; they also trace the intersection of the public and private ambitions of a community and a culture in process.

On the West Side of Chicago, gardening is a locus for studying the role of informal social networks such as block clubs, men’s organizations, and extended families in community-formation. It also exposes the workings of an informal economy of reciprocity for providing stability, security, and goods (Stack, 1974, p. 39-40 and Wellman, 1990, p.195). Gardens and “green spaces” are “sacred” on the West Side, inasmuch as they symbolize the rich cultural legacy of residents who left farms in the south to seek jobs in northern cities. Even the gangs respect the community gardens and leave them alone. In one garden, residents cultivate cotton and tobacco as symbolic reminders of their roots in an agrarian slave

economy. Furthermore, rather than simply preserve gardening traditions inherited from the southern rural black experience; urban gardeners actively construct black culture in migration. Gardening, in this instance, constitutes a symbolic activity for negotiating the distance between “here” and “there,” past and present, tradition and change, and a potential catalyst for community solidarity in the face of economic distress, racism, and social isolation. The names of the gardens themselves are expressive of a deep spiritual dimension, including words like Peace, Paradise, Faith, and New Life.

Both Belk and Sherry infer a correlation between acceptance of shared consumption sites and personal investment in the community, social stability and sense of belonging. (Belk, 1988,158; Sherry,1998, 111-112). The current study confirmed these correlations insofar as urban gardeners were long time homeowners who went to great lengths to beautify streets and marshal government resources to improve conditions in their neighborhoods. At the same time, however, the correlation between personal investment in the community and support for the Garfield Park Conservatory, an imposing Chicago landmark on the West Side, was not as clear. Local property owners and community activists appeared even less willing than those without property to visit the Conservatory. Conflicting cultural frameworks between the world of the Conservatory and the world of the inner-city neighborhood created “semiotic dissonance” concerning the meaning of gardens and gardening. Semiotic dissonance explains the resistance of local residents to the Conservatory as a guardian of European (horti)culture. Resistance can be mapped in terms of paradigmatic oppositions between European-American and African American, urban and rural, elite and popular, and closed and open cultures.

As migration creates and recreates the boundaries between the dominant culture and its “others” in urban centers throughout the United States, the guardians of dominant culture such as the Conservatory increasingly confront a constituency of ethnic consumers with conflicting needs, wants, and semiotic perspectives. As the current study demonstrated, inner-city blacks are not simply a “people without a past” (Herskovits, 1958, p.299), but form a distinct cultural entity with shared traditions, beliefs, and social practices that root them in their past and shape their future. Ethnographic research constitutes a first step in negotiating differences between the mainstream and margins of American culture by gaining access to consumer behaviors that have been obscured due to social isolation and marginalization.

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Cultural Role Confusion and Memories of a Lost Identity: How Non-Consumption Perpetuates Marginalisation

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ABSTRACT

Using Indian Punjabi Sikh men living in Britain as our sample group we argue that existing consumer acculturation theories are both limited and inaccurate in their renderings of consumer behaviour. This is illustrated by using a culturally marginalised group who are unable to engage with, let alone negotiate through the use of product consumption, daily interactions between South Asian and British White cultures. Using an ethno-consumerist methodology, our findings indicate cultural marginality arises from a combination of racism and in-group prejudice. Marginality, we suggest, results in the deliberate, self-destructive, non-engagement with culturally laden consumer objects.

INTRODUCTION

Using a variety of acculturation models, we argue that existing consumer acculturation theories are both limited and inaccurate in their renderings of consumer behaviour. This is illustrated by using Indian Punjabi Sikh men living in Britain¹ who are unable to engage with, let alone negotiate through the use of product consumption, daily interactions between South Asian² and British White cultures. This paper, therefore, addresses previous calls for wider, more extensive, research into ethnic minority individuals and their groups, within the stream of post-assimilationist research (Bhatia 2002).

LITERATURE REVIEW

Culture and ethnicity

Keesing's (1974) identification of culture as three ideational themes: cognitive, structuralist and symbolic has important implications for understanding consumer acculturation. The cognitive system argues that individuals are cognitively dependent on the categories and distinctions within their language, where the non-existence of words can be attributed to that specific concept not being available to people using that language (Hayes 1994). The structuralist system argues that culture is embodied in the group's social organisations and structures, taught, for example, through the family unit or religious institutions. Finally, symbolic culture can be separated into objective culture (an object whose status can be publicly verified) and subjective culture (how a group perceives and controls their social environment through norms, roles, rules and values) (Triandis and Vassiliou 1972). Considering these systems, culture has been classified using the terms "collectivism" and "individualism". A central tenet of collectivism is the need for individuals to form groups where connectedness, mutual deference or compromise and social interdependence are actively encouraged (Tafarodi and Swann Jr 1996). Individualistic cultures however encourage and enforce the right of the individual to be assertive, autonomous, creative, emotionally independent and use their own

initiative (Tafarodi and Swann 1996; Triandis et al. 1988). British and Indian culture have been identified with the latter and former respectively (Lindridge, Hogg and Shah 2004).

An individual's identification with a specific culture is also identifiable with ethnicity, where an individual defines themselves and others into specific groups using ethnic labels (Venkatesh 1995). This process of self-identification is facilitated by perceived differences between the various ethnic groups, identified on the basis of: etiquette, language, morality, religion and values (Webster and Faircloth 1994).

Finally, cultural identification may also be derived from how strongly one identifies with that group in a particular situation (Jamal and Chapman 2000). Such behaviour is widely referred to as felt ethnicity, i.e. ethnically-based decisions are increasingly likely to be made in those situations where members of the same ethnic group are encountered. An ethnic minority individual might then unconsciously recall a culturally orientated collective self-identity whenever they encounter a relevant cultural situation (Lindridge, Hogg and Shah 2004).

Acculturation

How an ethnic minority negotiates their cultural identity can be attributed to acculturation. Acculturation was defined by the Social Science Research Council (1954, p. 974) as a "Culture change that is initiated by the conjunction of two or more autonomous cultural systems". Ward and Kennedy (1993) in an attempt to distinguish between the group and individual attitudes and behaviours, distinguish acculturation into two distinct outcomes: psychological and socio-cultural. The former refers to a set of internal psychological outcomes, such as the individual being ultimately satisfied existing in their new culture. The latter refers to external psychological outcomes that relate individuals to their new cultural environment, and the acquisition of social skills and behaviours appropriate to engage with the new society.

In identifying how acculturation affects ethnic minority individuals, three models are worthy of further discussion. First, Berry (1992) proposed ethnic minority individuals can be categorised into four distinct acculturation strategies, with 'marginalisation' (rejection in both their ethnic minority culture and the dominant culture) being relevant to our argument. Hutnik (1991) using South Asians in Britain, in keeping with Berry, identified marginality as an individual who constructs a socially orientated identity, such as "I am a good football player."

Bourhis et al.'s (1997) Interactive Acculturation Model (IAM), developing Berry's work further, argued that ethnic-minority members acculturation strategies are inter-linked with the acculturation orientations of host-majority members; the latter group, due to their influence and power in society, having a stronger influence on the acculturation preferences of ethnic minorities. According to the IAM, concordance occurs when the host society and the ethnic-minority group share virtually similar acculturation orientation attitudes and behaviours, with discordance occurring when the host society and the minority groups reflect little or no commonality (Bourhis et al., 1997). Marginality, building upon Berry's (1994) strategies, may then be attributed to the ethnic minority individual rejecting their own community / identity and being rejected by the dominant cultural group.

¹Defined as second generation descendents of migrants from the Indian state of the Punjab and who can be self-identified as Sikhs.

²The term 'South Asian' is used inter-changeably for various ethnic groups, who self-identity with each other through a common descent from the Indian sub-continent, but retain unique differences in their identities.

Bhatia's (2002) dialogical model of acculturation draws upon the philosophical assumptions of social constructionism, representing a critical, dynamic, flexible and holistic approach. Bhatia (2002) argues that acculturation and identity are both dynamic, with the ethnic minority individual creating multiple presentations of the self, depending on other individuals and situations encountered. The creation of multiple identities draws upon Oswald's (1999) argument that ethnic minority individuals conduct a code switching process, this process of code switching allowing an ethnic minority individual to draw upon appropriate ethnic minority or host cultural values in appropriate situations. Consequently, ethnic minority individuals encounter "a dialogical process that involves a constant moving back and forth between incompatible cultural positions...between the I positions of feeling simultaneously assimilated, separated and marginalized" (Bhatia 2002: 57). Hence, acculturation becomes the enactment of a variety of codes, representing the creation of multiple identities amongst ethnic minority individuals (Lindridge, Hogg and Shah 2004). Dhillon (2004), using the dialogical model of acculturation, argued that marginality amongst Indians in Britain arose from the wider issues of self-imposed and community and society rejection, culminating in a failure within ethnic minority individuals to be able to conduct code switching of identities.

Marginality then represents a sense of exclusion. Khatib-Chahiddi, Hill and Paton (1998) in their study of cross-cultural marriages identified two types of marginality relevant to this study: structural marginality (differences arising from culture, ethnicity and social-class) and familial marginality (feelings of difference / exclusion from the family). As both society and family are central to self-identity, it may be argued that these can be expected to influence an ethnic minority person's ability to construct multiple-identities.

Consumer acculturation and consumption

Our possessions ability to carry and communicate cultural meanings "contribute to the construction of the culturally constituted world precisely because they are a vital, tangible record of cultural meaning that is otherwise intangible" (McCracken, 1986, p. 73). Product consumption can therefore symbolise identification with a given culture, and can be identified as 'ethnic emblems' (Hoyer and McInnis, 2001), providing individuals with the means to construct a culturally derived self-identity. This may then allow ethnic minority individuals to identify and code products, facilitating their acculturation process, with either the dominant or their own ethnic group. Product consumption then becomes indicative of an individual or group accessing and owning a prescribed set of symbolic culture cultural values, identifiable with Keesing's (1974) symbolic system of culture. Such behaviours have been indirectly noted amongst Indian migrants, to Canada and the USA, by Joy and Dholakia (1991) and Mehta and Belk (1991).

McCracken (1986) noted that products act as performance agents, allowing their user to adapt to specific situations. From an ethnic minority perspective, such behaviours have been noted amongst South Asians in Britain by Jamal and Chapman (2000) and Lindridge, Hogg and Shah (2004). These findings, indirectly drawing upon Bourhis et al.'s (1997) acculturation theory, indicated that the consumption patterns of ethnic minorities may demonstrate varying levels of assimilation and disassociation with both the dominant and their own ethnic cultures. This demonstration of cultural adherence in varying situations may represent the individual's internal dialogical voice undergoing "a multiplicity of I positions" (Hermans et al. 1992). In differing situations encountered, possessions may then become a means to assist in the construction of these multiple identities, as identified by Lindridge,

Hogg and Shah (2004). An influence on situational consumption is noted by Sekhon (2003), who argues that an ethnic minorities generational level, will ultimately affect consumption laden identities. However, research into consumer acculturation and identity has not studied how the concept of consumer acculturation, multiple identities and consumption affects marginalised ethnic minority individuals. More importantly, previous research appears to assume that an ethnic minority individual is both able and capable of constructing consumption laden multiple identities, as a means of negotiating differing cultural situations.

The role of products as acculturation agents remains under-investigated. However, research does indicate a relationship between selective cultural values and product consumption. For example, consumer acculturation studies in the USA by Peñaloza (1994), taking an ethnographic approach, showed how Hispanic people in the USA used products to demonstrate assimilation; while Oswald (1999) referring to the Haitian population in the USA noted that product consumption represented a layering of identities constructed around cultural personas as and when required. Similar research in Britain reflects ethnic minorities comfortably using consumption as a means of engaging with the wider British White culture. For example, Jamal and Chapman's (2000) study of Pakistanis living in Britain suggested a switching of identities in varying situations. An observation developed further by Lindridge, Hogg and Shah (2004) who argued that product consumption enabled Indian women to engage more actively and comfortably in a variety of culturally construed situations. However, these studies infer a positive consumer acculturation perspective, with ethnic minorities gladly engaging with the consumption process as a wider indication and means of engaging with their dominant society's cultural values. Alternative consumer acculturation studies that investigate ethnic minority's consumer acculturation failures do not appear to have been researched. Such a lack of research may, therefore, present a biased perspective presenting predominately White audiences with a belief that all ethnic minorities ultimately desire and seek assimilation through product consumption.

METHODOLOGY

This research is an exploratory study into consumer acculturation and marginality. To identify a marginalised ethnic minority group, this research selected Indian Punjabi Sikh males living in Britain, satisfying both methodological and research criterion. Methodologically the population represents an ethnic group in terms of religion (Sikhism) and being descended from the Punjab region of India (therefore eliminating those Indians in Britain descended from immigrants from India via Africa or other parts of South Asia).

The 2001 census (HMSO, 2003) indicated that the British population consisted of approximately 60 million people, including 2 million people who identified themselves of South Asian descent. Of these, just over 1 million people claimed to be descended from India; with 13% of these stating their religion to be 'Sikh'. Jacob et al., (1998) found that Indian Punjabi's living in Britain were more likely, when compared to 'Whites', to suffer from depressive ideas (worthlessness and suicidal thoughts). One potential outlet for this depression is alcohol consumption, which indicates a higher rate of psychiatric admission for Sikhs in Britain owing to alcohol dependence (Ananthanarayanan, 1994).

Researching Indian Punjabi Sikhs living in Britain as a consumer group is also justified by previous research. Parekh (1994: 615) suggests a "preoccupation with making money [which] is also a common and persistent feature of the...[Indian]...diaspora" with Dasgupta (1989: 85, italics—authors additions) noting that amongst Indian migrants to North America "conspicuous consumption,

possession of material goods like a big house, expensive cars, maintaining a specific lifestyle have become important criteria within the Indian community [*in the USA*]. Acceptance of the value, achievement orientation, in a materialistic society has made Indian immigrants measure success in terms of material possessions". Indian Punjabi Sikhs living in Britain, therefore, appear to demonstrate both a propensity to consume and potential acculturation difficulties, identified through mental health problems.

Sample group

The sample group of Indian Punjabi Sikh men were drawn from Sandwell in the West Midlands, Britain. The choice of this area was supported by the 2001 Census (HMSO, 2003) which noted that, with the exception of London, the West Midlands has the highest percentage of people identifying themselves as non-‘White’ in England, i.e. 11.2% compared to the average of 9.1%. In this non-White population, 8% are self-defined as Indian and live in concentrated communities in Wolverhampton, Sandwell and Coventry. These areas also have the highest proportion of Sikhs in England at 2% of the total population compared to an average of 0.7% (HMSO 2003).

Sandwell suffers from a variety of socio-economic deprivations, including above average levels of unemployment, and is considered to be in the top ten of England’s poorest places. The 2001 census (HMSO, 2003) showed that 45.6% of the population have no academic qualification, and when combined with one of the lowest economic activity rates in England, may explain why 37% of people living in Sandwell do not have access to or use of a car. Compounding this situation is 30% of residents of Sandwell live in rented accommodation. These statistics when considered with the population’s low socio-economic status, therefore, may suggest a heightened desire to consume or attribute values to product consumption, owing to their own potential inability to consume.

To engage with people who were potentially marginalised ethnic minorities required access to people who demonstrated related behaviours attributed to marginalisation, such as cultural identity loss. Participants were recruited through the use of advertisements placed within a centre that helps people with substance misuse problems. The participants were self selected based on the sampling criteria.

Data collection and analysis

Meamber and Venkatesh’s (2000) ethno-consumerist framework was used in this research. Stage one of the research processes involved a comprehensive review of acculturation and consumer behaviour literature. Analysis of the literature then prompted stage two, consisting of thirty-two participants being interviewed for one to three hours each, followed by one mini-focus group to validate the research findings, followed by data analysis and concluding with theory development.

Ghunam’s (1998) acculturation questionnaire, using a seven point Likert scale, was administered to 35 potential participants to assess marginality, with only three participants completing the questionnaire. The remaining participants demonstrated heightened levels of frustration, unable to commit to a psychometric scale choice, manifesting in swearing aloud, hitting chairs and pacing around the research room. With the awareness that the questionnaire may then be detrimental to the participant’s psychological well-being, along with the difficulty of managing bias in assistance and interpretation of the psychometric instrument, the questionnaire was withdrawn. Tentative discussions revealed that the participants were unable to answer the questions, as they felt the questions related to specific cultural issues they did not agree with

or identify with, which was taken as indicative of marginality. The in-depth interview confirmed their cultural marginality.

The interviews were conducted by one of the authors who matched the sample group criteria of being: male, Sikh, Punjabi descent. Interviews were conducted in either English or Punjabi depending upon the participant’s wishes.

Data interviews were transcribed verbatim, with the transcripts read and then re-read, producing preliminary codes which were transcribed onto coded data sheets. These sheets were annotated to allow for identification of comparisons, metaphors and tropes in the data (Meamber and Venkatesh 2000). This process allowed for the identification of cultural categories of consumption and relationships between the emerging cultural categories (Lindridge, Hogg and Shah 2004). Finally, the generated consumption-oriented meanings derived from the data were presented to a mini-focus group of six participants to validate the research findings.

FINDINGS

To understand and construct how multiple identities affect the consumer acculturation process of marginal Indian Punjabi Sikh males, it is important first to locate the origins of their marginality.

Social histories

Social histories aim to investigate the origins of marginality amongst the participants. Familial marginality, focussing on Indian cultural values of caste and childhood socialisation, was a dominant theme in the participants’ narratives. Participants (n = 26) complained that older members of their families (i.e. parents, grandparents, uncles and older siblings) had prevented them from socialising with South Asians from differing castes or religions:

I have friends who are Muslims and Valmiks. W and me ate from the same plate, but my older brother hated it and told me so and beat me up... I hated him then and we don't talk anymore. (P30)

Violence from older siblings was not unusual (n = 12), often arising from the participant’s perceived breaking of cultural norms and widely perceived to be endorsed by either family members or by older siblings to act out their own acculturation stressors:

My older brother used to get me [to] have fight with his mates and they'd take bets... was eleven or twelve [years old]... if I didn't he'd lock me up and kick me in. (P2)

Participants experiences left them feeling lost and abandoned confirming that their culture, which they believed supposedly endorsed family values allowed and indirectly endorsed a variety of domestic violent acts. These experiences encouraged assimilation into British White society, which were often met with experiences of racism (n=32) and in-group prejudice (n=24). These experiences left participants expressing deep sadness, culminating in a fragmented sense of cultural and ethnic identity, i.e. marginality.

Cultural marginality-‘Mein kon hun?’ (Who am I?)

For the majority of participants (n = 21) feelings of loss, pain, regret and shame in not being able to express or own a consolidated sense of identity were recurring themes. One contributing factor to participants’ identity confusion was demonstrated in their varying degrees of English and Punjabi language fluency. Five participants declared that they only spoke English (n = 5) arising from parental socialisation encouraging conformity to British White society and

rejection of old, traditional Indian cultural values. Yet, for some participants (n = 17) who were able to speak Punjabi, language choice provided a small means to demonstrate personal power and vengeance in their daily lives, demonstrating rebellion against their Indian Sikh culture but also created other tensions in their lives:

I only talk English at home. She [his mother] can't speak English and I can't talk Punjabi [though the person has been heard by the researcher talking some Punjabi]. I just ignore her. We hardly talk. (P15)

A central theme regarding loss of ethnicity / identity was religion, with participants (n=27) attributing their non-belief to its minimum role during childhood socialisation and the hypocrisy they experienced in their engagements with religion. Consequently, loss of religion diminished important cultural behaviours, functions, roles and transactions in relationships within their Sikh or South Asian community. Instead, all cultural embodiments of Sikhism became embodiments of a wider cultural disillusionment and thus object of hatred, manifesting (n = 3) in violence towards the very embodiment of the Sikh religion, a paathee (Sikh priest):

I lost my religion really. I saw one of the paathees drink whiskey and I swear I got him by the beard and sorted him out. (P24)

The subsequent loss of a cultural / ethnic identity, identifiable with marginality, resulted in heightened levels of paranoia, evident in felt ethnicity. Initial awareness of felt-ethnicity arose from childhood awareness of skin colour differences and heightened levels of difference, i.e. inferiority, arising from societal interactions. As a result, participants (n=29) experienced intense levels of cognitive and emotional distress when encountering predominately British White areas, creating a sense of self-exclusion:

We moved...mainly [to] a White people's area... In the pubs I used to go to they were 95% White faces... they were surprised to see an Asian person walk into the pub, and all of a sudden I'd feel like a bad Asian thinking what the fuck am I doing here? (P19)

An outcome of the participant's loss of a cultural identity was that the majority (n=21) demonstrated an inability to engage with multiple identities, required to engage in differing cultural / ethnic situations. Participants were also unable to manage their in-group prejudice, resulting in depressive ideas, violent behaviours and adopting a mask of being somebody other than what they might actually be or want to be.

Consumption

McCracken (1986) noted that products were an embodiment of a group's cultural values, which we identified and analysed through the participant's consumption of cultural events, non-consumption of tangible products and consumption of alcohol and food. Lindridge, Hogg and Shah (2004) argued that culturally laden consumption assisted South Asians in Britain in their construction of multiple-identities in engaging with British Whites and South Asians living in Britain. The findings presented next attempt to show that marginality prevented both the participants' ability to consume and therefore engage with multiple-identity construction and management.

Consumption of cultural events such as the local 'mela' (South Asian cultural festivals held throughout Britain) presented participants with behavioural and emotional challenges. Engagement

with these festivities was indicative of a wider acknowledgement, acceptance and celebration of both their own cultural and ethnic identity, and their relationship with British 'White' society, i.e. acceptance. Participants (n = 22) consumption of their local mela and similar reflected a wider sense of disowning, mocking, ridicule and anger:

I look forward to the mela...we get pissed³ [with friends] and have a laugh... a fight. (P1)

A 'laugh' constituted getting excessively drunk and ridiculing other South Asians at the event. This form of ridicule typically took the form of lascivious behaviour culminating in physical violence, i.e. a fight. Antecedents of this behaviour were attributed to participants' anger at perceiving other South Asians as happy, enjoying themselves typically with their families and appearing to be acculturated and accepted by the British White community. Similar behaviours were also noted in wider British White cultural events, such as Bonfire night.

Other examples of non-engagement in community cultural events, such as weddings and birthdays, reflected similar narratives with participants not being invited to celebrate. This deliberate exclusion from their community only exacerbated the participants' sense of marginality.

Consumption of products represented a particularly difficult nexus for participants to negotiate. The South Asian community were deemed as being highly consumption conspicuous, using products as a means of signifying and stating ones individual and family's economic and social status in a post-immigrant multi-cultural Britain:

Nobody cares about what you've achieved...it's what you have, own and can buy...they are all [Indians] obsessed with what make of this and that you got.

Desired products, that participants felt would bestow individual and family honour tended to be high status brands; ones that carried specific cultural messages to the South Asian community, such as Mercedes-Benz (good parenting, wealthy family), Sony (can afford anything they want) and so forth. Yet the participant's low socio-economic positions inhibited their ability to consume the very possessions that the Indian community perceived as indicative of success. Consequently, the participants viewed non-consumption and ownership as representing their wider sense of failing in life, only reinforcing their own sense of rejection and marginality. Participants in contrast viewed products owned by other South Asians as indicative of their owner's wider success in their South Asian community and wider acculturation into British White society. Consumption of products appeared then to transcend any specific culturally laden meanings and allowed for certain South Asians a means to engage in life. Products became acculturation vehicles allowing a select group to retain their cultural identities and yet hold a British identity as well, a concept alien to and excluded from the participants. The participants subsequently felt that they had culturally failed both themselves and their families, leading to a further sense of rejection and marginality:

They make me fucking sick...say one thing and go and do it themselves...they are saying look at us, we're successful as any White person but never consider yourself to be like them

³Pissed' meaning drunk

Excluded from British White society and their own South Asian community and unable to re-engage through consumption acts owing to their own low socio-economic profiles, resulted in the excessive consumption of alcohol. Hutnik (1991) described marginality as an ethnic minority individual who constructs a social identity rather than a cultural one. For participants (n=32) a chaotic social identity with alcohol at its core was typical, with their responses and self-descriptions tending to become more jolly and uplifted in their memory recall of drinking encounters, where words are filled with a perceived pride, for example:

I drink like mad-man. They [people he meets in the pub] reckon too. Twenty four pints I got. Do you drink? [Researcher answers]. A few years ago I could get through a crate of whiskey in a weekend. (P29)

The sense of bravado and pride that participants felt, regarding their alcohol consumption, were often experienced in non cultural / ethnic / racial or religious environments, i.e. a bar. This environment provided participants with a rare opportunity to construct and reinforce a socially construed identity, free from cultural roles and norms and most importantly the paranoia associated with felt ethnicity. Instead, multiple-identities could be constructed around the common purpose of drinking, where an ability to out drink all others bestowed a sense of respect, trust and warmth that they craved from but never received from their own South Asian community or British White society:

Going to the pub used to be right buzz. Do you know the [names a bar]? To be honest with you it's a brilliant place to get pissed. I drink alone... for years now. (P18)

The construction of a social identity around alcohol produced friendship networks (n=28). Yet these friendships lacked the social norms and values of other groups, like the family, and appeared not to be engaged with outside the bar. Participants were unable to contemplate the significance of this, merely viewing friends as someone to drink with:

Drinking, drinking, drinking it's been my whole life. I love it. Made friends through it. The twenty seventh person died this week. [Researcher probes]. I know twenty seven people who have died cause of drink in my life. Somehow, I've survived, it's luck. (P7)

Further exploration of the participants need to drink suggested a psychological mechanism to allow them to cope with acculturation stress, arising from their loss of a cultural identity and their perceived failure to accommodate Indian Punjabi cultural values:

That's what makes people go on heavy drinking, to blank their minds, to blank everything up, to blank their minds or their so they don't want to listen to anything and that's how they go on drinking. (P28)

Food represents an important cultural embodiment and means to engage with and retain a cultural identity. Yet for participants, food was neither valued as a cultural commodity nor served any conceivable purpose. Instead food represented an embodiment of wanting to live and engage with life, with participants holding the macabre belief that this would inhibit their encroaching death from excessive drinking:

Look, a lot of my money actually goes on cigarettes and booze.⁴ What you can buy is food as well, I know its going be a waste of money if I buy it for a start I know if I did eat it, I am going to vomit, I am going to vomit it's all going to come back out and secondly if I did buy, I don't fancy it ... I drink to die man. (P14)

DISCUSSION

The premise of this paper was to identify and present an alternative consumer acculturation perspective. The narratives presented suggest that previous acculturation theories may have romanticised ethnic minority identities, either through the positivistic approach of Berry (1992) or the post-modern acculturation identity proposed by Bhatia (2002). Instead, participants demonstrated polarised psychological acculturation outcomes, evident in alternating levels of depression, frustration and suicidal thoughts (Ward and Kennedy, 1993), with behaviours identifiable with structural and familial marginality (Khatib-Chahidi, Hill and Paton, 1998). Participants attempts to conform to British White society had been rejected, an attempt that also ensured their own communities wider scorn. Although these rejections partly reflect Bouris et al.'s (1997) Interactive Acculturation Model, the rejection of both groups represents a previously unforeseen acculturation dimension. A consequence of community rejection, a troubled childhood socialisation and subsequent cultural disengagement suggested a fragmented sense of identity, devoid of any cultural sense of identity. The participant's unwillingness to engage in culturally laden ethnicity identifiers, such as etiquettes, morality, religion or values (Webster and Faircloth, 1994), therefore perpetuated their loss of a cultural identity. Compounding this loss was the participant's acceptance of British individualistic and rejection of Indian collectivist cultural values, created an intense internal struggle to understand their role in British White society. Consequently, the socio-cultural environment the participants existed in had created and perpetuated a heightened sense of individual cultural isolation and thus marginality. In stark contrast then to Lindridge, Hogg and Shah (2004) acculturation study, the participants were unable to negotiate the conflicting cultural demands of their differing cultural systems, preventing participants from constructing any cultural identity. Therefore, any situational encounter presented personal psychological challenges in confronting participants with their disowned cultural identity, such as religious institutions, or in heightened levels of felt ethnicity, resulting in psychological distress. The ultimate outcome was, rather than participants owning a variety of 'I' positions (Bhatia, 2002), a struggle to engage with any I position identifiable with any cultural or ethnic value.

The only reported outlet for the participants' expressions of anger, depression and frustration arising from their cultural detachment, was a socially construed sense of self-identity identifiable with marginality (Hutnik, 1991). For participants, alcohol consumption provided a means to construct a social identity around a bar, whilst offering an escape from the psychological and socio-cultural acculturation anxieties experienced (Ward and Kennedy, 1993). Group membership for participants did not involve curtailing or engaging with cultural or religious values but merely excessive consumption of alcohol. Alcohol consumption provided then social encounters that offered an inherent sense of belonging and being valued, that were not evident elsewhere in their lives.

Where Lindridge, Hogg and Shah (2004) noted that South Asians in Britain used consumption to create multiple identities, thereby allowing them to engage in a multi-cultural society, this was not evident in participants. In contrast, the participants actively

⁴'Booze' a slang term meaning alcohol

disengaged from any consumption they felt had cultural association with British White society or their own communities, therefore disengaging from the earlier noted symbolic cultural system (Keesing, 1974). Although this may have been partially attributed to their socio-economic status and the wider environmental socio-economic positions noted in the methodology section, the participant's narrative expressed a fundamental rejection of culturally laden symbolic consumption. Marginality, for this sample group, represented the complete and utter rejection of any object, value or individual that represented any culture, replaced with an alcoholic consumption identity. We, therefore, propose that these behaviours be termed 'consumption cultural non-conformity' from a consumer-acculturation perspective.

CONTRIBUTIONS

The use of Meamber and Venkatesh's (2000) ethno-consumerist approach, attempted to address potential western centric aspects of previous consumer acculturation research. Theoretically, this paper adds to current acculturation positivist and macro studies by building them into Bhatia's (2002) post-modern dialogical model of acculturation. The use of marginality as a positivist acculturation category, juxtaposed with Bhatia's post-modern concept of multiple identities, rather than produce inherent tensions of conflict were shown to compliment each other. The participants, we have argued, devoid of the socialisation skills to engage with these wider power dynamics and ostracised from their own community, instead pursued a policy of non-cultural engagement. This policy reached its climax and ultimate rejection of culture through consumer-acculturation non-engagement with culturally laden consumption. Future research therefore should focus on harder to access and engage with ethnic minority individuals rather than more research friendly ethnic communities or groups.

CONCLUSION

We have showed that unlike previous consumer acculturation studies our sample group of Indian Punjabi Sikh males living in Britain were unable to use culturally laden consumption to engage with the dominant culture. This inability or unwillingness to engage with the wider consumer-acculturation process produced a range of emotions from anger and frustration projected onto the individual self, their family and community, and society.

Future acculturation theories and research should recognise that not all ethnic minority people choose to engage with any ethnic culture and instead be in a complex psychological and social position of cultural disengagement.

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Is Cultural Assimilation Related to Environmental Attitudes and Behaviors?

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ABSTRACT

Research in environmentalism (Lynch 1993 and Schultz, Unipan, and Gamba 2000) suggests that culture is an important determinant of environmental attitudes. This paper applies ethnic-assimilation theory to analyze intra-cultural differences within the Hispanic cultural group. Results indicated that acculturation was negatively related to environmental attitudes like importance, effort, and inconvenience. These results are contrary to conventional thinking, which posits that environmental concerns are post-materialistic concerns associated with higher levels of economic development and immigrants; especially those coming from developing societies are not likely to have these concerns. These findings also suggest that the design of environmental strategies for ethnic groups must recognize the importance of acculturation and not treat cultural groups as one composite entity.

INTRODUCTION

The US society faces the challenges associated with receiving newcomers who represent a plurality of ethnic, linguistic, and racial groups (Glazer 1997; Taylor and Lambert 1996). An element of this plurality is the concern that different ethnic groups who migrate to this country may come from cultures in which certain pro-environment behaviors are not common as they are in the US. It is suggested that environmentalism has become an important part of American culture and performing certain pro-environmental behaviors is a form of cultural praxis or ritual forms of participation in civic life (McCarthy 1996).

In 1997/1998, the Sierra Club policy debate drew attention to the influence of the immigration on environmental issues (Zuckerman 1999). At the heart of this debate was the concern that population pressure due to immigration would contribute to environmental degradation and the growing consumption of natural resources. It was argued that immigrants from poor countries would have less concern for the environment. More recently, Huntington in his new book "Who are we" writes that the new immigrants (especially from Mexico) have little interest in assimilating and feel comfortable within their own culture (as quoted in "The American Dream" by Brooks 2004), thus contributing to the debate of Hispanic assimilation.

Why would immigrants' environmental attitudes and behavior be different from native -born residents? A post-materialist thesis argues that the higher standards of living of industrialized nations permitted the development of environmental concerns, and that individuals from poorer nations were likely to be preoccupied with issues of economic security rather than to issues of quality-of-life concerns such as the environment (Pfeffer and Stycos 2002). When material well-being is sustained for several years, second and third generations can give priority to post-materialistic values such as environmentalism. This argument leads one to suggest that acculturation into the host culture is positively related to environmental attitudes and behaviors.

There are competing views regarding the above assertion. The post-materialistic thesis argues that environmentalism and quality-of-life issues are possible in societies where economic security has been achieved. Thus, immigrants from poor countries are likely to have less concern than US residents. Assimilation in the mainstream culture would enable immigrants to adopt environmental attitudes and behavior representative of a post-materialistic culture. The competing argument is that poor environmental conditions in

the immigrants' home countries would have sensitized them to environmental awareness, thus there would be no difference between immigrants and US residents' environmental attitudes and behaviors (Martinez-Alier and Hershberg 1992).

This paper applies the ethnic-assimilation theory to explore differences within the Hispanic group in their environmental attitudes and behaviors. Specifically, we argue that there may be as much cultural diversity within an ethnic group that it makes it necessary to explore other variables like levels of acculturation rather than rely on ethnicity. We conclude by offering suggestions for social marketing strategies designed to impact pro-environmental attitudes and behaviors especially among Hispanic consumers with varying levels of acculturation.

Cultural Assimilation

Keefe and Padilla (1987, p. 18) have defined assimilation as the "social, economic, and political integration of an ethnic minority group into mainstream society." According to Gordon (1964), assimilation is a seven-step process beginning with acculturation or behavioral assimilation and ending with civic assimilation or the absence of value and power conflict. Acculturation occurs when an ethnic group's cultural patterns change to those of the host society. This process is labeled 'Anglo-conformity' to distinguish it from other models of assimilation namely the 'melting-pot' metaphor or cultural pluralism (McLemore 1991). Keefe and Padilla (1987) suggest that Gordon's description of the assimilation process i.e., Anglo-conformity, may not reflect the assimilation process of Hispanics for whom assimilation may not always lead to a complete replacement of one culture by another. What may happen is that different parts of a culture are transferred with varying degrees of success and speed (Yinger 1981) with material culture being relatively easy to share and the adoption of a host culture's values being a slower process (Shaull and Gramann 1998).

An understanding of the acculturation process of immigrants would be valuable to domestic and international marketers operating in such culturally heterogeneous societies.

According to the US Census (2000), the percentage of foreign-born persons is 13.9% for Texas as compared to 11.1% for the US as a whole. Further, in Texas 31.2% speak a language other than English at home compared to 17.9% in the US. Clearly while the US society is becoming diverse and multi ethnic, in states like Texas diversity is more predominant. According to Surro (1999), nearly half of all immigrants today-legal and illegal-come from Spanish-speaking countries. Based on their high birth rates, the US Census Bureau predicts that native and foreign-born Latinos will account for more than 40% of US population growth in the next decade, compared to less than 25% for non-Hispanic whites. Unfortunately, the melting pot metaphor does not help much in understanding this group's acculturation process.

Investigation of the role of acculturation on consumer behavior had resulted in an impressive body of research (Golden, et. al. 1996). Studies have typically focused on changes in behavior patterns of Hispanics in areas such as food, dress, and information search (Webster 1994). Another stream of research has focused on strategies for reaching Hispanic consumers through efficient segmentation. Segal and Sosa (1983) suggested strategies based on media preferences and O'Guinn and Mayer (1984) suggested language use as an effective segmentation variable. A third stream of research has compared Hispanic and Anglo consumers and found

significant differences in intergenerational influences (Hoyer and Deshpande 1982) and brand loyalty (Donthu and Cheria 1992).

Environmental attitudes are influenced by culture. Lynch (1993) suggested that there are differences in Anglo and Latino environmental views. For example, Anglo environmentalism is characterized by a reliance on technical solutions while Latino environmentalism relies on communal solutions. Anglos and Latinos differ in their views of the wilderness; Anglos view the wilderness to be pristine and Latino environmentalism is described as "human-in-nature" view. "Humans are seen as an integral part of nature rather than as protectors or consumers" (Schlutz, et al. 2000, p. 23.). Finally, Carr and Williams (1993) reported a relationship between assimilation and views on "showing respect for the forest." U.S. born Hispanics interpreted "respect for the forest" to mean specific behaviors such as "not littering" and picking up trash, while respondents born in Mexico mentioned respect in more abstract terms and as an extension of respect for one's home. The implication of these findings is that there is variation not only between ethnic groups, but also within an ethnic group and one potential source of this variation could be explained by the degree of cultural assimilation.

Recycling Attitudes

Environmental issues have attracted the attention of researchers in the social sciences and marketing (Berger 1997 and Pieters et al. 1998). Marketers have researched recycling issues in an effort at understanding consumer motivations underlying the purchase of environmentally friendly products and services (Bagozzi and Dabholkar 1994), exploring the relationship between general psychological constructs and environmental behavior (Biswas et al. 2000; Dietz, et al. 1998), and identifying the antecedents of post-purchase/post-consumption behavior (Alwitt and Pitts 1996 and Shrum, McCarty, and Lowrey 1995). Interestingly, most of the research has been on Anglo consumers and with only a small number of studies focusing on African Americans and Hispanics (Howenstine 1993 and Golden, Frels, Vincent, and Santos 1996).

Psychological constructs such as attitude and beliefs are important and often researched antecedents because they are more amenable to influence and thus actionable. A well-known attitude in the ecological literature is the concern for environmental problems and a perception of their severity. Ecologically conscious consumers believe that current environmental conditions are deteriorating and represent serious problems facing the security of the world, whereas consumers who are less sensitive to ecological issues perceive that environmental problems in the long run will resolve themselves (Banerjee and McKeage 1994). Environmental attitudes are conceptualized as abstract orientations and it is argued that recycling behaviors are influenced by more specific psychological constructs such as beliefs related to recycling. Laroche, et al., (2001), found that the two beliefs that are most consistently related to recycling are a general attitude or belief about the importance of recycling, and a specific belief about the inconvenience of recycling. Importance, with respect to the environment, can be defined as the degree to which one relates recycling to being environmentally conscious. This construct also relates to the benefits of engaging in behaviors that could have possible long-term outcomes such as reduction in number of landfills.

Inconvenience refers to how inconvenient it is perceived by the individual to behave in an ecologically compatible fashion. For example, one may think that recycling is important, but one does not recycle because it takes too much time or requires extra space. Inconvenience of recycling relates to costs or the difficulty associated with performing environmental behaviors. Included are perceptions of how easy or hard it is to perform the recycling behavior.

Effort is defined as the degree of difficulty in executing the behavior. The amount of effort required for a behavior functions as an impediment to action (Bagozzi et. al. 1990). Although decreased perceptions of difficulty have been generally associated with increased environmental behavior, mixed results have been reported in the literature (Oskamp et al. 1991).

Hypotheses

The above discussion on cultural assimilation, acculturation, and environmental attitudes suggests that the process of acculturation is thought to help immigrants learn the behavioral expectations of American culture (e.g. recycling attitudes and behaviors). Padilla (1980) calls this immigrant environmental acculturation. Since the research on Hispanic culture and environmentalism has competing viewpoints, I choose to explore the influence of levels of acculturation on environmental attitudes through non-directional hypothesis:

Acculturation, Attitudes, and Recycling Behaviors

- H1: There are differences in attitudes toward environmental concern among Hispanics with different acculturation levels.
- H2: There are differences in attitude toward importance of recycling among Hispanics with different acculturation levels.
- H3: There are differences in attitudes toward inconvenience of recycling among Hispanics with different acculturation levels.
- H4: There are differences in attitudes toward recycling effort among Hispanics with different acculturation levels.
- H5: There are differences in recycling behavior among Hispanics with different acculturation levels.

RESEARCH DESIGN

Sample and Procedure

The survey was administered in person to a convenience sample of 262 residents of a mid-size city on the U.S. side of the Mexico-US border. Students were recruited as principal investigators and they conducted the survey. Malls and grocery stores in different parts of the city were chosen as locations to conduct the interviews. The choice of locations enabled us to have a fair representation of most of the geographical locations of the city. The questionnaire was translated into Spanish and back translated to check for consistency. The interviewers, depending on the language requirements of the respondents, used both versions of the questionnaire. Respondents needed to be one of the heads of household and over 18 years of age. The sample was 77% female and 23% male; 20% were high school graduates, 72% were college graduates and 8% had a master's degree. 34% reported income less than \$25,000, 40% were in the \$25,000 to \$50,000 range and 26% reported earning more than \$50,000. The demographics of the sample reflect the area, which is among the ten poorest counties in the country.

Measurement Purification

All measures were assessed through confirmatory factor analysis using LISREL 8 with item correlations as input (Joreskog and Sorbom 1996). An iterative approach was adopted to arrive at the final measurement model with items that did not meet the qualifying criteria being deleted. For example, items with low or extremely high factor loadings and those with high modification indices were deleted. The measurement model performed well: standardized

TABLE 1
Measurement Model Details

	Composite Reliability	Cronbach Alpha	Average Variance Extracted	Factor Loading
<i>Environmental Concern</i> (Schultz and Oskamp, 1996))				
1. Environmental problems are of great concern to me				.542
2. Environmental problems are not that important to me (R)				.646
3. Things will balance out (R)				.696
4. I'd rather do other work (R)	.77	.76	.46	.814
<i>Importance</i> (McCarty and Shrum, 1994)				
1. Recycling will save land				.567
2. Recycling will reduce pollution				.793
3. Recycling is important to save resources	.82	.81	.54	.871
<i>Inconvenience</i> (McCarty and Shrum, 1994)				
1. Recycling is inconvenient				.721
2. Recycling is too much trouble				.789
3. I hate to sort materials	.82	.83	.61	.827
<i>Effort</i> (Effort, 1994)				
1. Recycling requires a lot of extra time				.899
2. Recycling requires a lot of extra space	.87	.87	.77	.853
<i>Recycling Behavior</i> (McCarty and Shrum, 1994)				
1. I recycle aluminum cans				.634
2. I recycle paper and newspapers				.837
3. I recycle glass	.72	.70	.55	.547

factor loadings ranged from .55 to .90 with t-values greater than 6.32 (Ford, MacCallum and Tait 1986). The construct reliabilities ranged from .70 to .87 exceeding the recommended minimum of .60 and the average variance extracted (AVE) was greater than .40 for all of the study constructs. Thus, all of the constructs exhibited good internal consistency and reliability (Bagozzi and Yi 1988). The final measurement model exhibited satisfactory fit. The chi-square value for the measurement model was significant ($X^2_{94}=155.430$, $p < .000$). Since chi-square statistic is sensitive to sample size we examined other fit indices. The root mean square error of approximation (RMSEA) was .06; the goodness-of-fit (GFI) and adjusted goodness-of-fit (AGFI) indices were .89 and .85 respectively; Bentler's comparative fit index (CFI) was .94; and the non-normed fit index (NNFI) was .93. All the above fit indices are within acceptable ranges (Byrne 1998). Given the relatively small sample size, we found the fit indices quite satisfactory for the number of parameters being tested. Finally, two tests of discriminant validity were performed for all study constructs. First, the mean AVE for each construct pair was compared with the squared phi estimate (maximum likelihood estimate of correlation) for the pair. All pairs of constructs with the exception of inconvenience and effort had mean AVEs larger than the squared phi estimate (Fornell and Larcker 1981). Second, confidence interval tests were conducted (Anderson and Gerbing 1988). When a confidence interval constructed around the correlation estimate between two constructs does not include 1.0, then discriminant validity is demonstrated. In this study, all factor correlations demonstrated discriminant valid-

ity. Details of the various measurement items and constructs used, and their operationalization are summarized in Table 1. The mean, standard deviation, and correlation values of the latent variables are given in Table 2.

Measures

Environmental concern is a four-item scale that has been adapted from previous research (Ellen 1994). Respondents were asked to express their disagreement or agreement to items such as: "compared to other things in my life, environmental problems are not that important to me." The items for the importance and inconvenience constructs were taken from McCarthy and Shrum, (1994). Recycling effort (Ellen 1994) was measured by asking respondents if recycling required a lot of extra time. Responses for all the above scales were measured on nine-point Likert scales anchored by strongly disagree=1 to strongly agree =9. Recycling behavior (Biswas et. al 2000) was measured by asking respondents to indicate the extent to which they recycled aluminum cans, newspapers and magazines, and glass (never recycle=1 to always recycle=9). Acculturation was measured by asking respondents to answer the question "What language is mostly spoken in the home?" The response choices were English, Spanish, and English and Spanish equally (Webster 1994). English language use, which measures functional integration into the United States mainstream, is recognized as one of the most powerful indicators of acculturation (Betancourt and Lopez 1993). Demographic variables requested were age, gender, education, and income.

TABLE 2
Means, Standard Deviations, and Correlation Matrix

	Mean	S. D.	(1)	(2)	(3)	(4)	(5)
Environmental Concern (1)	6.45	1.74	1.000				
Importance of Environment (2)	7.88	1.38	.465(**)	1.000			
Inconvenience (3)	3.68	2.13	-.542(**)	-.354(**)	1.000		
Effort (4)	4.07	2.37	-.528(**)	-.348(**)	.800(**)	1.000	
Recycling Behavior (5)	4.46	2.25	.285(**)	.244(**)	-.437(**)	-.425(**)	1.000

** Correlations are significant at the 0.01 level (2-tailed)
n=262

TABLE 3
MANCOVA Results for Dependent Variables

			F-Values		
Source of Variation	Environmental Concern	Importance	Inconvenience	Effort	Recycling Behavior
Main Effect					
Acculturation	.081	4.732 ^b	10.848 ^c	10.572 ^c	4.683 ^b
Covariates					
Education	.542	.042	7.541 ^b	4.392 ^b	8.198 ^a
Income	2.703	1.322	.384	13.559 ^c	5.723 ^b

^ap<.05
^bp<.01
^cp<.001

Findings

Multivariate analysis of covariance (MANCOVA) for a single factor was used to examine the hypothesis. MANCOVA was used because of multiple dependent variables, and to control or partial out the effects of certain covariates like education and income. Further, all the dependent variables were correlated significantly with p values<.01. For example, the correlation between environmental concern and importance of environment was .454, (p<.000), and between effort and length of recycling the correlation was -.310 (p<.000). Wilks’ lambda results indicated significant main effects for the acculturation construct (F=4.762, p<.000). The effects of education (Wilks’ λ_{5,000} =.892, F=6.039, p<.000) and income (Wilks’ λ_{5,000} =.924, F=4.094, p<.001) were also significant. Multivariate and univariate results of the analyses are reported in Table 3.

The overall F-tests for all dependent variables except environmental concern was significant (p<.01). Further, the education covariate was significant for inconvenience and recycling behavior at p<.00, and for effort at p<.05 level of significance. The income covariate was also significant for inconvenience (p<.000) and effort (p<.01). Thus education moderated the effect of inconvenience, effort, and behavior, while income moderated the effect of inconvenience and effort. An analysis of the univariate results shows support for all hypotheses except H1.

Results

This research had posited that acculturation levels would influence environmental attitudes and recycling behaviors among Hispanic respondents. MANCOVA results provide support for H2–H5. H2 had posited that there would be differences among Hispanics with different acculturation levels and their attitudes toward the importance of recycling. Cell means in Table 4 reveal that the English only group was statistically different from the Spanish only and the bi-lingual group. H3 had stated that there would be differences among Hispanics with different acculturation levels and their attitudes toward inconvenience of recycling and H4 had stated that there would be differences among Hispanics with different acculturation levels and their attitudes toward recycling effort. Cell means in Table 4 show that for both H3 and H4 the English only group is statistically different from the Spanish only and the bi-lingual group. Finally, H5 had stated that English only, bi-lingual, and Spanish only groups would be different in their recycling behavior. Cell means shows partial support for this hypothesis since the English only group is statistically different from the bi-lingual group but not from the Spanish only group.

Discussion

Our analysis of the influence of acculturation on environmental attitudes and recycling behaviors revealed that the level of

TABLE 4
Cell Means for Acculturation¹

	English _a (n= 54)	Spanish _b (n=62)	Both English and Spanish _c (n=54)	F-Value
Environmental Concern	6.29	6.09	6.44	.081 (.922)
Importance of Environment	7.49 _{bc}	8.12 _a	8.02 _a	4.732 (.010)
Inconvenience	4.47 _{bc}	2.93 _a	3.60 _a	10.848 (.000)
Effort	5.02 _{bc}	3.43 _a	3.78 _a	10.572 (.003)
Recycling Behavior	3.92 _c	4.47	4.93 _a	4.683 (.010)

1- significantly different at $p < .05$ where a=English is spoken, b=Spanish is spoken, c=English and Spanish are spoken

acculturation did influence attitudes and behaviors. For example, the most acculturated group (English only) had the lowest scores on the environmental attitudes and recycling behavior scales. This group did not think recycling was important for the environment. Further, this group felt that recycling was inconvenient and required a lot of effort. The most acculturated group (English only) was statistically different from the least acculturated group (Spanish only), and the bi-lingual group with regard to all the above scales. Our analysis shows that the least acculturated group (Spanish only) had the most positive attitudes toward the environment; they did not think recycling was inconvenient nor did it require effort.

The results of this study are in line with research in environmentalism (Lynch 1993 and Schultz, et. al. 2000) that suggests that culture is an important determinant of environmental attitudes. These authors found that less acculturated Latino immigrants scored higher on the New Environmental Paradigm than more acculturated Latino immigrants. As an explanation, Lynch (1993) suggests that Latino environmentalism is characterized by a greater perception of the interrelatedness of humans with the natural environment. This suggestion may be surprising given the environmental degradation in countries like Mexico. However, Schultz, et. al., (2000) explain that the differences in environmental attitudes between more and less acculturated Mexican immigrants is because of the salience of the environmental problems. Concern for these problems among more acculturated Hispanic immigrants may decline over time since environmental degradation is less of an issue in the United States. Consistent with research by Schultz and colleagues our study too failed to find a positive relationship between acculturation and recycling behavior. Results show that low acculturated and bi-lingual respondents are statistically different from high acculturated respondents on importance, inconvenience, and effort related attitudes.

Public Policy Implications

The importance of these findings to marketing and public policy is to emphasize the concept of acculturation when exploring attitudes and behaviors among ethnic groups such as Hispanics. Recognition of intra-group diversity means that it is not useful to design environmental strategies that would suit all members of an ethnic group. A managerial implication of this finding is the need to deliver communications in both Spanish and English in order to

reach Hispanics of all acculturation levels. Policy officials need to understand the negative acculturation hypothesis (Vincent and Guinn 2003), which states that in some areas such as health, acculturation may lead to the adoption of behaviors like smoking and consuming fatty foods. Negative acculturation could be an explanation for low scores on environmental attitudes and behavior scales of the most acculturated group. For acculturated Hispanics (those who have the least favorable environmental attitudes), a possible strategy could be one that involves promoting positive environmental attitudes of his/her ethnic group in order to help neutralize the less positive socializing influence he/she experiences in American culture. If successfully engaged, the traditional Hispanic environmental values might help more acculturated Hispanics to readopt the positive environmental attitudes reflected by low acculturated Hispanics.

Finally, it is possible that the differences in environmental attitudes observed in this study could be due to the salience of environmental problems in the United States. Because of less salience, concern for these issues may decline over time. This decline in concern for the environment and environmental issues could be a problem since positive attitudes are important antecedents to pro-environmental behaviors.

Limitations

This study has some limitations that must be considered when drawing conclusions from the results. First, the focus of this study is narrow; we concentrated on a limited set of psychological constructs. Future work could include constructs like social norms and normative feedback, as well as the role of incentives. In this study we choose recycling of household garbage as the pro-environmental behavior, however, future research could include other behaviors such as conservation behaviors and purchase of green products as examples of pro-environmental behaviors. The results of this study can be generalized only to Hispanics living along the US-Mexico border since the sample was not chosen randomly. One should exercise caution in generalizing to all Hispanics especially those who are not from Mexico. This study demonstrated the need to include the acculturation level of members of ethnic groups when investigating their attitudes and behaviors. As this study demonstrates, acculturation does have an influence and contrary to popular sentiment acculturation into the American culture may not lead to positive environmental attitudes.

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Consumer Racism and Its Effects on Attitudes

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ABSTRACT

Marketing literature has so far largely occulted the impact of racism on consumer behaviour. This article first reviews the concept of racism and contrasts it with ethnocentrism and animosity. The postulated influence of racism on consumers' attitudes towards 4 product categories of varied ethnic origin is then verified through an experimentation involving a sample of French and English Canadian consumers. Findings suggest that consumers' evaluations of domestic products of varied ethnic origins are significantly correlated with declared levels of racism towards said ethnic groups.

Racism, its antecedents and its consequences have been the object in academic research in many fields including sociology, law, public health, journalism, and psychology. Racism has been studied in economic terms as a cost (Alexis 1999), and in management to identify for example how racism could influence evaluation of personnel (Knight et al. 2003). While general applicability of racism in marketing has been established especially through research in advertising (e.g., Bristor, Lee, and Hunt 1995; Bush, Resnik, and Stern 1980; Cox 1969-70; Kassarian 1969; Taylor and Lee 1994; Wilkes and Valencia 1989), its impact on consumer behaviour is largely unexplored

Yet it should be, along with other types of ideologies. Indeed, with the notable exceptions of ethnocentrism, patriotism as well as such constructs as animosity, the influence of ideologies in general on consumer behaviour and attitudes has itself not been the object of much attention from researchers. Marinov et al. (2001) studied for instance the impact of communist ideological legacy in Bulgaria, Romania, and Ukraine. However, when ideology-related research has been conducted in marketing, it usually held as an object how ideologies were manifested in marketing, not at the consumer level (see research in advertising cited before). For example, studies examined whether industrial advertising was sexist (LaTour, Henthorne, and Williams 1998) and the effect of ethnic ideologies on marketing practices (Kleiser et al. 2003). Yet ideologies have since long been documented in psychology literature as largely affecting behaviour. For instance, ideological-based discrimination was documented in the 1950's as eliciting behaviour ranging from avoidance, antilocution, differential allocation of outcomes, physical attacks, hate crimes, and even extermination (Allport 1954). One can postulate that if ideologies can push that far, they are certainly likely to potentially also affect consumer behaviour.

As mentioned, one ideology that has been widely studied in consumer behaviour is that of ethnocentrism, largely documented as affecting consumer behaviour towards foreign and domestic shops, products, and/or services (Balabanis and Diamantopoulos 2004). Psychologists recently postulated ethnocentrism to be positively associated with other domination ideologies such as nationalism, xenophobia, social dominance orientation, and racism (Lea 1996; Pratto et al. 2000, Sidanius et al. 1997). Provided the influence of ethnocentrism is largely documented, such a positive association with racism should suggest an influence of the latter also and warrant exploratory investigation. This article thus aims at exploring the concept of racism and some of its potential effects on consumer behaviour.

REVIEW OF THE LITERATURE

Racism was defined by Wilson (1973, p. 32) as "an ideology of racial domination or exploitation that 1) incorporates beliefs in

a particular race's cultural and/or inherent biological inferiority, and 2) uses such beliefs to justify and prescribe inferior or unequal treatment for that group." Contemporary authors however concur that the original biological foundation of racism has given way to bases characterized by real or imagined differences between ethnic groups in terms of their languages, cultures, customs and life-styles (Taguieff 1988). "Neo-racism", or "modern racism," has thus apparently shifted its object from race to culture, or ethnic belonging (Gilroy 1991).

Racism, ethnocentrism, and animosity

Racism is often the reaction of ethnically dominant groups to the "imposition" by ethnic minorities of their unassimilatable cultures, which would undo the accomplishments of history, the order of things, national identity, or its supposed unity (Potvin 2000). It is always made up of two major functions—that is, demarcation and legitimization of domination (Memmi 1994, p.106). It is thus by definition always directed from an ethnically dominant group towards one or more (but not all) minority groups. For instance, in the U.S., research has suggested that because it is threatening to White hegemony for Blacks to have influence and authority, many Whites are either consciously or unconsciously motivated to find ways to perpetuate the existing imbalance of power by reacting negatively towards Blacks in high status positions (Dovidio & Gaertner 1981; Knight, Giuliano, and Sanchez-Ross 2001).

By definition, consumer racism is thus in essence different from a variety of other constructs, including that of consumer ethnocentrism, defined and largely operationalized as the beliefs held by consumers about the appropriateness, indeed morality, of purchasing foreign-made products (Shimp and Sharma 1987), or shops, products, and/or services originating from a different ethnic group. The latter construct is valid for all countries of origin or ethnic origins, potentially moderated by cultural proximity with the countries or ethnicities being evaluated (Laroche et al. 2003), and in essence centered on the *evaluating* consumer's own national, cultural, or ethnic backgrounds. Racism, on the other hand, is rather centered on the *evaluated* object's national, cultural, or ethnic origin, and specifically directed towards it (Memmi 1994). One could thus be ethnocentric (have a tendency to reject shops, products, and/or services other than originating from his/her own ethnic group) and, in addition, exhibit racism towards one minority in particular (have a tendency to even further reject shops, products, and/or services originating from that precise group) while better accepting other minorities. Even though they should share a moderately high amount of variance, separate influences of both ethnocentrism and racism should therefore differ and should be researched as two separate yet potentially combinable constructs as they have been in psychology.

Racism also appears to be different from animosity, introduced and defined by Klein and colleagues (1998) as the remnants of antipathy related to previous or ongoing military, political, or economic events. Feelings of animosity towards a specific country, distinct from consumer ethnocentrism, would affect consumers' willingness to purchase foreign products rather than their judgment or evaluation of these products. Evidence to support this was found, based on a study of consumers' willingness to buy Japanese products in the Chinese city of Nanjing, where 300,000 people were massacred by the Japanese in World War II. While Klein found

animosity to a country to affect consumer attitudes and willingness to purchase products in an extreme case, namely, the Chinese in Nanjing, an interesting question raised by Nijssen and Douglas (2004) is whether animosity has the same influence under less extreme conditions.

From a theoretical point of view, animosity differs from racism in that it is on the way toward racism. Animosity, according to Entman and Rojecki (2001), sits on a continuum between racial harmony and outright racism. Racism, in this sense, appears to be animosity taken one step further.

The effects of consumer racism

Overt evidence of racism has decreased in recent years (e.g., Dovidio and Gaertner 1991; 2000) but it remains robust in more subtle forms that individuals may be hesitant to express (Gaertner & Dovidio 1986; McConahay 1986). These subtle forms of racism may be expressed in ambiguous situations where the behaviour can be justified by motives other than racism. For example, the effects of subtle racism have been observed in people's decisions about whom to hire for employment (Dovidio and Gaertner 2000; McConahay 1983) and how personnel evaluations are conducted (Knight et al. 2003). Researchers thus generally believe racism is manifesting itself more indirectly, in more symbolic ways (Myers 1993; Potvin 2000).

One potential instance of such indirect and symbolic way of expressing racism is through attitudes towards shops, products, and/or services. Although not documented in the scope of racism nor through evaluations of shops, products, and/or services per se, academic literature provides hints of the influence of racism on evaluations of shops, products, and/or services. Following a review of the literature and after acknowledging methodological limitations, Whittler (1991) concluded that some White viewers were not affected by the presence of Black actors in advertisements (as measured by a number of factors, including brand name recall, attitude towards the product and brand, and purchase intentions) while others were not as positive to Black actors as they were to White actors. Influence of racism is also hinted by the principles regarding transfer of meaning (McCracken 1989): if one does not like a specific ethnic group, theory suggests that he/she should not like its products either.

Previous research however fails to demonstrate the role of racism in the above-mentioned results, which could otherwise be explained by ethnocentrism. For example, if consumers of ethnicity x were found to discriminate more actively against products displayed as originating from ethnic group y than against products perceived as originating from ethnic groups a , b , and c , then consumers of ethnicity x could be hinted as exhibiting racism towards ethnicity y and not just ethnocentrism in favour of their own ethnicity x . Yet previous research has not included evaluations of advertisements, shops, services, nor products originating from more than two ethnic groups, usually Blacks and Whites in the U.S., nor has it included measures of racism.

The Canadian setting

According to cited definitions of racism, for the phenomenon to take place requires the presence of a majority ethnic group alongside an unassimilable ethnic minority. Because of its linguistic duality and within-country differences, Canada was deemed to be an appropriate society for this investigation. Prior research in marketing provides strong evidence of the existence of two distinct ethnic groups within Canada, an English majority and a dominant French minority (e.g., Kim et al., 1989; Kindra et al., 1994; Heslop et al., 1998; Plummer, 1977; Schaninger et al., 1985). It is widely

recognized that English and French Canadians possess different cultural traits, customs, language, and traditions subsequently yielding differences in their consumer-related behaviour (Laroche et al. 2000). Most importantly, research has demonstrated that some English Canadians did exhibit a certain level of racism towards French Canadians (Potvin 2000).

The Province of Quebec provides an interesting setting for this study as English Canadian and French Canadian groups can be perceived by their members as either the majority or the minority groups depending on either they adopt a province-wise point of view or a nation-wise point of view. Racism is therefore likely to occur both ways. In addition, Canada has a number of other ethnic minorities that allow for comparison and validation with additional ethnicities. In the Montreal metropolitan area, aside from the English and French communities, important ethnic minorities include Italian, Arabic, Spanish, and Chinese groups (Statistics Canada 2001). Provided racism is postulated to negatively influence racists consumers' evaluations of shops, products, and/or services originating from ethnic groups against which they exhibit racism, we postulate the following proposition: "The more one exhibits racism towards an ethnic group, the less positive his/her attitudes towards products and services perceived as originating from that group will be."

METHODOLOGY

Design

A 5 (French/English, Italian, Arabic, Spanish, and Chinese) x 4 (product class) design was developed and intended for French Canadian and English Canadian respondents. Varied stimuli in terms of product classes were believed necessary as research has consistently shown that country stereotypes tend to be product class-specific (Kaynak and Cavusgil, 1983), likely ethnic stereotypes also are. In order to fully control for factors other than racism, product classes were selected to control for product-based stereotypes on ethnic groups' abilities and competence in providing said shops, products, and/or services. For instance, jewellery shops were not considered likely to be owned by Italians nor Arabs in Montreal. In a pre-test, 34 business school students (17 English and 17 French) had rated the degree to which they thought each product class was specifically associated with one or more (but not all) of French Canadian, English Canadian, Italian, Arabic, Spanish, and/or Chinese communities (1=not at all; 7=very much). Four classes of retail and services were selected: auto repair, flowers, landscaping, and convenience stores, all of which scored low on the ethnic dominance and competency scales ($M_s < 1.6$) conferring them ethnically neutral status. Retailing and services were chosen as, in a pre-test, respondents confided they found more credible a scenario in which immigrants would be providing services or owning shops than manufacturing goods.

Participants

With the implicit assumption that geopolitical boundaries inadequately represent ethnic groups, the populations targeted for the current study consisted of adult English and French Canadians residing in the same city, the Montreal metropolitan area, as previous research has demonstrated appropriate (Laroche et al. 2003; Schaninger et al., 1985).

French and English groups were of interest in this study due to their majority statuses. In order to ensure a representative sample of both ethnic groups, given the multicultural character of the population of Montreal, participants were recruited in various city sites known as ethnic English or ethnic French-dominant. These sites were

TABLE 1
Brand names used in the study

Ethnicity	Names used			
French	Tremblay	Dubé	Léveillé	Gagné
English	Peterson	Morris	Campbell	Jenkins
Italian	Tozzi	Moscatelli	Di Francesco	Giulletti
Arabic	Al-Shawa	Khalife	Youssef	Al-Mousawi
Spanish	Gomez	Velasquez	Espinoza	Martinez
Chinese	Xiang	Sheng	Jin	Wu

defined according to Census of Canada data about the mother tongue of residents. Respondents were recruited through random mall or street intercept procedures.

A total of 394 respondents were submitted to a screening questionnaire that aimed at evaluating their belonging to either the French or English group. The latter was assessed through a multidimensional index of ethnicity (Kim et al. 1989), which uses as reliable measures of the strength of ethnic affiliation dimensions of language usage and ethnic identification.

A certain number of acculturated Canadians were expected (Laroche et al. 2003), as well as respondents indicating use of a language other than French or English. All were turned away, leaving a total of 319 completed questionnaires. Three were eliminated for incompleteness, thus leaving a final set of 316 questionnaires, 160 completed by English Canadians, and 156 by French Canadians.

Stimuli

Short descriptive ads for all four selected shop and services categories were developed to be identical in structure (image colour and size, length of descriptive text, brand name size, etc.) and contents (message style, benefits advertised, etc.). For each category, 48 advertisements were designed to describe and depict the exact same offering. Ads varied in the language they were written in (French or English) and in the ethnic connotation of brand names. Attitudes towards messages and brand names were also pre-tested with a sample of 34 business school students (17 English and 17 French). Names denoting high ($M_s > 5.9$) ethnic affiliation in both ethnic groups were selected based on a scale of 1 (not specifically ethnic-sounding) to 7 (very specifically ethnic-sounding). Brand names including family names were the highest scoring and thus were selected (see table 1).

Ethnicity of selected names could also be correctly identified in 97.1% of cases and no significant difference was found between French and English in the pre-test. Use of brand names was randomized across the study so that respondents would see a randomized brand name for each category, and so that participants would not see twice the same brand name in two different categories. Attitudes towards the messages did not significantly differ among them, nor across ethnic groups.

Procedure

A self-administered, computer-based questionnaire was used to gather data for this project. The questionnaire was originally developed in English and translated into French using a translate/back-translate procedure.

A short introductory note provided background information and informed participants they were going to be shown, for 4 product categories, a total of 5 short ads (one for each ethnic group except the respondent's own) of shops or services companies located in Montreal. The computer instructed participants to take a thorough look at each of the 4 product descriptions they were going to be shown in order to provide their evaluations of the companies afterwards. One at a time, ads were then shown, for which respondents had to provide store or service brand appreciation directly on the computer. To make sure respondents processed ethnic origins for each brand, they were instructed, upon providing ratings, to enter the brand name. After each brand for each shop and service company had been evaluated, socio-demographic data and information on racism were finally gathered.

Measures

The independent variable of theoretical interest in this study was respondents' level of racism. It was assessed using an adapted version of Saucier and Miller's (2003) Racial Argument Scale (RAS). Although the older Modern Racism Scale (McConahay et al. 1981) has achieved widespread use in the measurement of racism since its creation, recent findings suggest that it is now correlated with social desirability (Dunton and Fazio 1997; Fazio, Jackson, Dunton, and Williams, 1995)—that is, respondents now bias their answers in order to hide what they consider a socially undesirable sentiment. The RAS measures racial attitudes through an indirect path, measuring how individuals believe that arguments support positive and negative conclusions related to Blacks. Individuals will not report how much they personally agree with the arguments, only how much the arguments support the conclusions. Alpha reliabilities of the scale were shown to range from .67 to .74, and the scale has been demonstrated not to correlate with social desirability while still significantly explaining racism (Saucier and Miller 2003).

Adapted versions of the scale were developed to include 8 statements and conclusions on which respondents had to express how much statements did support positive and negative conclusions related to studied ethnic groups. The scale was pre-tested on a sample of 63 business students (26 English and 37 French) and interestingly showed internal reliability scores that were quite more favourable than those noted by Saucier and Miller (2003) at .933 (Cronbach alphas for each ethnicity were .932 (English Canadian), .936 (French Canadian), .931 (Italian), .934 (Arabic), .930 (Spanish), and .932 (Chinese)).

The dependent variable was global product attitude and was measured along a three-item (bad/good; unfavorable/favorable;

TABLE 2
English and French Canadians' levels of racism by ethnicity

	MEAN (standard deviation)		T tests	
	French Canadians (n=156)	English Canadians (n=160)	(Pairwise comparisons)	
Racism targeted at			t	df
Each other	1.99 (1.51)	3.47 (2.06)	-7.73	155 ^a
Italian ethnicity	2.07 (1.18)	2.20 (1.59)	-.82	155 ^b
Arabic ethnicity	2.61 (1.54)	2.75 (1.95)	-.57	155 ^b
Spanish ethnicity	2.11 (1.20)	2.26 (1.63)	-1.02	155 ^b
Chinese ethnicity	2.37 (1.43)	2.32 (1.63)	.21	155 ^b

Items measured on a seven-point Likert scale (“does not support at all” to “strongly supports”).

^aSignificant at $r < .001$.

^bNot significant.

unsatisfactory/satisfactory) seven-point semantic differential scale (Cronbach alpha=0.967).

ANALYSIS AND RESULTS

Table 2 provides racism scores for both the French Canadian and the English Canadian samples. Pairwise comparisons across both samples indicate some differences in overall racism of French Canadians and English Canadians against each other. A first look at the data shows that English Canadians exhibit more racism towards French Canadians than vice versa. However, both groups do not appear to differ in their racism towards other ethnic groups.

Racism and shops evaluations

The results of this study provide support to our hypothesis. Correlations between racism scores and shops/services brand evaluations were assessed. As results in table 3 depict, racism scores of respondents are inversely correlated ($r < .01$) with attitudes towards products originating from the ethnicity that is the object of racism. Moreover, aside from 6 exceptions noted hereafter, no other significant correlations were found between racism towards a specific ethnic group and attitudes towards products originating from other ethnic groups.

Weaker and less significant correlations have also been found between some racism scores towards one ethnicity in particular and attitudes for 1 or 2 brands originating from another ethnicity than that targeted by studied racism scores. These results, although isolated, are nonetheless intriguing since no significant correlation has been found between scores of racism towards ethnic groups except for a slight relationship (Pearson correlation=.118) between racism towards ethnic Arabic and Chinese groups ($r < .05$ (2-tailed)). Out of 6 unsuspected correlations, 2 are related to racism towards Chinese and attitudes towards Arabic products. The 4 other unsuspected correlations could be the effect of a statistical bias as there is nothing in the literature that would suggest why consumers exhibiting racism towards Spanish ethnic groups would less positively favour landscaping services from Arabic groups. This thus generally tends to confirm that attitudes towards products and services are indeed affected by racist sentiments thus supporting our hypothesis.

DISCUSSION AND IMPLICATIONS

The research objective of this study was to examine whether racist sentiments of consumers could influence their attitudes towards products of different ethnic origins. A descriptive look at the results indicates that, in the samples examined, a racist-based influence does exist. The results indeed highlight the existence of racist and non-racist consumers as well as the direct relationship the construct has on product evaluations: racist English Canadians and French Canadians both exhibit less favourable attitudes towards products originating from ethnic groups towards which they exhibit racism, as general racism literature suggests (Myers 1993; Potvin 2000). No study had so far directly established relationships between a measure of racism in consumers and their attitudes towards products.

This study suggests that marketing practitioners carefully review their options before making a decision on the ethnic image they are to give their products or services, especially if the considered image is that of an ethnic minority. This is obviously most especially true if marketers' target consumers are of a local or regional ethnic majority. The results also raise concerns for policy makers, who should question whether they should provide assistance to help entrepreneurs from ethnic minorities enjoy similar chances of commercial success than majorities despite apparent negative racist effects on their business.

For academic researchers, research implications of this study are three-fold. First, findings in this study suggest racism as a key construct for future academic research involving consumer behaviours across ethnic groups and in relation with each other. Furthermore, this investigation also highlights the importance and, at least, relevance of conducting cross-cultural or cross-ethnic research within countries as opposed to just between countries (Laroche et al. 2003). Finally, this investigation has shown how racism may impact consumer attitudes towards products of different ethnic origins in within country settings.

The main limitation of this study however is its limited number of participants and the local, Montreal-related scope of the study. Although targeted phenomena were demonstrated as statistically significant and in line with expectations based on the literature, other studies involving different ethnic groups elsewhere in the

TABLE 3
Correlations between racism scores and global product attitude

Attitudes towards products of ethnic origin...		Racism scores towards...				
		French / English	Italian	Arabic	Spanish	Chinese
French / English	Auto repair shop	-.597 ^b	a	a	a	a
	Florist	-.647 ^b	a	a	a	a
	Landscaping services	-.585 ^b	a	a	a	a
	Convenience store	-.601 ^b	a	a	-.138 ^c	a
Italian	Auto repair shop	a	-.424 ^b	a	a	a
	Florist	-.120 ^c	-.475 ^b	a	a	a
	Landscaping services	a	-.442 ^b	a	a	a
	Convenience store	a	-.467 ^b	a	a	a
Arabic	Auto repair shop	a	a	-.516 ^b	a	-.118 ^c
	Florist	a	a	-.561 ^b	a	-.126 ^c
	Landscaping services	a	a	-.545 ^b	-.118 ^c	a
	Convenience store	a	a	-.541 ^b	a	a
Spanish	Auto repair shop	a	a	a	-.432 ^b	a
	Florist	-.117 ^c	a	a	-.483 ^b	a
	Landscaping services	a	a	a	-.488 ^b	a
	Convenience store	a	a	a	-.513 ^b	a
Chinese	Auto repair shop	a	a	a	a	-.463 ^b
	Florist	a	a	a	a	-.537 ^b
	Landscaping services	a	a	a	a	-.483 ^b
	Convenience store	a	a	a	a	-.531 ^b

Scores showed are Pearson correlation coefficients.

^aNot significant.

^bCorrelation is significant at the .01 level (two-tailed).

^cCorrelation is significant at the .05 level (two-tailed).

world should be undertaken before confidently concluding in the existence and influence of racism on consumer attitudes and behaviour. Another limitation is the rather indirect applicability of the racism scale used in the context of consumer research. In this sense, one important avenue for further research is certainly the creation of a consumer racism scale, similar to the CETSCALE used to measure consumer ethnocentrism, which would be more directly appropriate for use in marketing than Saucier and Miller's (2003) Racial Argument Scale (RAS). Finally, our study used the perceived ethnic character of brand names as a cue indirectly signalling ethnic origin of products. Further research should try to clarify more directly how racism and actual ethnic origins of products combine in influencing consumer attitudes across different ethnic groups.

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Arousal as a Driving Force for Decision-Making—Empirical Results from Measuring Electrodermal Reactions at the Point-of-Sale

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EXTENDED ABSTRACT

For more than 40 years, cognitive approaches to the analysis of problem-solving in buying decisions were the dominant paradigm. Thus, for the most part, the four main problem-solving types (extensive, limited, routinized, and impulse buying behavior) were characterized by the cognitive effort associated with them. However, in recent years, new research streams have shifted the focus to affective processes involved in buying decisions. In spite of this “emotional turn”, the authors are not aware of any studies comparing the arousal between the four different types of problem-solving.

From a psychophysiological point of view, arousal is a fundamental feature of behavior. “Tonic” arousal refers to a relatively long-term state of consciousness that changes only slowly. “Phasic” arousal arises in response to specific stimuli, resulting in short-term variations in the arousal level. Phasic electrodermal reaction (EDR) has proven to be the most appropriate and valid indicator for measuring the activity of the preparatory activation-system which encompasses motivational aspects of arousal, and which is responsible for positive emotions, both being highly relevant for decision-making processes at the Point-of-Sale (POS).

Using EDR, the authors aim to address the above-mentioned lack of empirical research by considering a comparison of the evoked arousal between the different problem-solving types on the one hand, and on the other hand, weighting the evoked arousal of the problem-solving groups against the arousal reactions of consumers who decided to buy nothing. Relevant reasons for also taking non-buyers into consideration, result from diverse studies reporting that shopping trips can have a hedonic value and lead to increased arousal, irrespective of whether or not something is purchased. Nevertheless, since making a real decision implies more effort than leaving it, we hypothesize that buyers show higher phasic arousal reactions than non-buyers. Thus:

H1: On average (over all categories of problem-solving), buyers will show significantly higher phasic arousal than non-buyers.

Whereas the first hypothesis implies a simple comparison between buyers and non-buyers, in our second hypothesis we take the different types of problem-solving processes in the context of buying decisions into account. As discussed above, arousal may vary with the type of problem-solving, hence leading to the second hypothesis:

H2: Extensive and impulsive decision-making at the POS will be accompanied by significantly more phasic arousal than habitual decision-making.

Furthermore, we investigate the specific relationship between arousal and task performance. Since arousal is regarded as being a prerequisite for motivation and a “driving force” for accurate problem-solving, we hypothesize for the ascending part of the inverted-U-function:

H3: The higher the arousal, the higher the accuracy of complex problem-solving.

We tested our hypotheses in four empirical studies. Our first two studies were conducted at the POS in a mall and in a large department store for sports goods. The studies focused on the question of whether buyers perceive higher arousal than non-buyers. In both studies, we found significantly higher arousal for buyers than for non-buyers. Thus, H1 was confirmed.

In our third study in a local supermarket (which we chose as to yield at least some habitual purchases), we tested if arousal differs significantly for routinized, impulsive, and cognitive controlled buying. In accordance with theory, the results reveal significant differences with regard to the total amplitude between non-buying and routinized decision-making on the one hand and impulsive and cognitive controlled decision-making on the other. Thus, we found support for H2. Furthermore, there are also significant differences between non-buying and routinized decision-making with regard to frequency, which shows that even routinized shopping behavior is associated with more attention by the individual towards the assortment.

In the fourth study, we experimentally tested the relationship between arousal and task performance by asking test subjects to examine the value-for-money ratio of different and complex computer hardware offers. Multivariate data analyses using accuracy of task performance as dependent variable and arousal, time needed to complete the task, as well as computer know-how as independent variables reveal that only arousal contributes significantly to the accuracy of task performance. Thus, H3 was supported.

In summary, arousal was found to be an important construct for the explanation of buying behavior. Even in the first study, where we were only able to measure consumers’ intention to buy something, it was evident that decision-making is obviously connected with higher arousal, or in other words, these consumers were more affected by the range of items or the visual merchandising concepts.

In accordance with theory, on the one hand, the third study demonstrates (with respect to convenience goods) that impulsive as well as cognitive controlled buying behavior are associated with higher phasic arousal than habitual decision-making. On the other hand, our findings also show that even routinized shopping behavior relates to more attention by the individual towards the assortment, than non-buying.

Last but not least, the fourth study shows—again in accordance with prior research—that there is a significant relationship between arousal and performance. Thus, it is apparent that arousal is necessary for complex problem-solving and a better predictor of task performance than time.

Some limitations should be addressed in further studies: Firstly, our findings are based on relatively small sample sizes. This is mainly due to the complex EDR measurement process. Furthermore, the setting of our third study led to a concentration on convenience goods and should be extended to shopping goods in

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further studies. It might be that in stores selling shopping goods (e.g. fashion stores) there are more hedonic shoppers who love to browse through the store, simply enjoying the atmosphere without buying anything. In this case, it might be possible that hedonic non-buyers are more aroused than habitual buyers (provided that automatic buying behavior can be found here at all).

“Hi, I’m A Compulsive Buyer:” A Content Analysis of Themes from Testimonial Telephone Calls at QVC

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ABSTRACT

This paper reports a content analysis of 100 hours worth of testimonial telephone calls received and put on-air at QVC television shopping network. The total number of telephone calls analyzed was 514. After reviewing themes that emerged from literature regarding television shopping networks, the testimonial calls were analyzed and categorized into four themes. These themes include: I Love QVC Products and Their Quality, My Buying is Out of Control, I Love the QVC Hosts as Friends/Family, and I Am Treating Myself to Gifts.

INTRODUCTION

The objective of this paper is to conduct a content analysis of testimonial telephone calls at a major television shopping network (QVC) for the purpose of uncovering themes relevant to consumer behavior researchers. Testimonial telephone calls are calls made to a shopping network that are put on the air live so that all consumers watching the network can hear the caller. Sometimes, the host will ask for buyers to call in and sometimes the calls are unsolicited. The purpose and contribution of this study is to use content analysis to classify themes from testimonial calls that deal with compulsive buying. In the next paragraphs, we briefly describe the importance of television shopping networks in the retailing realm. Then, we discuss the possible links between television shopping and compulsive buying.

Interest in television shopping networks and the consumers who shop at them has increased as the number of networks have grown and the sales at the large networks have exploded (Moss 2002). There are currently approximately a dozen television shopping networks on various cable stations (Beres 2003). The two largest are QVC located in suburban Philadelphia, PA and HSN located in Clearwater, FL (Hoover’s Online 2004). Other, much smaller television shopping channels include ShopNBC and Shop at Home (Moss 2002). QVC is the largest (and most studied) network with 2003 sales of \$4.9 billion and reach of approximately 95 million U. S. households (QVC also has international networks in England, Ireland, Scotland and Germany) (Higgins 2003; Lillo 2003). QVC features approximately 1600 items on the air each week (Kaptik 2003). QVC is able to answer 162,000 telephone calls each hour and can ship up to 300,000 packages each day (Ragas 2002). By contrast, HSN had \$2 billion in sales in 2003 and reaches 79 million households (Hoover’s Online 2004). The other networks are much smaller in both sales and reach.

More than one thousand journal and popular press articles have been published in the last decade that mention the topic of home shopping or home shopping networks (cf., Infotrac Online Database). Most of the articles deal with non-consumer behavior issues such as ownership of various networks, stock price changes, executive changes, etc. After collecting several hundred of the most relevant articles and categorizing them in terms of major themes, three themes of interest to consumer researchers appear to dominate both the academic and popular press articles. These themes are: 1) television shopping is a major force in retailing and growing rapidly (Beres 2003; Hoover’s Online HSN 2003; Hoover’s Online QVC 2003). To support this theme, on Dec. 2, 2001, QVC sold \$80 million worth of product in one day, breaking its previous total of

\$60 million (Moss 2002; Van Camp 2002); 2) television shopping appeals more to women than to men (Hill 2002; Lawrence 1990); and 3) television shopping networks are conducive to compulsive buying (Hill 2002; Hunt 2003; Lee, Lennon and Rudd 2000; Marsden 2002; McPherson 2003; Stesin 1997). It is the second and third themes, and their relationship to each other, that are of particular interest in this study.

In the next section, compulsive buying is briefly discussed, including the proposed relationship between compulsive buying and television shopping. The relationship of gender to compulsive buying and television shopping is also highlighted. Then, the method that was used to collect testimonial telephone calls from QVC is described. Next, the resulting themes are presented and discussed. Finally, suggestions for future research are offered.

COMPULSIVE BUYING AND ITS RELATIONSHIP TO TELEVISION SHOPPING

Compulsive buying has been widely studied in the consumer behavior literature. It is defined as “chronic, repetitive purchasing that becomes a primary response to negative events or feelings” (O’Guinn and Faber 1989, p. 155). Although it is beyond the scope of this paper, a comprehensive review of the possible sources of compulsive behaviors and addiction can be found in Hirschman (1992). There are at least three scales that measure a consumer’s tendency toward compulsive buying (Edwards 1993; Faber and O’Guinn 1992; Valence, D’Astous and Fortier 1988). Research has shown correlates of compulsive buying to include low self-esteem, materialism, loneliness, obsessive-compulsive disorder, anxiety and stress (Faber and Christenson 1996; Faber and O’Guinn 1989; 1992; Scherhorn 1990; Stephens, Hill and Bergman 1996). Compulsive buying appears to possess the characteristics common of all compulsive behaviors, including repetition, loss of control, dysfunctional nature, and the desire to engage in the behavior in order to escape other problems or for mood control (cf., O’Guinn and Faber 1989; Rindfleisch 1997). Another common characteristic of compulsive buying is that the behavior appears to be much more common among women than men (Black 1996; Faber, Christenson, DeZwaan and Mitchell 1995; Faber and O’Guinn 1989). While it is estimated that only about 10% of the population can be labeled compulsive buyers, 80-92% of these are female (Black 1998; Faber and O’Guinn 1989).

According to existing research, there is a relationship between television shopping and compulsive buying. Although causation is not claimed, some authors believe that television shopping is an activity that may enable compulsive buying (McElroy, Keck and Phillips 1995; Stephens et al. 1996). “QVC may contribute to the transformation of occasional impulse buying into compulsive buying, for a person so predisposed, in several ways” (Stephens et al. p. 195). They mention the continuous availability of the channel in the home, the friendliness of the hosts, and the items sold as factors that may contribute to compulsive buying. The availability of QVC and its potential as a “secret venue” for buying is also supported in other research (Lee et al. 2000; Stanforth and Lennon 1996). Faber and O’Guinn (1988) state that although media are certainly not the cause of compulsive shopping, the constant exposure may encourage such activity. Harden (1996) found in focus groups that many

middle-aged women found television shopping networks to be addictive. Finally, researchers have found that between 44-60% of QVC's transactions are from repeat buyers, indicating the existence of at the least brand loyalty and possibly compulsive buying (cf. Cook 2000).

Although it is often assumed that QVC buyers are from the lower middle-class in terms of socio-economic status, this does not appear to be the case. Television shopping networks in general and QVC in particular appear to know their customers' characteristics very well (Kerver 2000). This target market is backed up by articles that describe the typical customer as female (75%, Chachare 2002; 90%, Stesin 1997), age between 40-65, income of \$50,000-\$70,000, and college educated (Jeffries 2003; Stanforth and Lennon 1996). Further evidence of the socio-economic status of the typical QVC buyer is found in the products that sell extremely well on the network. Expensive brands such as Philosophy, Bare Escentuals, L'Occitane and Birkenstock are top sellers. Cubic zirconium jewelry (often associated with television shopping networks) represent only 2% of the network's sales (Chachere 2002).

To keep buyers apprised of programming, QVC sends what is called a Program Guide, covering one month of programs, with each purchase and to all QVC credit card holders. These program guides show each "program" that is on the air each hour. Based on a sampling (n=50) and categorizing of these guides, it was found that approximately 80-85% of all programming is geared specifically to women (examples include jewelry, women's clothing and shoes, cosmetics, candles and other home décor, scrap book supplies, and bedding). Only about 10% of the programming is geared more specifically toward male interests (i.e., shows that sell Nascar collectibles and Craftsman tools). The remaining programming is of interest to both females and males (examples include CDs of famous artists, computers, cameras, and food products).

There appears to be a natural link between television shopping networks and women who may be compulsive buyers. First, the presentation of the products is very casual, friendly, happy and personal (Cook 2000). Hosts reveal details about their personal life in order to make the products more appealing, such as a host relating a story about a piece of jewelry currently being sold that was bought for a loved one or received from a husband or fiancé (Gumpert and Drucker 1992; Kerver 2000; Lee et al. 2000; Moore and Stern 1998; Stephens et al. 1996). These authors refer to the hosts and viewers as having parasocial relationships. Parasocial relationships are imagined by the viewer and are one-way relationships. This type of relationship has been found to be important to compulsive buyers as a means of feeling validated, liked, valued and encouraged in their buying behavior (see also O'Guinn and Faber 1989). Using content analysis of interactions between consumer callers and hosts, Stephens et al. (1996) concluded that these relationships encourage compulsive buying.

Second, the program guides enable shoppers to plan their buying around particular time slots. By showing the hourly lineup of shows a month at a time, shoppers are able to pick and choose which shows to watch. In addition to the program guides, the hosts frequently encourage shoppers to stay up late for a particular show or to be up at midnight when a new "Today's Special Value" (one product that is presented at a special low price for a 24-hour period) is first offered. There are also constant reminders by hosts and through the use of program ads of the next four or five shows that will air after the current show is over (each "program" lasts one hour).

Third, the products are presented with some urgency to purchase. Each product remains on the air for approximately eight minutes. Although consumers can buy any item at any time, it is

most convenient to order the item when it is on the air. It is only during this period that the live or automated operator has the item number available and it does not have to be remembered by the buyer. In addition, urgency is present in the form of a counter on the screen that shows the number of orders for each item updated in real time. If there is only one item being presented (such as a piece of jewelry), the host continually updates viewers on the number still available. If there are multiple items for sale at one time (such as a jacket that comes in six sizes), a yellow dot appears on the screen by the size when it becomes limited and a red dot appears when the item is sold out (or put on waitlist only status).

Finally, according to Lee et al. (2000): "It is also likely that television shopping channel exposure contributes to the belief that happiness can be found through consumption. Thus, television shopping channel viewing may encourage television shoppers who are predisposed to manifest their problems through compulsive buying." (p. 480).

METHOD

In order to summarize a vast amount of data into systematic and objective categories, content analysis was considered an appropriate data analysis technique (Kassarjian 1977). Thus, a content analysis was performed using testimonial calls as the item of classification. In preparing to collect the data, several factors were deemed important. First, a sufficient quantity of data was necessary to allow on-air testimonials to support themes. Although we were unsure how many testimonial telephone calls would be needed, we decided to collect a large number of data points. Second, it was believed that the sample should be drawn from a variety of times in case testimonial calls differed by time of day or by day of the week. Thus, calls were sampled from morning, afternoon, evening, and overnight hours and from week-days, week-ends, and holidays (QVC is on the air 24 hours a day, 364 days a year—taking only Christmas Day off). Third, the data was collected at a variety of times during the year, so that special holidays (i.e., Christmas, Easter, Valentine's Day, etc.) did not have a greater than normal impact on the testimonial calls. Table 1 shows the data collection procedure. Because most viewers watch during the evening hours (except on week-ends) and the least number during the overnight hours, the number of hours for each time period reflects viewership numbers (Moss 2002).

As shown in Table 1, all data were collected over a six-month period between April-September 2001. Hours recorded were selected randomly but in the proportion shown. All testimonials collected during the 100 hours recorded were coded. After first coding the testimonials based on the time of day the data were collected, it was agreed that the same themes emerged in approximately the same proportion when the data were combined. The findings report the data in the combined form. Although content analysis often uses a pre-determined system of coding items within established categories, preconceived categories were not used in this study. So as not to force the themes of interest (i.e., compulsive buying by women) onto the testimonial calls, the coding scheme was developed separately by the two judges working independently. That is, each judge developed names (or titles) for the theme(s) suggested. Not only were the judges' theme names remarkably similar, the judges agreed on the testimonial code theme for all but 6% of the testimonials. These disagreements were reviewed, discussed, and resolved. The major area of disagreement was that many of the calls contained several themes, so the number of testimonials that suggest each theme summed across the themes is greater than the total number collected (514).

TABLE 1
Data Collection Procedure

Data Collection Period: April-September, 2001
Total number of testimonials: 514
Total number of testimonials by gender: female=492 (96%) male=22 (4%)
Total number of hours of television coded: 100
hours of morning television: 20
hours of afternoon television: 20
hours of evening television: 40
hours of overnight television: 20
Average # of testimonials/hour: 5.2
Range of # of testimonials/hour: 0–11
Average length of testimonials: approximately 2 minutes
Range of length of testimonials: 25 seconds–5 minutes

FINDINGS

Four themes dominated the testimonial telephone calls. Several of the calls suggested a variety of other themes, but there was insufficient quantity to warrant discussion. The key themes are presented and discussed below. It should be noted that approximately 5% of the testimonials had little or no content and on average lasted only about 20 seconds. The callers seemed very nervous and only tentatively answered a few questions posed by the hosts with one word answers. These calls were excluded from further analysis.

THEME ONE: I LOVE QVC PRODUCTS AND THEIR QUALITY ($n=332$). Love of QVC products was the theme that was expressed by the majority of testimonial calls. Many customers related that they had not only bought the current item on the air, but had bought dozens of other items from QVC. Most of these calls also contained at least one additional theme that dealt with compulsive buying. However, because this theme is not necessarily related to compulsive buying, only a few verbatims are listed below:

“Ladies, get off the fence and order this, you will love the beauty and the quality.” (bracelet)

“If anyone is reluctant, they should buy this, it works!” (Philosophy moisturizer called Hope in a Jar)

“I love everything that you sell on your program” (it is interesting to note that this caller and many others refer to QVC as a show or a program rather than a 24-hour per day commercial for selling products.)

THEME TWO: MY BUYING IS OUT OF CONTROL ($n=290$) This was the second most dominant theme. As shown by the number of callers who mention this theme, it is a close 2nd to the quality theme above and directly relates to compulsive buying. Although in the last few years (since 2002), hosts have obviously been told to downplay these types of testimonials, at the time this data were collected, no such controls were in place. There is no citation documenting this change of behavior of the hosts, but in listening

to current testimonials, it is evident that hosts quickly change the subject when a caller brings up this theme. In fact, there are recent instances where a caller is quickly dismissed by the host if she continues on the compulsive buying theme. Examples of testimonials expressing this theme include:

“You guys are going to make me poor. I bought another outfit by this brand earlier this week.” (Susan Graver fashion).

“I shouldn’t be allowed to have a QVC credit card. It is always at the limit and then I just pull out my other credit cards to buy.” (18K gold jewelry)

“I can’t believe that I just bought the entire collection you are showing now.” (Mojave Magic cosmetics—cost about \$575)

“I’ve told my mother/friend/sister about QVC and now her/their credit cards are sky high too.” (This type of statement was made frequently.)

“I love your program and I buy everything.”

“I didn’t just buy one set (of variously scented candles from Valerie Parr Hill). I bought three sets. The last time I ordered, I bought three sets and I gave them all away. These three are just for me.”

“This is my third or fourth order for this product (Breezie underwear). There is no tugging or pulling in the back, if you know what I mean. I guess I’m just a Breezie girl.”

“I buy way too much. The product explanations are so clear that I really love to buy everything I see.”

“I have everything that you sell. My house is completely full of QVC products. I have no space left.”

"I started collecting dolls after watching QVC. Now I have over 300."

(dolls priced between \$100-\$400 designed by Marie Osmond dolls were being sold at the time—QVC has many doll designers that sell on QVC)

"I bought every single color of t-shirt and Capri pants that you showed." (Denim & Company clothing—a QVC brand)

"I just can't stop buying from QVC. I watch it all the time—as many hours per day as I can."

"I waited until my husband went to sleep to start ordering." (indicating the possibility of a "secret venue" as a way to hide purchases from family members)

"My QVC card is so high that I can only buy on Easy-Pay." (a QVC policy that allows customers to buy certain products, receive them now, and pay for them over a 2-5 month period).

"Well, I've already bought 3 or 4 things tonight from this line and now I want this shirt." (fashion hour)

"I've stayed up all night so I wouldn't miss anything. I've bought so much I can't believe it." (caller during Fashion Day—24 hours of fashion)

"I called in sick at work today so I could watch all 24 hours." (Fashion Day)

"I'm trying to get my sister to order this. I know it is perfect for her." (trying to turn ones relatives into compulsive buyers?)

THEME THREE: I LOVE THE QVC HOSTS AND BELIEVE THEY ARE MY FRIENDS/FAMILY ($n=197$). The calls expressing this theme appear to be engaging in parasocial relationships. Stephens et al. (1996) found strong evidence of these relationships in their research. Even the then President of QVC has stated that he wants the audience to love the hosts and to make the audience part of an extended family (Gumpert and Drucker 1992). Hosts are trained in techniques to draw consumers into their "family". While most consumers understand that this friendliness on the part of the hosts is a sales technique, others appear to take the hosts into their hearts. The comments expressing love for the hosts were generally mentioned as the call was coming to a close. In addition to expressing love and interest for the hosts and their families, callers also mentioned love of celebrity guests. QVC currently employs approximately 25 hosts and a vast number of mostly minor celebrities who bring products to the network (Harrington 2003). Included are Joan Rivers (jewelry, skin care, cosmetics), Marie Osmond (dolls), Delta Burke (larger-sized fashions), Richard Simmons (Richard Simmons' Diet Plan, dolls), Tova Borgnine (wife of actor Ernest Borgnine who sells cosmetics and fragrance), and Nolan Miller (fashion designer and jewelry).

Examples of testimonials that express this theme include:

"I just love you. You're one of my favorite hosts—you can sell me anything." (referring to Judy Crowell—host)

"Mary Beth (Roe), you're so great—you're my favorite host."

"You're one of my very favorites—you epitomize the word lady." (Mary Beth Roe)

"You are so beautiful and I know you were a beauty queen before working for QVC." (Lisa Robertson)

"Jane, I am so happy that you're pregnant—do you know if it is a boy or a girl?" (Jane Rudolph Treacy)

"I heard you adopted a little girl from China. Do you have a picture of her that you can show me? (Mary Beth Roe showed a picture of her baby)

"Congratulations on your engagement, I am so happy for you. When are you going to show us a picture of the lucky groom?" (Jill Bauer)

"I feel I know you as a friend and I love you so much." (Dan Hughes)

"How are you handling your divorce? I worry about you." (Dan Hughes)

"I'm a big fan of Joan Rivers and I love her. She is so funny when she is on the air and I love her jewelry."

"Richard Simmons, I love you so much. You are my incentive to lose weight."

"Thank you so much for talking to me. I really love you as a daughter." (Pat Dimintri)

"You are so beautiful. You look great in all your clothes." (to host)

THEME FOUR: "I AM TREATING MYSELF TO GIFTS ($n=150$). This theme was unexpected but interesting with many callers indicating how the products they buy make them more confident and happy about themselves (especially in terms of their looks or figure). In addition, many callers referred to negative mood states they were in and how the "product treat" would help them feel better. Several researchers have found that compulsive buying results in a lot of self-gifts during negative mood-states—either to treat or to cheer oneself (Faber and Christenson 1996; Shapiro 1993; Woodruffe 1997). Many callers indicated that QVC products helped them physically. Examples of testimonials expressing this theme include:

"I decided I was *due* a bracelet because I haven't bought one in a while."

"I'm *treating myself* today. I'm home sick and I've been treating myself all day."

"I'm home recovering from surgery and I'm buying *lots of pretty things for myself*."

"When I wear this make-up, I feel beautiful." (Victoria Principle cosmetics)

"This will look good on me." (Bare Ecsentials cosmetics)

"I've never used one before, so I bought it today. As I get older, I need this more. I can't wait to get it because *I know I will look better*." (a face shaver that removes hair from above the lip and cheeks)

"I love this jacket. *I look really good* in this. It's hard to find fashion for larger sized women, but I really look good in the ones I buy at QVC." (Delta Burke fashions)

"I just turned 40 and I love this stuff (Laura Geller's Spackle Cream Under Make-Up Primer). At the end of the day, *I look good.*"

"I am really appreciating this. I am in a lot of pain with my back. This has helped me so much. God bless you. (Wacoal Under-wire T-back bra)

DISCUSSION

Although several of the themes found in this research have been examined before, theme one (quality of products) and theme four (love/care of self) have not previously been discussed in academic literature in the context of television shopping. Of primary interest to this study was theme two (My Buying/Debt is Out of Control), which was found to be the second most dominant theme in terms of number of mentions. It adds evidence to the idea that QVC may, in fact, be enabling and/or encouraging compulsive shopping. Of the over 500 calls examined, a majority of the callers mentioned their over-spending and debt. A caller who has bought over 300 dolls from QVC sounds to the outside world as "out of control." The hosts are careful to never tell a caller that their behavior is odd or out of the ordinary. Instead, they make comments that reinforce the caller's sensible spending. If a caller says: "I bought one in every color" (referring to a clothing item, for example), the host will generally respond with "and now you have one to go with everything in your wardrobe, so you've really saved money."

Theme three (I Love the QVC Hosts as Friends/Family) also relates strongly to compulsive buying. Since it has been found that compulsive buyers score higher than others on loneliness scales, the parasocial relationships with the hosts may encourage additional buying and improve the caller's mood (cf., Faber and Christenson 1996). Theme four (I Am Treating Myself to Gifts) appears to also be related to compulsive buying. The verbatims indicate that many of these callers feel negative in some way (ill, unattractive, etc.). If buying an entire line of make-up makes a consumer feel better about themselves, then, as with theme three, negative feelings can lead to compulsive buying.

In conclusion, the overall take-away from the examination of testimonial calls by viewers is that the themes represented in the content analysis of 100 hours of telephone testimonials appear to be highly related to much of the research on compulsive buying. For example, general overspending, buying one in each color, buying an entire line of make-up, running credit cards to the limit, waiting until a husband is asleep to begin ordering, watching late into the night, taking off of work to watch QVC all seem to be represented in Theme Two: My Buying Is Out of Control. Likewise, the parasocial relationships formed with the hosts feeds into the acceptance of excessive buying they provide. In addition, the loneliness that many compulsive buyers feel may be assuaged by the support and personal touch the hosts give to the buyers. These are represented in Theme Three: I Love the QVC Hosts as Friends/Family. Theme Four: I Am Treating Myself to Gifts also appears to be related to compulsive buying. Taken from the adage, "When the going gets tough, the tough go shopping", this theme represents shoppers who appear to be in a negative mood state (see verbatims). Purchasing at such times appears to indicate an attempt to make oneself feel better through consumption.

SUGGESTIONS FOR ADDITIONAL RESEARCH

From all sources, it appears that television shopping networks are growing and will represent a larger percentage of retail sales in the future (Albright 2004; Beres 2003). That said, there are several avenues for future research in this area, especially where compulsive shopping is concerned. First, the greatest need is to verify the themes empirically. A random survey of television home shoppers may show a different picture than is presented in the testimonial telephone calls. It may be that compulsive shoppers are more likely to ask to be put on the air or are more willing to wait to speak with one of the hosts. Many callers expressed that they had talked to various hosts multiple times in the past. Thus, the on-air testimonials appear to consist of a self-selected group of QVC buyers. Since previous research indicates that approximately 10% of all female consumers are compulsive buyers, it is necessary to get empirical data to have a clearer picture of the actual percentage of television shopping network buyers (Faber and O'Guinn 1992).

Additional qualitative research on this topic would also be helpful. Depth interviews with testimonial callers would greatly help in understanding whether the statements made on air represent a true disorder or a milder form of enjoyment of shopping. It is possible that callers exaggerate their purchases in the excitement of the moment or to please the hosts. Depth interviews would more clearly reveal the motivations of the callers. Moreover, in terms of motivations, a better understanding of self or other gift-giving behavior is necessary. Do compulsive television buyers use products to treat or cheer themselves when they are in different mood-states? When do they buy for themselves versus for others? How do motivations for buying for others differ?

Finally, it is important to continue to study the reason why women seem to be most affected by compulsive buying in general and from television shopping networks, in particular. Are there products or venues in which men are compulsive buyers? For example, in buying coins or other collectibles, are men more prone than women to buy compulsively? Surveying male consumers who frequent the eBay site would be instructive in fleshing out this apparent over-representation of women in the compulsive buyer group.

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What Do Novice Consumers Remember?

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ABSTRACT

A recall advantage has been found for consumers with expert domain knowledge when searching, comprehending (i.e. Brucks 1985; Huffman and Houston 1993; Roehm and Sternthal 2001; Spence and Brucks 1997; Sujan 1985), and remembering (i.e. Cowley and Mitchell 2003; Maheswaran 1994) product information. The *to-be-learned* information is generally a written description of functional attributes (information about how a brand performs) for hypothetical brands or products (i.e. Cowley and Mitchell 2003; Huffman and Houston 1993; Johnson and Russo 1984; Srull 1983). In these studies, memory performance was calculated by accurate recall of the attributes: higher knowledge consumers (HKCs) consistently outperformed lower knowledge consumers (LKC). Since HKCs are generally categorized as experts by their knowledge of functional attributes, it is not surprising that they would more effectively learn and remember this information. Less attention has been paid to what novices learn when they are exposed to brand or product information.

CONSUMER EXPERTISE

Higher Knowledge Consumers

We hypothesize that if information concerning both descriptive attributes (how a brand looks) and functional attributes (how a brand works) is provided, HKCs are more likely to recall functional attribute information than descriptive attribute information, and more functional attribute information than LKCs. Consumers have been shown to transfer functional attribute knowledge from other related domains when learning about brands or models in new product categories (Gregan-Paxton and Roedder-John 1997), and specifically, when faced with new technologies (Moreau, Markman, and Lehmann 2001). We expect more functional knowledge in a related domain, such as a previous technology, will facilitate greater recall for functional attribute information, particularly for HKCs in the old technology that are LKCs in the *new* product category.

Lower Knowledge Consumers

Since LKCs tend to store physical attribute information (Mitchell and Dacin 1996), and since they are more likely to rely on surface structures when making judgments (Chi, Feltovich, and Glaser 1981), specifically when deciding how well a product will serve a need (Alba and Hutchinson 1987), it is possible that the physical attributes of a *new* product are used by LKCs to bring meaning to unfamiliar products. Therefore, when presented with information about a brand, LKCs are likely to learn descriptive attributes (i.e. the camera is silver and very thin), and to use descriptive attribute information when evaluating quality.

METHODOLOGY

Sixty-two undergraduate completed a knowledge measure for both digital and film cameras. They were then provided with information about four brands of digital cameras in four separate booklets. They were presented with both functional attributes (a list of attributes) and descriptive attributes (a photo of the camera) while they answered questions about their interest in the camera, the value of the camera, and when it might be useful. After a 15 minute

filler task, participants were asked to recall the information they saw earlier and their thoughts while reading about the cameras.

RESULTS

Attributes Recalled

The mean number of attributes recalled was not significantly different between the digital camera knowledge groups ($LKC_{\text{digital}}=11.33$, $HKC_{\text{digital}}=12.60$, $t=0.75$, $p=.45$). Since all idea units including attribute information were coded as either functional or descriptive, a ratio was created. The proportion of functional attribute information recalled by HKCs was .67, which is significantly larger than .5 ($t=2.87$, $p<.01$). The proportion of functional attribute information recalled by LKCs was .32 (3.63 functional attributes), which is significantly less than the proportion recalled by HKCs of .67 (8.44 functional attributes, $t=4.44$, $p<.0001$). The proportion of descriptive attribute information recalled by LKCs was .68, which is significantly larger than .5 ($t=3.44$, $p<.001$).

The digital camera knowledge groups were subdivided by film camera knowledge. An ANOVA with both digital knowledge and film knowledge as independent factors reveals a significant effect for both digital camera knowledge ($F(1, 56)=21.57$, $p<.0001$) and film camera knowledge ($F(1, 56)=5.79$, $p<.01$), and the interaction between the two ($F(1, 56)=6.69$, $p<.01$). Respondents with film camera knowledge, in the low digital knowledge group, were more likely to recall functional attribute information than their counterparts with low film camera knowledge.

Benefits Recalled

The mean number of benefits recalled was not significantly different between higher and lower knowledge digital camera consumers ($LKC_{\text{digital}}=3.68$, $HKC_{\text{digital}}=4.20$, $t=0.61$, $p=.55$).

The proportion of functional benefit information recalled is not different for LKCs compared to HKCs ($LKC_{\text{digital}}=.75$, $HKC_{\text{digital}}=.85$, $t=0.96$, $p=.35$). Although LKCs are not able to explicitly remember functional attributes, they are able to report functional benefits.

DISCUSSION

The results reveal that when LKCs recall the same amount of information as HKCs, but LKCs remember the descriptive attribute information. This type of attribute information may be used by LKCs when evaluating brands since they were most interested in the camera that had the fewest features, but the latest design. The findings reported here contribute to our knowledge of what novice consumers remember about product information and what information they use in their decisions. This is important because the past research emphasizes what expert consumers remember, or what novice consumers do not remember (with the exception of Huffman and Houston 1993).

Another notable finding is that knowledge of a previous technology improved memory for functional attributes of a new technology. $LKC_{\text{digital}}/HKC_{\text{film}}$ participants were better able to recall the functional attribute information for digital cameras than $LKC_{\text{digital}}/LKC_{\text{film}}$ participants. Past research has demonstrated that knowledge about previous technologies can affect expectations for a new product (Moreau, Markham, and Lehmann 2001),

and that HKCs use analogies in brand evaluations (Roehm and Sternthal 2001), but not that previous technology knowledge can affect what information is recalled.

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Materiality, Agency, and the Constitution of Consuming Subjects: Insights for Consumer Research

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ABSTRACT

What do consumer researchers mean when they claim that consumer selves are “transformed”, “created”, “expressed”, or “emancipated” in relation to objects and contexts in consumer culture? What are the relations between subjects and objects that are being proposed, called upon, or assumed in such consumer research? More specifically, what versions of materiality are consumer researchers using? Such questions highlight a concern with the ontological assumptions about subject identity, or self, and its relations to others—and moreover, to consumption objects. Using anthropologist Daniel Miller’s theory of materiality as an illustrative example, this article demonstrates the importance of explicitly conceptualizing the consumer self’s formation, both generally and in relation to influential articulations in primarily interpretive consumer research. Miller’s theory of materiality, based as it is in theoretical reflections upon material practices drawn from extensive anthropological research (Miller 1987; 1994; 1998), presents compelling material for the study of consumer processes and practices. Miller’s prolific work in material culture and consumption studies includes an explicit theory of materiality that consumer research should no longer ignore.

INTRODUCTION

Who or what the consumer *is* matters. How consumer researchers conceptualize consumers, the consumer self, and consumer identity crucially impacts upon appropriate research assumptions, contextual understandings, and potential insights and outcomes in consumer research. The most obvious danger of leaving unarticulated one’s theory of materiality—or assumptions about the way relations work between subjects and objects—lies in contradictions that may arise between notions of consumer subject agency and implicit, yet unexplored, materiality assumptions. Whereas this article does not suggest unilaterally adopting anthropologist Daniel Miller’s theory of materiality, consumer researchers might use as an illustrative example Miller’s way of recognizing and articulating a theory of materiality undergirding theories of consumption. Such a move inspires interrogation of potential incompatibilities that do creep into consumer research—between ascribed consumer agency and materiality assumptions—and, thus, contributes to theory building.

Such considerations may prompt a puzzled, perhaps ho hum response, signaling the apparent familiarity with, if not banality of, focus on consumer ontologies in a discipline that in recent decades has emphasized self-concept, symbolic consumption, and an increasing market segmentation (e.g., Elliott 1999; Solomon, Bamossy, and Askegaard 2002), and, moreover, consumer “relationships” with products and brands (Fournier 1998). Consumer choice, consumer experiences, consumer products—and material objects generally—are said to express and create (Schau and Muniz 2002), emancipate (Kozinets 2002), and transform (Otnes and Ruth 2003) the consumer self—albeit under varying conditions—and, moreover, communicate self-concept and status to others (Arnold and Price 2001; Belk 1988; Borgerson and Schroeder 2005; Richins 1994). In addition, brands themselves may provide “raw materials” for construction of self and identities (e.g., Holt 2002). What are the relations between subjects and objects that are being proposed, called upon, or assumed when consumers are seen as seeking out certain brands “to contribute directly to their identity projects” (e.g., Holt 2002), or brands are said to function “as resources for the

symbolic construction of the self” (Elliott and Wattanasuwan 1998)?

IDENTITY AND MATERIALITY IN CONSUMER RESEARCH

Work in consumer culture has become increasingly focused on the contribution of objects to identity construction—and to questions of agency, generally (Schroeder and Borgerson 2004; Miller 2002). Research with related concerns has tended to discuss *materialism*—that is, “the role of material objects in affecting terminal goals such as life satisfaction, happiness, and social progress” (Claxton and Murray 1994, p. 422)—rather than *materiality*, or the relation and co-creation of subjects and objects. Theories of materiality—articulating various understandings of subject and object formation and interrelation—form the foundations for assumptions about consumer processes, relationships, and identity. Nevertheless, insights around consumer subject identity, or self, construction—and, furthermore, agency—remain contested: How much agency should be attributed to objects and subjects in becoming who and what they are?

Often, work on the constitution of consuming subjects and objects of consumption proceeds as though reflective consciousness levels, versions of subject/object co-creation, and related aspects of materiality, enter unproblematically into theorizing. That is, effects of materiality-related assumptions often remain under theorized, or simply absent, leading to conceptual confusion, inaccurate description, and simplifications rather than complexity even in sophisticated attempts to understand relationships between humans and life contexts. Which versions of materiality offer interesting and provocative insights for consumer studies and consumer research? Moreover, how do notions of consumer subject agency function in relation to theories of materiality?

Work focused upon theories that underlie basic assumptions about the world or worlds that consumers inhabit, and in addition, that may be explicitly adopted in execution of observation, description, and explanation of consumers and their contexts (see Thompson 1997), may be more likely to explicate notions of subjects, objects, and their relations. For example, attempts to apply post-structural or existential-phenomenological understandings in consumer research specifically discuss the conceptual movement from a unified and autonomously existing subject, or self, to a self constructed or formed through lived practices in embodied lives with others; in addition, the self may be seen as intersubjective and fragmented (Firat and Venkatesh 1995; Thompson, Locander, and Pollio, 1989). Applying newly mobilized variables around notions of the emergent self and intersubjectivity in multiple contexts provides previously inaccessible insights into who and what the consumer might be, and furthermore, how such an entity engages with and is engaged by context and community. Nevertheless, Thompson, Locander, and Pollio (1989) turn their discussion of three metaphors that ‘describe assumptions’ of existential phenomenology to researcher methodologies and how such assumptions lend themselves to data gathering and interviewing strategies. They might instead have asked what such assumptions mean about the constitution of the consuming subject, and their response would have intersected nicely with Miller’s theory of materiality.

Elliott and Wattanasuwan (1998) invoke narrative identity theory, dialectical cultural meaning transfer and negotiations, and mediated experience, coming closer than most to articulating a

theory of materiality in their work on “brands as symbolic resources for construction of identity.” They write, “Thus we come to know ourselves by the narratives we construct to situate ourselves in time and space. This task can be greatly aided by symbolic resources” (p. 133). Advertising images and brands are turned to as powerful sources of symbolic meanings. Consumers actively “draw upon,” “interlace,” and “express” in their efforts to “construct and maintain identities” in the face of postmodern meaninglessness. Consumption itself “plays a central role in supplying meanings and values for the creation and maintenance of the consumer’s personal and social world” (132) through apparently narrative efforts. Though not explicitly explored, attributions of agency made here appear to be compatible with narrative identity theory and the role ascribed to symbolic resources.

Consumer research has emphasized the importance of understanding the relation between who we are and what we have. Russell Belk (1988) explored the “extended self”—as one conceptual element in complex layers of self—in an attempt to articulate the implied relation between consumers and their possessions. Belk argued that measurement could be made of “the degree to which various things are perceived to be a part of a person’s self” (Belk 1989, p. 130). That is, some objects appear to be more crucial—in terms of possession, “attachment,” and, of course, lack—to a person’s identity than other objects do; and Belk sees insight emerging from consumers’ possession-based responses to the question, “Who are you?” and, by implication, concerns around who one is not (129). In his understanding, “agency” presumes acting upon objects, and through agency “objects can become part of the extended self” (p. 130). Whereas this definition of consumer agency implies a control *over* things, Belk insists, moreover, that a kind of agency on the part of objects, a kind of “control *by* things also results in feelings of merged identity with objects” (p. 130).

Cohen (1989) criticized Belk’s notion of the extended self for its lack of meaning, lack of empirical identification, and lack of explanatory power. Extensive as these criticisms—to which Belk replied (1989)—may seem, ultimately neither of the researchers call into question the very notions of self they apply. We see in this debate attention to notions embedded in theories of materiality, yet the researchers merely imply that some process of materiality must be at work. A more extensive engagement with the assumptions found in Belk and Cohen would undoubtedly yield insights into their specific oversights, but such a task must be deferred for now.

In this almost magical realm of self-construction and identity transformation something quite fundamental is lacking—that is, any number of possible reflections and acknowledgements of how the consumer self, or the consuming subject, is in fact theoretically conceptualized. This is certainly not to claim that only one version of subject constitution should be finally settled upon. Many theoretical conceptions exist; moreover, these are often implicitly drawn upon in interpretative research, especially that which is informed by social sciences and humanities disciplines that apparently move beyond positivist assumptions (see e. g., Arnould and Price 2001; Brown, Hirschman, and Maclaran 2000; Firat and Venkatesh 1995; Holt 1998; Schroeder 2002; Scott 1994; Wilk 2002). Yet, it cannot be denied that this most basic concern—how material objects interact with and transform consuming subjects—rarely receives direct attention in consumer research. How is the self in consumer research conceptualized; and who, or what, is this subject conceptualized as?

MATERIALITY AND AGENCY

The above considerations raise our initial question once again: What, then, *do* consumer researchers mean when they claim that consumer selves are “transformed”, “created”, “expressed”, or

“emancipated” in relation to objects and contexts in consumer culture? By altering assumptions around the existence and formation of the self, new insights emerge. Notions of intersubjective self or subject, formed in relation to experiences of others and material objects, mobilize manifestations of consumer selves in relation to consumer objects, products, experiences, and brands. That is, the consumer self emerges in a context consisting in consumption practices and consumer culture.

Miller’s theory of consumption has attracted considerable attention, however few studies in consumer research have explicitly adopted his theory of materiality. Consumption, according to Miller, is a process through which human beings materialize or objectify values and meanings, and resolve conflicts and paradoxes (Miller 1987). Yet, Miller has argued that a theory of consumption needs a theory of materiality, that is, an understanding of the assumptions about subjects and objects, and the relations between them—including, for example, claims about the inability to distinguish their borders—that undergird various claims in consumer studies. Miller’s position calls for a reflexivity among researchers, a concrete sense of theoretical foundations that may support or undermine hypothesis and model building, particularly regarding consumer self-construction and identity constitution.

A theory of materiality helps map agency and effects in relations between consumers, objects/relations of consumption, and identity construction. Given the centrality of contradiction in consumption practice—between theoretical generality and specificity, individual and group identity—clear notions of materiality aid in navigating appropriately dialectical analysis. A theory of materiality parallels “a dialectical perspective that understands the link between emerging differentiation or specificity and new forms of totalisation and generality” (Miller 1995, p. 54). Such a focus requires study of “the manner by which both individuals and groups objectify themselves and their values though material culture and consumption acts” (p. 54). In articulating his approach to material culture’s role in culture’s continual process of change, Miller engages a “Hegelian notion of the dialectic.” Such an approach is warranted “in as much as values and social relations are not prior to the cultural form they take, and therefore not reflected by them, but are created in the act by which cultural forms come into being” (Miller 1995, p. 277). Here, then, we have a connection between a theory of materiality and the understanding of various forms of subject and object ‘agency’ and the relations between them.

MILLER’S MATERIALITY

If objects have, not precisely agency, but what could be described as a non-intentional capacity to facilitate alteration, how does Miller’s view of subject/object relation and co-creation intersect with understandings of consumer subject identity formation in interpretative research? Whereas far from all recent research accepts post-structural notions of (the lack of) the subject and related issues of agency, these have had significant influence. Postmodern perspectives acknowledge that “consumer objects and images are increasingly taking over from people as objectification of human values,” yet, Miller goes further: “people are using these objects to formulate ideals and argue through problems” (Miller 1994, p. 315-316). According to Miller, “mass consumption has shifted embodiment of values from their objectification in persons to objectification in objects” (p. 316). Moreover, material culture in a culture of mass consumption engenders pluralism, diversity in identity, and, importantly, expression and resolution of contradictions.

In *Material Culture and Mass Consumption* (1987), Miller has argued for a theory of materiality emerging from Hegel’s dialectic and the co-production of subjects and objects. Although the work of Hegel is not unknown in broader business studies (see e.g.,

Hancock and Tyler 2001; Reed 1997), such a position offers new challenges to thinking in consumer research. For example, organization theorists Hancock and Tyler recognize the theory's potential and utilize their "understanding of Hegel's ontology of the subject; that is, the phenomenological process through which subjectivity evolves" in the process of examining "managerial interventions into the process of subjectivization" (Hancock and Tyler 2001, p. 570). By focusing upon the creation of institutionalized embodied subjectivities within the organization environment, they are able to point out the absence of non-colonized bodies capable of intersubjective exchange and growth.

Miller's theory of materiality, through its reliance on material culture and an ethnographically based understanding of subject/object hybridity, avoids the necessity of essentialist transcendent ontologies, yet surpasses in depth the purely epistemological. Theorist Peter Pels argues that Miller attributes "at least a minimum capacity for transcendence to material objects, although, since they are artifacts, this transcendence is achieved by human intentionality and artifice, and matter remains an empty signifier, a tabula rasa on which humanity inscribes meaning differentially" (Pels 1998, p. 99). Though arguably inaccurate in his accusation of a Durkheim-related blindness in Miller's work, Pels accurately marks Miller as arguing for "recognition of materiality in social process, by systematically treating materiality as a quality of relationship rather than of things" (p. 99). Miller's Hegelian model reinforces the crucial and constitutive role "objects" have in human life; or, to put it another way, material culture participates in the larger process of development of any possible subject/subjectivity.

While giving up a purer philosophical version of the problem to capture a "representation of objectification that lays closer to the social self-perception that anthropologists deal with" (Miller 2002, p. 4), Miller stands by a "dialectical conception of the intrinsic hybridity of the world" (p. 9). Such a conception recognizes subjects and objects as "necessary but always secondary 'avatars' of the foundational being of the world which is the process of objectification" (p. 9). Thus, when Miller discusses the agency of an object, he turns, for example, to a haunted house. A haunted house, writes Miller, "actively constrains" inhabitants' agency to alter said house. Human transience in the face of the house's history is constructed as a "ghost." The ghost's status and function can be understood through anthropologist Alfred Gell's notion of aduction—the imagined social agency or intentionality imputed to objects and people. "So the house here has agency in Latour's sense that it actively constrains our agency, which we then construct as a ghost" (Miller 2002, p. 8-9). Accuracy of 'haunting' claims becomes mostly irrelevant, as the experience of agency constraint provokes the situation's interpretation. The important point here emerges from Miller's insistence on the overall material environment's role in creating us as subjects who, moreover, are often compelled to give an account of our experience (Borgerson and Rehn 2003).

In distinguishing his own work on materiality from anthropologist Marilyn Strathern's, Miller writes that whereas his main concern was for the materiality of artifacts—from which a rethinking of the subject followed—Strathern was interested in "people's conceptualization of each other" which includes the materiality of artifacts, but not as the primary concern (Miller 2002, p. 5). Strathern and Miller both transcend the simple dualism of persons and objects: acknowledging the subject allows us "to infer the existence of those objects whose effects are seen in the subject" (p. 4). Here, persons can constitute the 'objects' that have effects. One of Strathern's most interesting aspects, writes Miller, is her development of Mauss' insights into the 'thing-like' properties of persons (Miller 1995, referring to Mauss 1966, pp. 6-8).

From another influential perspective, Bruno Latour focuses on the material nature of social worlds, countering Durkheim's disregard for non-humans and the effects of their agency. On the question of materiality, Latour proposes a "theory of constraints and effects"—with objects as actors that possess agency as "effects" in the social world "that cannot be separated from social and material aspects" (see e.g. Latour 1999). In this way, Latour, like many others doing theory especially over the past three decades, attempts to overcome dualism. For example, Latour proposes that a person in possession of a gun is not subject with object, but a new hybrid, "a person/gun entity". The "actant" here is the hybrid consisting of a number of forces, together forming the cause of any possible effect that could be attributed to the person/gun combination. In his corrective stance, Latour, according to Miller, ignores the study of material culture, and particularly a "social perception of" approach" (Miller 2002, 6). Miller, on the other hand, uses objectification to create a theory of material culture, including the role of objects, often in the form of the subject-like nature of things. Miller (2002) seeks to reconsider the concept of "objectification" in light of Strathern, Gell and Latour's approaches to materiality and the related role of agency.

How can an understanding of the interdependence of subject and object be transformed into maps of consumer society? Miller's approach to the question of materiality requires "the vulgarity of ethnographically based work" (2002, p. 3) that refutes the dualistic semantics of persons and things, while at the same time recognizes the employability and usefulness of dualistic semantics. Miller writes, "For example, unlike Latour I think we should allow room for the social anthropology of materiality where that is primarily concerned with how people conceive of objects and agency" (p. 8). So, does the consumer subject, conceived of as agent, consciously and purposefully guide consumption activities, and narratives perhaps, to suit his or her preferred identity? How might consumption objects and meanings constrain consumer agency, for example, in constructing narratives of identity or the consumer self?

WHAT IS AGENCY? : PHILOSOPHICAL CONSIDERATIONS

Miller's theory of materiality calls the agency of subjects and objects into question, as agency appears to emerge in relation, not as a quality of either subjects or objects. The most stringent philosophical requirements for agent status, and agency, will be put aside here to engage with the concerns presented by consumer research and Miller's theory. However, a deeper understanding of philosophical agency will help register a broader theoretical frame for further recognizing what is at stake in models of materiality underlying assumptions in consumer research. Although these considerations may appear unnecessarily abstract, assumptions of both Miller, who acknowledges and is theoretically driven by this, and Belk—representing typical moves in consumer research—depend upon the outcomes.

Agency is often understood simply as the ability to act. An agent is someone, often understood as a subject, who can undertake action. These actions become expressive of a particular agent, ultimately insofar as the agent uses uncoerced decision-making powers to choose between alternatives based upon an understanding of circumstances and options available. The context of the circumstances and options; the variable nature of what is meant by 'understanding'; and, furthermore, the range of abilities to distinguish crucial and relevant pieces of information all figure into notions of agency and criteria for agent status, especially as this relates to 'ethical' or 'moral' agency. For example, Immanuel Kant required display of a particular form of "rationality" in the playing

out of human action and decision-making in order for an agent to be considered not amoral, but truly part of the universe of moral action.

On a more general level, the term agent designates sites of cause and effect. This article engages with such definitions used in Latour's actor-network theory and Miller's anthropological work on material culture and materiality. However, from a philosophical perspective such a use appears loose and inadequate. Consider for a moment the idea that an agent is simply a site of effects. That is, the agent initiates effects or causes things to happen in the world, often in interaction with other things and agents. A philosophical analysis might question the basic notion that we can designate a cause of an effect, hence, calling into question the effect-causing identified 'agent.' Miller, as well, has called into question actor-network theory's use of apparent subject-based agency as a metaphor where it serves as an interpretative model for so-called object agency (Miller 2002).

Philosopher Harry Frankfurt (1998) has characterized different approaches to questions of action and agency. Frankfurt's fundamental concern focuses on the possibility of distinguishing happenings and events in themselves, rather than requiring reference to the causal sequence that has produced an action. Frankfurt suggests that a theory of action must allow the agent to account for what is happening in the present. In contrast, a mainstream "causal approach" account refers to the causal chain that occurred prior to the happening: Here, Frankfurt writes, "the problem of action is to explicate the contrast between what an agent does and what merely happens to him, or between bodily movements that he makes and those that occur without his making them" (Frankfurt 1998, p. 69). Understanding an action, thus, requires access to specifications in time other than the present one, and furthermore, a sense of how these fit together into the puzzle of the present. This places the agent in the unenviable position of possessing an understanding—not of the current happening as an event in itself, but—of "how what is happening was caused to happen by certain earlier conditions" (p. 70). Though a happening may be recognized as an action, "it does not follow even that it has a cause or causes at all" (p. 69): Frankfurt argues that assumptions regarding causal antecedents are unsatisfactory.

Intentionality, often the root of any notion of agency, becomes for Frankfurt a matter of more or less effective agent intervention. A certain capability underlies human action—articulated as something more significant in human life and understanding than simple effects of intersubjectivity and other causes. Here we differentiate between what an agent does and what happens to him or her. That is, agency is set against, or works in conjunction with, "effects of forces which would otherwise interfere with the course of the behavior" (Frankfurt 1998, p. 74). Behavior is "purposive," writes Frankfurt, "when its course is subject to adjustments which compensate for" the effects of forces and "when the occurrence of these adjustments is not explainable by what explains the state of affairs that elicits them" (p. 74). Adjustments, as Frankfurt calls them, are an independent causal mechanism that are not guided by us, but rather, when we are performing the action the mechanism *is* "our guidance of our behavior" (p. 75). This is not something we *do*: "It is a characteristic of the operation at that time of the systems we are" (p. 74). Thus, agency becomes a kind of participatory intervention in an attempt to accomplish purposes that might otherwise be dissipated in other intervening forces' wake. Human agents, or subjects, are conceived of as having this intervening ability, or power, in interaction with other beings, objects, and forces that both have and do not have the same. Interactions become sites of agency, as well as identity constitution—especially in the sense of accomplishing certain purposes, undertaking certain activities, and relating to certain objects/others; or not.

Action and, by implication, the agent become problems. Discussions of this problem are ubiquitous within the realm of poststructural influence. Titles, such as, "Agency without Agents" and the related "Subjectivity without Subjects" push action and subject to their conceptual limits invoking notions of "decentering" and "fragmentation" to aid with new models and theory building, even in anti-theory guise. Other conversations around intersubjectivity, rationality, and various versions of subject/object co-creation that displace and replace concentrations of human agency and intention with materiality and object effects draw attention to the basic status of related questions.

CONSTITUTION OF CONSUMING SUBJECTS

Recently, the United States Park Service reevaluated a category of objects that had come into their possession. Collected from along the base of Maya Lin's Vietnam Veteran's Memorial in Washington, D. C., objects left by visitors—in memory of relationships severed by death in war—were transported to "lost and found." Viewed, or at least categorized, as things forgotten, as if by mistake, that might later be sought after and claimed by their owners, this myriad miscellany has now formed a centerpiece collection to reside in a museum dedicated to meaningful memorial objects that relate permanently in the minds of those left behind to those lost in the Vietnam war. In reflecting upon his own work, Miller writes, "I want to suggest that a theory of objectification continues to have the advantage of precisely problematising the agency we ascribe to people to the degree to which it ascribes agency to things. But contains an additional advantage because it is open to forms of objectification which do not depend upon the ascription of agency to either people or things, but rather in the Hegelian sense to institutions and ultimately to history" (p.9). In the above example, human subjects—both present and absent, living and dead—and objects together in a complex dance of interaction form and change each other over time. Miller's approach grounded in material culture with a concern for social perception has a breadth that motivates understandings, for example, in accounting for change in meaning of the objects left at the Vietnam Veteran's Memorial, where otherwise there might be unrecognized, but meaningful silences.

This article has argued that whereas work in consumer research has become increasingly focused on the contribution of objects to consumer identity construction, theories of materiality that form the foundations for assumptions about consumer processes, relationships, and identity remain under theorized, or simply absent from the discourse. Regarding the constitution of consuming subjects, if one uses a Hegelian model, as Miller does, objects are always already conceived of as active in subject formation. Such a vision of relation and interaction at the base of all human existence invokes certain notions of human agency. In Miller's view, material culture participates in the larger process of development of any possible subject/subjectivity; that is, he insists upon the overall material environment's role in creating us as subjects. Miller's theory of materiality provides a foundation for subject/object co-production claims: whether this vision can lend support to consumer research on conscious and reflective versions of consumer identity, or self, construction remains mostly unexplored. Members of a consumer culture, in which processes of consumption facilitate and constitute contexts basic to human life, engage in and are engaged by particular consumption activities, objects, and meanings that have the potential to create, transform, intensify, or call into question consumer subject identity; but without attending to related materiality issues, consumer research leaves fundamental questions unasked, venturing unreflective assumptions and inaccurate conclusions.

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ROUNDTABLE

New Approaches and Theoretical Synergies in Cross-Cultural Consumer Psychology

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A growing body of consumer research has pointed to fundamental culture-based differences in consumer cognition, motivation, and emotion. Research has examined culture at a variety of levels of analysis, operationalizing culture via national, ethnic, and individual differences. More recently, within-person differences have been a focus of study, as attention has turned to the situations and products that *activate* particular cultural selves or culturally linked goals, particularly among bi-cultural individuals. Generally speaking, research in cross-cultural consumer behavior has closely tracked theoretical developments in social psychological approaches to culture. Thus, there is strong concordance in the issues and findings addressed by these literatures.

This roundtable session provided an opportunity to talk about current issues with researchers differing in their areas of expertise and focus. Our panel included marketing scholars (Briley, Gürhan-Canli, A. Lee, K. Lee, Maheswaran, Shavitt, and C. Yoon) as well as basic social psychologists (C. Chiu, Y. Hong, and Wyer), many of whom are top contributors to the cross-cultural field. In terms of expertise, some approach culture through the lens of social cognition and apply similar paradigms to the study of culture (e.g., Wyer, A. Lee). Others approach cultural influences on consumers' judgments and choice through the lens of behavioral decision-making (Briley). Some focus on the situational forces that influence the dynamic cultural-self (e.g., Hong, Chiu), whereas others focus more on dispositional aspects and/or chronic and stable cultural differences (e.g., Maheswaran, Gürhan-Canli).

The substantive areas represented by the roundtable discussion therefore varied broadly, touching upon issues regarding persuasion, motivation, self-concept, choice, affect, globalization issues, etc. Among the questions discussed:

How can cultural knowledge be classified as declarative or procedural?

What are the implications of this classification?

Are the study of culture and the study of measurement separable?

What do global cultural changes (e.g., individualism among younger generations in cultures considered to be collectivistic) imply for how we do cross-cultural research?

How can cultural research create generative knowledge about human nature?

When examining cultural knowledge from a general framework of information processing, cultural knowledge may be classified as declarative or procedural. When cultural knowledge is viewed as declarative, this implicates the role of accessibility, diagnosticity, and accessibility experiences (or metacognition). When cultural knowledge is viewed as procedural, individuals' perceptions and spontaneous behaviors are focal subjects to consider. Tacit measures can capture such procedural knowledge and shed light on the role of culture in perception and behavior. It is suggested that when certain preconditions are met, procedural

cultural knowledge comes to the fore as spontaneous reactions evidenced in everyday behaviors (e.g., interpersonal skills such as eye contact), which individuals have acquired and practiced initially at the conscious level but subsequently become spontaneous reactions. In other words, consciousness of content may not be the criterion for deciding whether something is procedural or declarative.

So far, cultural research has predominantly focused on declarative (or semantic) knowledge such as individuals' beliefs or values (i.e., what culture *is*). A more careful assessment of the role of procedural knowledge is thus called for. Moreover, culture should also be viewed as a tool that an individual employs to achieve certain goals (i.e., what culture *is for*). Therefore, more attention should also be given to motivational factors in cultural research.

SPECIAL SESSION SUMMARY

How Do Consumers and Managers Process Numeric Information?

The Role of Numerical Cognition

Manoj Thomas, New York University

Vicki Morwitz, New York University

SESSION OVERVIEW

Consumers and managers frequently encounter numerical information. Managers often make decisions based on numerical information about historical trends of various decision variables. While making purchase decisions, consumers often encode and compare multi-digit prices and other product-related numeric information (e.g., attribute levels, quality ratings, etc.) Sometimes consumers evaluate a product-related number by comparing it to a comparison standard available to them from some context (e.g., at the point of purchase). On other occasions these comparisons are done *vis-à-vis* comparison standards recalled from memory. The complexity of numerical information and the fact that numerical information is used very frequently to make many important decisions makes numerical cognition a challenging and important domain for research. In this session we present research that draws from recent advances in cognitive psychology on numerical cognition. Specifically, we present three papers that examine how consumers and managers encode and process numerical information.

The first paper by Hutchinson, Alba and Eisenstein examines how managers process graphically presented numeric data. They find that the type of graphical format used to present numerical information affects the perceived relationship between numeric variables, and in turn, the decision heuristics used by the decision makers. Bar charts and cross sectional data encourage the use of informational heuristics (e.g., allocations similar to those that yielded the best results in data) and line charts and time-series data encourage the use of locational heuristics (e.g., compare year-to-year changes in allocation to year-to-year changes in outcomes). Further they find that these effects are large and are resistant to debiasing efforts.

The second paper by Thomas and Morwitz examines how consumers compare multi-digit decimal prices. For example, they examine whether consumers perceive the difference between \$3.99 and \$5.00 to be more similar to the difference between \$4 and \$5 or the difference between \$3 and \$5. Digital models of numerical comparison suggest that since numerical comparisons are made digit-by-digit, the difference between \$3.99 and \$5.00 should be perceived to be similar to that between \$3 and \$5. In contrast, holistic models of numerical comparison suggest that since numerical comparisons are based on the holistic magnitudes, the difference between \$3.99 and \$5.00 should be perceived to be similar to that between \$4 and \$5. Results from three experiments suggest that the range of the activated scale moderates the type of numerical processing used by consumers. Digital processing mode was found to dominate when the numbers were close to each other.

The third paper by Vanhuele et al draws on the triple encoding model of numerical cognition to examine factors that facilitate and inhibit consumers' memory for prices. Their research focuses on the role of encoding processes in price recall accuracy. More specifically, they propose that prices are encoded in memory not only as analog magnitudes but also as auditory codes. Based on this premise they hypothesize that auditory features of prices will affect the accuracy of price recall. Results of three price knowledge surveys in France, the U.S. and Hungary provide evidence in favor of their hypotheses.

The three papers thus focus on the processes that underlie numerical inferences. Despite the ubiquitous nature of numerical information, relatively little work has been done in this domain. This proposed session attempts to present some intriguing research questions and interesting empirical observations in this domain. The session will demonstrate the importance of integrating numerical cognition theories into research on consumer and managerial decision making, by demonstrating that they help explain the recalled accuracy and the perceived magnitude of numeric information, as well as the perceived relationship between numbers.

“Numerical Inferences: The Effects of Prior Expectations, Semantic Frames, and Graphical Formats on Budget Allocation Decisions”

J. Wesley Hutchinson, University of Pennsylvania

Joseph W. Alba, University of Florida

Eric Eisenstein, Cornell University

Budget allocation is a primary responsibility for most managers. Moreover, allocation decisions are frequently supported by numerical data about past expenditures and their effects on sales and profits. Using these data requires inferences about causality that often depend on the correlational patterns that managers perceive in them. In earlier research (Hutchinson and Alba 1997), we demonstrated that the heuristics commonly used to make inferences from tables of numbers create strong biases in budget allocations, despite being reasonable approximations of normative correlation statistics. In particular, our paradigm revealed that decision variables with identical statistical properties can receive widely different levels of allocation, and these biases are systematically related to the heuristics that are used. In the present research, we use the same paradigm to show that similar heuristics are used for data presented in graphical formats, and they are similarly sensitive to the semantic frame of the data. In particular, we show that bar charts and cross-sectional data encourage the use of informational heuristics (e.g., allocations similar to those of that yielded the best results in the data) and that line charts and time-series data encourage the use of locational heuristics (e.g., compare year-to-year changes in allocations to year-to-year changes in outcomes). We also show that these effects are large compared to the known effects of prior expectations, that they are very resistant to classic debiasing methods, and that they occur for both novice and expert managers.

More specifically, the experimental findings reported here provide strong support for several conclusions about the biases that occur when people use numerical information as the basis of budget allocation decisions. First, graphical presentations that follow current recommendations for the appropriate display of data do not eliminate or reduce the types of heuristic-dependent biases that Hutchinson and Alba (1997) found for data presented in tables. In fact, the use of line charts, in particular, appears to increase the use of difference-based heuristics and the extremeness of the biases they create. Second, as in the Hutchinson and Alba studies, the distributions of types of heuristic used reveal considerable heterogeneity. In fact, the distributions are clearly bimodal. This suggests that best-exemplars and adjacent-differences heuristics are widely

used in all conditions, but our experimental effects (especially Semantic Frame) shift the likelihoods with which these heuristics are adopted and line charts increase the magnitude of the bias for people using an adjacent differences heuristic. Third, we also find that these effects are large compared to the known effects of prior expectations.

Because of the large magnitude of these effects, we attempted to debias subjects using several different techniques. Successful debiasing approaches must take into account the source of the bias. Arkes (1991) reviewed a large number of decision biases and classified them into three types based on source of bias and the level of resistance to debiasing. The first type of bias is strategy-based errors. These errors arise from adaptive decision making when people choose a less accurate strategy because it is cost effective. The resulting biases can be removed by changing the incentives to make accuracy more valuable. The second type of bias is association-based errors. These errors result from the associative nature of memory, which sometimes makes irrelevant information salient and important information hard to recall. Confirmation biases, hindsight biases, and overconfidence are examples of association-based errors. These biases are not affected by incentives ("subjects will merely perform suboptimal behaviors with more enthusiasm" Arkes 1991). However, these biases can be reduced by specific cues that make important information easier to retrieve. For example, bias is often reduced simply by instructing subject to "consider the opposite" of their current belief. The third type of bias is perceptual error. This type of error is highly resistant to debiasing interventions and people often still find the "wrong" answer compelling after the "right" answer has been explained to them. Arkes also notes that professional training can also be an effective, though time-intensive, debiasing intervention.

We attempt to debias participants using incentives to combat strategy-based errors, consider the opposite to reduce association-based errors, and a training paradigm to combat perceptual errors. None of these techniques effectively debiased participants, which lends support to the idea that, in graphical formats, the root cause of the bias is perceptual, rather than associative or strategy-based.

Although charts and tables have always been a part of business analyses and presentations, the increased penetration of personal computers, spreadsheets, and user-friendly statistical software runs the risk of making these tools, once reserved for sophisticated analysts, into "decision traps" for the unwary manager. Moreover, the advice of various popular books about how to present numerical information seems unlikely to reduce these risks. In fact, advice to use line charts for time-series data may lead to increased biases due to greater use of locational, difference-based heuristics. Implicit in these results is call for decision support systems that can avoid these traps (see Eisenstein and Lodish 2001) and for research to uncover the biases lurking in the wide range of applications that managers use on a daily basis. Regarding the latter goal, we suspect, the findings reported here are just the tip of the iceberg.

"Holistic Versus Digital Models of Multi-Digit Numerical Comparison"

Manoj Thomas, New York University

Vicki Morwitz, New York University

The classic distance effect phenomenon demonstrated by Moyer and Landeaur (1967) has often been cited as evidence for the proposition that multi-digit numerical comparison process is holistic rather than digital (Hinrichs, Yurko and Hu 1981, Dehaene 1997, Dehaene, Dupouz and Mehler 1990). The holistic model of numerical comparison postulates that when people compare two multi-digit numbers such as 3.53 and 6.65, they first encode these multi-

digit numbers as analog representations on an imaginary mental number line. This means that the comparison process does not entail the digits per se, but is based only on the holistic magnitudes as encoded on the mental number line. The digital model (Poltrock and Schwartz 1984), on the contrary, suggests that the multi-digit magnitude comparison process entails a digit-by-digit comparison. For example, when people compare 3.53 and 6.65, just by looking at the left-most digit they can judge that the latter number is higher than the former. Hinrich's et al employed the Moyer and Landeaur (1967) experimental paradigm in the context of two-digit number comparison task. The experimental task was simple. Participants had to look at a two-digit number flashed on a screen and respond whether the presented number is higher than or lower than 55. Hinrichs et al (1981) examined whether the right digits of two-digit numbers had an affect on the response times. They observed that when participants were asked to judge whether the randomly presented two-digit numbers were higher than or lower than the comparison standard 55, not only the ten's place digit but also the unit's place digit had a significant effect on response times. The digital model postulates that while comparing two-digit numbers, such as 76 and 55, the perceiver does not have to consider the right digits to judge that the former is larger. Therefore, the digital model suggests that two-digit numbers with the same left digit should have the same response times. Hinrich et al's observation that the unit's place digits affect response times, even when relative magnitude judgments can be made just by considering the ten's place digits, suggests that participants had encoded and compared multi-digit numbers holistically rather than digitally. These findings were subsequently replicated using response time data collected from French participants (Dehaene et al 1990).

Although the data from these studies by and large supported the holistic model, there were some systematic discontinuities in the reaction time curve, contrary to the predictions of the analog model. Two prominent discontinuities appeared at the boundaries of the decade of the standard. For example, when the comparison standard was 55, reactions time smoothly increased with each unit until 49; but the reaction time to judge the magnitude of 50 was significantly higher than that for 49. Similarly the reaction time to judge the magnitude of 60 was significantly lower than that for 59. Proposing a two-stage model, Hinrichs et al (1981) suggested that when the left digits are different, then participants compared magnitudes holistically; but when left digits are the same (and thus non-diagnostic in relative magnitude judgments), perceivers compare only the right digits. The discontinuities observed could be because when the left digits are same, then perceivers have to activate a more finely calibrated scale to encode the magnitudes represented by the right digits. In three experiments we examine the effect of these discontinuities on magnitude perceptions of Prices and GPAs.

In study 1, we use an experimental paradigm similar to that used by Hinrich's et al (1981) with the exception that instead of using two-digit numbers we used three digit decimal numbers of the form N.NN. Given the finding that for multi-digit numbers with large digits, people tend to compare numbers digitally (Poltrock and Schwartz 1984), it is worth examining whether these discontinuities manifest with three-digit decimal numbers. Participants were randomly shown numbers ranging between 1.00 and 9.00 and asked to judge quickly whether the displayed number was higher than or lower than 5.50. Consistent with previous studies, we observed that response time for 4.99 was significantly lower than that for 5.00, presumably because the difference between 4.99 and 5.50 was perceived to be larger than that between 5.00 and 5.50. Similarly the response time for 5.99 was significantly higher than

that for 6.00, presumably because the difference between 5.99 and 5.50 was perceived to be smaller than that between 6.00 and 5.50. But the response time for 2.99 was *not* significantly different from that for 3.00; similarly the response time for 7.99 was *not* significantly different from that for 8.00. These results suggest that for numbers far away from the decade, fractional numbers are rounded off to the closest round digit number; but for numbers close to the decade boundary, such rounding down does not occur. In Study 2, we examined perceived *magnitudes* of prices. Similar pattern was observed. Participants rounded numbers to the nearest integer only when the stimulus prices were far away from the reference price. When the stimulus price and reference price were close, then they responded as if they are comparing the prices digit-by-digit. Finally, in study 3, we examined the same effect in the context of students' perceptions of grade point averages. We again found that participants were prone to rounding numbers to the nearest analog quantity only when the numbers were far away from the comparison standard. Together these results support our proposed two-stage model. When the numerical stimuli were close to the comparison standard, then participants had to activate the finely calibrated scale. In such cases round-off effects do not manifest; \$3.99 will be perceived to be significantly lower than \$4.00. However, when a large range scale is activated numbers such as \$3.99 tend to get rounded off to the nearest round digit number; in such cases \$3.99 will be perceived to be the same as \$4.00.

“How Do We Memorize Prices? A Numerical Cognition Perspective”

Marc Vanhuele, HEC School of Management

Gilles Laurent, HEC School of Management

Xavier Dreze, University of Pennsylvania

Zsolt Kenesei, Budapest University of Economic Sciences

Although the results of price memory surveys, like that of Dickson and Sawyer (1990), have received a great deal of attention and interest in our discipline and provoked a lot of discussion (see Kalyanaram and Winer 1995; Monroe and Lee 1999), remarkably little research has been done on the cognitive processes involved in the perception, storage, updating and retrieval of price information. In the field of numerical cognition, a subdomain of cognitive psychology, a consensus has started to emerge on the way the human cognitive system treats number information (Ashcraft 1992; Dehaene 1992 and 1997). The implications of these advances in numerical cognition for research on price knowledge have not yet been examined.

Numerical cognition has accumulated considerable evidence of the existence of a dedicated cognitive subsystem for dealing with numerical information. It is very likely that price information passes through this subsystem and examining this proposition is the main objective of our research. If prices are treated like any other number, memory performance for prices should reflect the architecture and processing characteristics of the cognitive system dedicated to number processing. Apart from its theoretical interest, examining this proposition also has practical implications because it implies that specific prices will be more or less likely to be recallable because of the way they are treated by the numerical cognitive subsystem. Recall errors and rounding effects would therefore not be random but, at least in part, systematic. Applying the results of past research in numerical cognition to prices may seem like a logical extension, but it should be noted that price stimuli are very different from the stimuli examined in cognitive psychology. Most research in numerical cognition works with small numbers of one or two digits. In addition, the numbers in most studies have no contextual meaning. Finally, to our knowledge

there is no research on numbers with a fractional part (the cents part in prices).

The Triple-Code Model. Central to the area of numerical cognition is the question of how numbers and arithmetic information are represented in the cognitive system and what roles the formats of representation play in numerical processing (Ashcraft, 1992; McCloskey and Macaruso, 1995). As a synthesis of the essential findings of this research, Dehaene (1992) develops a triple-code model in which he proposes that numbers can be mentally represented and manipulated in three different forms, depending on the task at hand. The auditory verbal code is generated by a conversion of the acoustic waveform to a phonological representation in which each number is represented by a sequence of phonemes (e.g., /thirty//five/). The visual Arabic code represents numbers on a spatial visual medium based on their written form in Arabic numerals (e.g., 35). The analog magnitude code represents numbers as approximate quantities on a dimension termed the number line (about 35, or somewhere between 30 and 40). An analysis of each of the three codes leads to a set of predictions on the types of errors consumers will make in memorizing prices. At this point our research focuses on the role of the auditory verbal and analogue magnitude code.

Auditory Verbal code. As already shown in the early work of Baddeley and Hitch (1974), the retention in short-term memory of short sequences of digits is often speech-based and depends on a subsystem of short term memory which they called the articulatory loop. By putting a number in the articulatory loop and recycling it, a number can be retained while the other components of working memory remain available for other concurrent tasks. The drawback of using the articulatory loop is that it has a span of only about 2 seconds. An intriguing implication of this memory span limitation of the articulatory loop is that prices that take longer to pronounce are less likely to be kept in the articulatory loop and therefore less likely to be stored in long-term memory. In addition, languages that use longer verbal strings to denote numbers handicap their users in the manipulation of numbers, and therefore prices. We formulate the following hypotheses:

- H1. Prices that take longer to pronounce have less chance to be accurately recalled and are more likely to be rounded.
- H2. Prices with more syllables have less chance to be accurately recalled and are more likely to be rounded.
- H3. Consumers who speak slower have a smaller chance to accurately recall prices that are long to pronounce and are more likely to round those prices.

Analog Magnitude code. Numbers in the analog magnitude code lose precision and are converted to approximate quantities. In addition, these conversions become less precise, the higher the number gets. In the context of price knowledge, this implies that smaller prices are coded with much more precision than larger prices. Absolute recall errors will therefore increase as prices get larger. As a result, we should also observe more rounding for higher prices.

- H4. The higher a price, the larger the absolute deviation between the recalled and actual price and the larger the probability of rounding.

Empirical Studies. Data collected from three price knowledge surveys in France, the U.S. and Hungary, and one experiment in France, provide preliminary evidence in to support our hypotheses. Data from the first experiment conducted in France confirm H1 and

H2 and reject H4. In this experiment we manipulate the verbal length of prices and their level and examine how these manipulations affect recall accuracy based on short-term memory. The same experiment will be run in the USA and in Hungary. Our hypotheses predict that the language of the consumer will also affect the probability of unaided recall and the accuracy of recalled prices. We plan to make a demonstration of this effect by making a comparison between three languages: French, English and Hungarian.

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SPECIAL SESSION SUMMARY
Implications of Experiential Processing
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SESSION OVERVIEW

A distinction between experiential and rational modes of information processing, with the former relying on spontaneous and relatively thoughtless associations, while the latter is based on more deliberate analysis has appeared in social and cognitive psychology (e.g., Epstein, *JPSP* 1996; Windschitl & Wells, *JPSP* 1998). Besides experiential versus rational, researchers have used terms such as rule-based versus associative (Sloman, *Psych. Bull.* 1996), and reflective versus impulsive (Strack and Deutsch, *PSPB* in press) to refer to similar information processing models. This session focuses on experiential processing, as (1) it remains the least researched route and (2) its study has clear implications for marketing. We present five studies that we expect will foster a discussion of potential future research on experiential processing.

The papers proposed investigate the implications of consumers processing experientially, as opposed to rationally. At a theoretical level, a key issue for consumer research is to understand how engaging in experiential processing differs from engaging in rational processing. All three papers stress the spontaneous and sometimes uncontrollable nature of experiential processing, and show its distinct impact on memory (paper 1), learning (paper 1), attitude formation and persuasion (paper 2), and product differentiation (paper 3). We expect that this session will attract researchers interested in the latter research topics, researchers focussing on automatic processes, and practitioners in advertising.

In addition, we stress that experiential processing does not only occur when consumers have a direct experience of a product or service. An important aspect of this session is that each of the papers focuses on a different level of experience, and as the session unfolds, it would become clear that the investigation of experiential processing has implications on all three levels. The first paper investigates the impact of virtual product experience (defined as on-line interactivity with the target object) on memory and learning (Schlosser). Object-interactivity is contrasted with the passive watching of a video, and it is shown that virtual contact with a product is enough to create illusory memories. The second paper (Sellier, Brendl and Chattopadhyay) presents evidence for what have been termed experiential contrast effects (Mussweiler and Strack *ERSP* 1999). This distinct type of contrast effect is generated automatically via a comparison process, and is showed to occur even when there is no contact with the target attitude object (i.e., experiences are elicited by written descriptions of the target object). This paper thus suggests that the study of experiential processing is important even when consumers have never directly experienced, or even seen an advertised product. Last, the third paper shows that experiential product attributes (e.g., color) can be processed either deliberately or spontaneously, and when consumers are most likely to engage in each route. This has implications for product differentiation (Brakus, Schmitt and Zhang). In this work, the level of experience with the product attributes is direct. In sum, the three levels investigated are when the contact with the target object is virtual (paper 1) or indirect (paper 2), and when the contact with product attributes is direct (paper 3). Paper 1 (Schlosser) and 3 (Brakus et al.) are still being developed; paper 2 (Sellier et al., two studies) is under review.

EXTENDED ABSTRACTS

“Learning Through Virtual Product Experience: The Role of Direct Manipulation and Imagery on False Memories”

Ann E. Schlosser, University of Washington

Interactive media environments provide a new means for consumers to experience products through *object-interactivity*. Object-interactivity involves direct manipulation of objects in a virtual world (Schlosser 2003). Direct manipulation occurs when there is a continuous change in images as a result of user behaviors that resemble the corresponding physical behavior. For instance, clicking on the zoom button on a graphic of a camera and then seeing the graphic change to zoom in on the focal object would be an example of object-interactivity. Typing the syntax command “zoom in” or clicking on a hyperlinked text to zoom in on the focal object would not be an example of object-interactivity. Compared to static graphics and text (i.e., *a passive site*), object-interactivity results in more vivid mental images (Schlosser 2003), and like direct experience, information acquired through object-interactivity will likely be stored in and retrieved from memory as vivid mental images.

It is proposed that the very ease of generating vivid mental images may cause confusion regarding whether a memory was externally triggered (a perceived experience) or internally generated (imagined), thereby increasing the emergence of false memories. Indeed, according to the source-monitoring model (Johnson et al 1993), individuals determine whether a memory was internally generated versus externally triggered by considering the sensory quality of the retrieved mental image (e.g., how vivid is it?) and the cognitive operations involved (e.g., how difficult was it to generate?). When the mental image is clear and distinct and took little cognitive effort to create, individuals attribute it to being perceived rather than imagined. A false memory occurs when individuals can easily create a vivid mental image, and they misattribute the mental image source to an external source.

It follows that more false memories should be observed among individuals who are capable of evoking vivid mental images on their own than those less capable of this. Likewise, encouraging individuals to use their imagination should increase the occurrence of false memories. Indeed, instructions to imagine appear to cause individuals to use mental images (Heaps and Nash 2001) and to draw upon experiences they previously had or observed (Wyer et al 2002). Thus, such instructions may cause individuals to (re)construct a representation for an event (Heaps and Nash 2001). Consequently, false memories should emerge more among those who did than did not use their imagination during encoding.

To examine the role that direct manipulation plays on false memories, object-interactivity is compared with instruction interactivity. With the latter, the user controls the pace of the experience using video-recorder functions to play, pause, stop, fast-forward and rewind (Bétrancourt and Tversky 2000). Thus, unlike the object-interactive site, at which individuals participate in creating the experience, the instruction-interactive site allows individuals to be passive observers of the same experience.

Under low imagery conditions (i.e., when individuals are not vivid imagers or are not using their imagination), object-interactivity

should facilitate the creation of vivid memories more than the instruction-interactive site should. However, such rich experiences can cause individuals to “fill in” missing details during retrieval (Bartlett 1932). If the object-interactive site leads to such rich experiences, then those who visited the object-interactive site are more likely to envision attributes that were absent from the product than will individuals who visited the instruction-interactive site—thus, more false memories will be observed.

Under high imagery conditions (i.e., when individuals are vivid imagers or are using their imagination during encoding), object-interactivity may *reduce* false memories. Some propose that co-created imagery scenarios make imagination more effortful (Arbuthnott et al., 2001). By making imagination more effortful, individuals should remember which mental images they generated versus were externally generated. When imagination is effortless, however, individuals should find it difficult to separate imagined from externally generated memories, thereby leading to a greater number of false memories. Because object-interactivity requires individuals to co-create the experience by directly manipulating the virtual object, it should be more effortful to generate their own images while encoding, thereby resulting in less source confusion than watching a video of the same experience. If so, fewer false memories should emerge among those using their imagination while visiting the object-interactive than instruction-interactive site.

To test this, a 2 (site: object-interactivity vs. instruction-interactive) x 2 (instructions: imagination vs. general) x 2 (imager: vivid vs. nonvivid) factorial experiment was conducted. The focal products were digital cameras. The instruction-interactive site was a five-minute film of a user’s visit through all aspects of the object-interactive site. After visiting the site, participants were given 10 digital camera attributes and asked to identify which features were present versus absent from the focal camera. Three weeks prior to the main experiment, participants completed the mental imagery scale (Sheehan 1967), which assesses individuals’ ability to evoke vivid mental images.

The results suggest that mental imagery plays an important role in the creation of false memories. More false memories were observed among vivid than nonvivid imagers and among those given imagination than general instructions. These effects were especially pronounced when users visited the instruction-interactive site. In fact, for vivid imagers and those using their imagination during encoding, the object-interactive site led to *fewer* false memories than the instruction-interactive site. It appears that compared to actively receiving information through object-interactivity, encoding this same information passively makes it easier for individuals to generate their own images, thereby leading to more source confusion and more false memories. This supports speculation that user involvement can reduce the occurrence of false memories (Arbuthnott et al., 2001).

“Explaining the Elusive Matching Effect in Attitude Change: Experiential Contrast”

Anne-Laure Sellier, New York University

C. Miguel Brendl, INSEAD

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A matching effect occurs when a pre-existing attitude (e.g., emotion-based) is changed more by a matched persuasive appeal (e.g., emotional) than by a mismatched persuasive appeal (e.g., cognitive). The persuasion literature typically assumes dual matching effects, one when the attitudinal basis is emotional and another one when it is cognitive (but see Drolet and Aaker 2002).

This research revisits the question of whether such dual matching effects exist. We reviewed the literature supportive of

these effects and conducted two experiments that allow us to draw two conclusions. First, there is empirical evidence for emotional matching effects, but not for cognitive matching effects. It is more effective to challenge an emotion-based attitude with an emotional appeal than with a cognitive appeal. However, it is equally effective to challenge a cognition-based attitude with either appeal. Second, emotional matching effects are not caused by the averaging process implicitly assumed in previous research, but instead by a comparison process producing experiential contrast. Next, we summarize the evidence for these conclusions.

In study 1, participants initially formed a negative initial attitude toward a portable CD player that had either an emotional or a cognitive basis. Participants either listened to the CD player playing mildly negative music or they read a mildly negative description of the CD player. Subsequently, the negative initial attitude was attacked by a positive appeal, either an emotional one or a cognitive one: participants either listened to positive music from the CD player or read a positive description of it. Study 1 strongly suggests that an appeal matching the basis of an attitude is more effective than one mismatching it only when the basis is emotional, as - in contrast to previous research - the emotional and cognitive appeals were pretested to be equal in strength. Thus, the emotional appeal was more persuasive than the cognitive appeal in changing an emotion-based attitude, while both appeals were equally persuasive in changing a cognition-based attitude. These results suggest that our minds are subject only to the emotional matching effect, whereas prior theorizing assumed that they are subject to dual matching effects (one for each attitude basis).

Research supportive of dual matching effects assumed a process whereby directly attacking the basis of an attitude would be more effective than attacking another component of an attitude. This presupposes an information integration hypothesis. Our conclusion that matching effects occur only for emotion-based attitudes undermines this hypothesis, because the principle of an averaging process should hold no matter what the attitude basis is.

Study 2 proposes and tests an alternative process explanation for why matching effects have been observed only for emotion-based attitudes, which we refer to as the *experiential contrast hypothesis*. When processing two consecutive emotional experiences, the mind engages a comparison process rather than an averaging process. Pleasant music seems even more pleasant when followed by unpleasant music. When producing the second experience the mind compares the percept to a previous one rather than averaging the two. A positive emotional appeal should thus be experienced as more positive and hence be more persuasive when it follows a negative emotional experience than when it does not. This hypothesis predicts a contrast effect of initial attitude and subsequent appeal if both are experiential. The averaging process hypothesis predicts the opposite: an assimilation effect. We tested the two hypotheses against each other by adding one factor to the design of study 1, extremity of the initial attitude. We instantiated an initial attitude that was either mildly positive or very positive. Each level of extremity was instantiated either emotionally or cognitively. A negative appeal followed, that was either emotional or cognitive. The design was a 2x2x2 between-subjects factorial of attitude basis (emotional vs. cognitive) x basis extremity (moderate vs. extreme) x persuasive appeal (emotional vs. cognitive).

We found that the same negative emotional appeal changes an emotional attitude more, the more positive the latter is. Such a contrast effect is inconsistent with the information integration hypothesis, because this hypothesis predicts, at best, that the positivity of the prior attitude should not affect the persuasiveness of the appeal. Yet, this contrast effect supports the experiential contrast hypothesis, according to which an emotional appeal is

perceived as hedonically more extreme, the more extreme an oppositely valenced prior experience was. Also consistent with the experiential contrast hypothesis, we observed a contrast effect of persuasive appeal and attitude basis for emotion-based attitudes only. Presumably, the reason is that experiential contrast occurs only when basis and appeal have an experiential component, which is not the case for arguments.

The bulk of modern persuasion research has focused on deliberate reasoning processes and on memory processes. Our studies suggest that investigating perceptual processes can add unique insights to the study of persuasion. The dominant way of thinking about persuasion assumes that the effectiveness of a persuasive appeal is independent of the extremity of the initial attitude, or is attenuated, the more extreme an initial attitude. Our results show the opposite pattern. The effectiveness of an appeal can increase more, the more extremely opposed the initial attitude is to the appeal. It follows that a one-time slip in service quality is perceived as worse for a high quality service provider than for one of mediocre quality. Our contribution is to demonstrate that one source of contrast is an experiential process that is fully automatic, a new idea in persuasion. Motivation and ability to process an appeal should have no effect on the perceived extremity of an appeal. Finally, our findings call for rethinking advertising planning models that assume the existence of dual matching effects. These should instead acknowledge that experiential persuasion is particularly effective when trying to change attitudes based on prior experiences.

“Declarative and Experiential Information in Preference Judgments: The Role of Processing Fluency”

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Bernd H. Schmitt, Columbia University

Shi Zhang, UCLA

We investigate the importance of experiential product attributes in consumer judgments. Experiential attributes are nonverbal stimuli that include sensory cues (e.g., colors and shapes) as well as affective cues (e.g. mascots that appear on products [Keller 1987]). When consumers evaluate products differentiated on functional attributes, they engage in a deliberate reasoning process (Shafir, Simonson, and Tversky 1993; Simonson 1989). In contrast, experiential features can be processed deliberately or spontaneously. In two studies, we suggest that two factors determine whether experiential attributes are processed one way or the other: the diagnosticity of the functional attributes in the product description, and the choice context that may prime experiential attributes (Mandel and Johnson 2002).

In study 1, each subject was in one of four two-option choice situations, and was asked to indicate their likelihood of choosing each option. Each subject executed the same choice task three times. Before each choice task, each subject was exposed to a different banner ad: one containing a sensory cue, one an affective cue, and one a functional cue. The banner said “Welcome to the dot in.com.” The letter ‘o’ in the word ‘dot’ was an orange circle (the sensory cue), a heart symbol (the affective cue), or a plain letter ‘o’ (the functional cue). The choice options were three floppy disks: a “functional” floppy (i.e., a standard black diskette), a “sensory” (i.e., green color), and an “affective” floppy (black with a smiley on it). All floppies were described with five functional attributes. Each subject was in one of the following choice situations: choice between (1) two functional floppies such that one was clearly functionally dominant, (2) a functional floppy and a functionally inferior sensory floppy, (3) a functional floppy and a functionally inferior affective floppy, and (4) a sensory and an affective floppy

that were functionally equally good. Functional attributes were diagnostic in all situations except situation 4. Thus, study 1 was a 4 (choice situation: functional vs. functional, functional vs. sensory, functional vs. affective, affective vs. sensory) x 3 (context banner: sensory, affective, functional) mixed design. The dependent measure was the likelihood of choosing A versus B.

Our results show that when the choice set consists of two functional options, consumers are likely to choose the functionally dominant alternative irrespective of the context. In situations where both functional and experiential attributes are present, the presence of the experiential attribute can make up for the functional inferiority of the experiential alternative, when subjects are primed with an experiential context, sensory or affective. Subjects are then equally likely to choose between the functionally inferior experiential and the “functional” alternative. In contrast, when primed with a functional context cue, subjects are more likely to pick the “functional” option over the functionally inferior experiential option. Finally, when both functional and experiential attributes are present but the functional attributes are not diagnostic, the floppy most likely to be chosen is the one matching the context cue presented: a “sensory” option is most likely to be selected when subjects are primed with a sensory context cue, and an “affective” option is most likely to be chosen when subjects are primed with an affective cue. Both options are equally likely to be chosen when subjects are primed with a functional cue. In sum, study 1 suggests that different processes operate in different choice situations. Deliberate processing of experiential attributes seems to occur when consumers decide whether experiential attributes offer value in addition to the value provided by functional attributes. Spontaneous processing of experiential attributes seems to occur when the functional information cannot provide value for decision-making. Then, consumers spontaneously engage in a visual categorization process to match the experiential contextual cue with an experiential attribute of the same type (e.g., they match the heart symbol present in the banner with the “smiley” present on the diskette).

In study 2, we show that experiential attributes can be processed faster than functional attributes. Study 2 is a 3 (ad: functional, affective, sensory) x 2 (tempo at which the ad is shown: slow, fast) between-subjects design. The dependent variable is product evaluation. We show that consumers will evaluate the product differentiated with functional attributes less positively under time pressure than when they have more time to process these attributes, while the evaluation of experiential attributes is the same regardless of time pressure.

Together, these studies show that consumers are flexible when they process experiential attributes. We find that both choice context and product attributes play a role in the processing of experiential attributes. The choice context may be used either deliberately or spontaneously. In contrast, for functional attributes, the choice context is irrelevant in judgment.

SPECIAL SESSION SUMMARY
Choice Without Preference
Itamar Simonson, Stanford University

SESSION OVERVIEW

A fundamental assumption in the literature on consumer decision making and decision theory more broadly is that choices reflect preferences—consumers choose an option because they prefer it over other options. Building on recent research, the papers in this special session introduce the idea that there are two types of choices: those that are based on preference and those that reflect lack of preference, with preferences of the latter kind being less enduring than those of the former type. Specifically, consumers may often choose an option, not because they have a strong or clear preference for that option, but because their “resources” are depleted, they believe that their prior decisions were due to external factors, or due to their inability to form a preference.

The first paper, by On Amir, Roy Baumeister, and Ravi Dhar, builds on the work of Baumeister and colleagues (e.g., Baumeister et al. 1998) regarding the impact of depletion of “resources” that are needed in order to regulate people’s behavior and exert self-control. The Amir, Baumeister, and Dhar paper extends this work to the domain of choice, suggesting that choices that consumers make may often reflect the level of available resources, rather than their preference for the different options. Specifically, manipulating resource levels (e.g., requiring hungry subjects to not eat sweets in a room smelling of delicious cookies being baked), they demonstrate that ego depleted people are more sensitive to contextual influences (e.g., they are more likely to select compromise alternatives and to defer making choices), adding another dimension to the process of making choices.

The second paper, by Yoon and Simonson, approaches the choice without preference proposition from a different angle, suggesting that consumers may often choose certain options specifically because they do not have preferences. Furthermore, because such options are selected without true underlying preference, but merely as a way to resolve a choice problem, consumers are less likely to repeat the same choices on future consumption occasions. In particular, compromise alternatives are often selected when consumers are uncertain about their preferences (e.g., Dhar and Simonson 2003; Simonson 1989). That is, consumers often do not have a strong preference for a compromise option and simply use such options as a way to resolve the need to make a decision.

Suppose, now, that consumers who chose the compromise (middle) alternative encounter the same option a week later in a set where that option is not a compromise alternative (i.e., in a set with just two of the original options). In that case, there should be a relatively low likelihood that consumers will again choose the same option, because their original decision was not based on real preference. Conversely, if an option was initially selected because it appeared attractive and consumers believe that they chose that option because they liked it, then preference for that option should persist even in the absence of the asymmetric dominance relation that affected the original response and perceived attractiveness. Yoon and Simonson support these predictions and provide consistent evidence using process measures (preference certainty and recall).

The third paper, by Liu and Simonson, will take a broader view of factors that determine the degree to which choices are driven by preferences and the strength of preferences. They will also present related findings from a field study conducted in collaboration with

Amazon.com as well as related lab studies. Liu and Simonson argue that the degree to which choices are driven by preferences depends significantly on the procedure used to arrive at a decision. That is, some procedures are inherently more likely to result in clear and strong preferences, whereas others tend to produce indecision and preference uncertainty (see also Dhar 1996).

In the study conducted with *Amazon.com*, three procedures are contrasted (see attached extended abstract), which manipulated the manner in which preferences were formed and the likelihood of regret. Lab studies being conducted provide process measures and further insights into the impact of the decision procedure on the relationship between choices and preferences.

In summary, all three papers examine the same proposition regarding choices that reflect weak or no preference at all. Furthermore, the papers examine both the antecedents and consequences of choices that are based on weak or no preference. This session is expected to be of much interest to judgment and decision making researchers as well as to consumer researchers interested in the implications of the recent work of Baumeister on the depletion of resources. Finally, the *Amazon.com* study is likely to be of interest to researchers who study the implications of findings in judgment and decision making for consumer behavior on the Internet.

“How Stable Are Consumers’ Constructed Preferences? A Contrast between Attraction and Compromise Effects”

Song-Oh Yoon, Stanford University
Itamar Simonson, Stanford University

While choice is interpreted as an accurate indicator of consumer’s true preference, choices can differ in terms of how much they reflect the preference of the choosers. In some cases, consumers select the particular option with clear and well-defined preference, whereas in others, the product is chosen just because choosing the option provides an easy way to resolve the decision problem. These differences could have an important implication for the future choice outcomes; choices made with clear preferences are likely to be enduring while choices based on weak or no preferences are fleeting.

In the current research, we address this issue through comparing two different context effects; the attraction effect (Huber, Payne, and Puto, 1982) and the compromise effect (Simonson, 1989). We first argue that these two effects differ in the degree to which people are aware of the contextual influence on their choice, hence the perceived certainty with their choice. As suggested in prior research (Dhar and Simonson, 2003), the attraction effect is more perceptual in nature, and thus people are less likely to think that their choice of asymmetrically dominating option is due to the position of the option. Rather they are likely to believe that their choice reflect their true underlying preferences, leading to high perceived certainty with their choice. On the contrary, people who choose a compromise option are likely to select the option mainly because they don’t have a clear preference and choosing the middle option is safe under low preference certainty (Simonson and Tversky, 1992).

We further argue that this difference results in different levels of choice persistence. When people believe that their initial choice reflects their underlying internal value as in the case of the choice based on the attraction effect, they are likely to choose the same option again even when this option does not dominate any options

in the future choice set. However, this would not be true for the choice based on the compromise effect. When people are aware that their initial choice of the compromise option is mainly due to the position of the option in the initial set, the probability of choosing the same option is likely to be low when the option is no longer a compromise option in the new choice set.

We tested the proposed hypotheses in several different lab experiments. In the first experiment, we showed that participants were more certain about their choice of the product options when the same option was presented as an asymmetrically dominating alternative as opposed to a compromise option in the given choice set.

In the second study, we compared the level of persistence of the choice when the initial choice is made under the attraction vs. compromise effect. Participants at week 1 were randomly assigned to either the attraction or compromise effect condition in which the same target option was presented either as an asymmetrically dominating or a compromise alternative respectively. A week later, people in both conditions were provided with a two-option choice set which included the focal and the other option from the original set. The comparisons of each group with a control condition (where participants received the two-option choice sets in both time periods) showed supporting evidence for our hypothesis. Across three different product categories, the attraction effect lasted even a week later while the compromise effect disappeared in the second week. Furthermore, the analysis at the individual level revealed that people who selected a target presented as an asymmetrically dominating option tended to be more consistent in choosing the same option in the second week, compared to those who chose the same option presented as a compromise option.

The third study was conducted to test the alternative explanation that the greater persistence under the attraction vs. compromise effect is due to the extreme position of the asymmetrically dominating option in the given choice set. These tests were done by using the target option which has an asymmetrically dominating relationship to the decoy alternative, but is no longer an extreme option in the first week's choice set. We found greater stability of choice in this condition, compared to the compromise effect condition, which allowed us to attribute the greater stability to the inherent nature of the attraction effect (or option's asymmetrically dominating position) as proposed earlier, rather than to the extreme position of the target option.

The last study examined the underlying processes, using various memory measures. In this study, subjects in the second week were asked to remember their own choices as well as other alternatives presented in the first week's choice set. We found that asymmetrically dominating option choosers were better able to recognize their own choice at week 1, compared to compromise option choosers. However, it was compromise option choosers who had superior memory of the other options. These results confirmed our proposed notion that the more perceptual attraction effect leads one to build relatively strong initial preference for the chosen option, whereas the compromise choice is driven in general by people's preference for the option's position and its relationship to other options in the set.

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“Take It or Leave It?”—The Effect of Explicit Comparisons on Commitment to Purchase”

Wendy Liu, Stanford University

Itamar Simonson, Stanford University

A large body of research in decision-making looks at how people choose one best option from a given set of options. More recently, research has also examined the cases where people choose between buying something and not buying anything. In general, two reasons have been proposed for why people choose not to purchase (Dhar and Simonson 2003): (a) the options are not sufficiently attractive, and (b) there is uncertainty and difficulty in identifying the best option from the set of options (e.g., Dhar 1996).

So far, most of the “no choice” research has been focused on the issue of choice difficulty. When consumers experience conflict and difficulty in making a selection from a given set of options, the uncertainty in preference prevents them from making a commitment to purchase. In the current research, we extend the study of the purchase vs. no purchase decision by noting that the uncertainty that contributes to the withholding of commitment to purchase stems from not only the difficulty of choice, but more broadly, the ambiguity and uncertainty regarding the value of any target option. In particular, there are two components to this value judgment that are often ambiguous. The first component is the intrinsic value of the option (“how much do I like A”), and the second is the opportunity cost associated with acquiring the option (“while I like A, can I do better with my resources by getting B”, also see Schwartz et al. 2002). A question that naturally arises is whether factors in the judgment and decision making process could moderate the perceived level of uncertainty and ambiguity over the value of a focal option, and hence lead to greater or lesser degree of commitment to purchase.

In this research, we focus on the role of making explicit comparisons. We argue that an explicit comparative evaluation process showing the superiority of a focal option over other options can reduce the perceived uncertainty over the value of a focal option. Specifically, because it is often difficult for people to assess the intrinsic value and opportunity cost associated with an option, people rely on cues to inform them of these values. One of the strongest cues are comparison cues. By seeing that an option is superior to a number of other options, people gain confidence that the option is indeed attractive relative to the existing options and other potential options.

In an initial set of studies, we demonstrate that evaluation processes that enforce explicit comparisons can lead to greater purchase commitments for the leading option. In study 1, we compare two decision procedures in a mock internet shopping environment. Specifically, participants are invited to visit a shopping website once everyday for five days. Each day, the site provides 10 products from a variety of categories at special discounted prices. Upon each visit, the participant has the option to purchase one of the products, or purchase nothing. There are two conditions in this study. In one condition, the consumer is shown the products one at a time, and s/he must decide whether to buy the current product. If the decision is to pass, the next product will be shown, and the person can never go back to a previously shown offer. Therefore, in this condition, when the consumer decides whether to purchase a product, he/she must evaluate the product on

its own, without the possibility of comparing it with any other products. This is particularly a constraint for products that appear early in the sequence. In the other condition, people employ a “winner carries over” procedure. Specifically, people start by seeing two offers along side each other, and they are instructed to explicitly compare them and decide which one they like better. Once the consumer indicated this preference, the inferior option will be replaced by the next offer in the sequence, and the person compares the winner from last comparison with this new offer, and again, the winner gets carried over to the next round. The process is repeated until the consumer is left with a final winner. At this point the consumer must decide whether to purchase this product, or purchase nothing. Therefore, in this condition, when the consumer decides whether to purchase an item (i.e., the winner), this product has already been compared to at least one other product (products that appeared early in the sequence would have been engaged in more comparisons). Therefore, we make two predictions: (1) due to the opportunity to make explicit comparisons, people in the “winner carries over” condition is more likely to make a purchase than in the “single evaluation” condition; and (2) the “winner carries over condition” favors products that appeared early in the sequence, whereas the “single evaluation” condition favors products that appeared late. Both predictions were supported by our data ($n=1117$ visits). Indeed, in the “single evaluation” condition, 40% of all visits resulted in a purchase, whereas in the “winner carries over” condition, 46% of all visits lead to a purchase ($p=0.04$). Moreover, we noted the “location” of each purchase (location=1 if the item was the first in the sequence, and 10 if the item was last). Indeed, the mean location is 5.93 in the “single evaluation” condition, and 5.03 in the “winner carries over” condition ($p=0.0005$). Therefore, study 1 showed that being able to make explicit comparisons lead to greater commitment to purchase. However, in study 1, making more comparisons also meant seeing more products, and hence having more information about the product space. Therefore, the question remains whether making explicit comparisons can lead to greater commitment to purchase even if the comparisons provided no additional information. This issue was examined in study 2.

In study 2, we juxtapose two evaluation procedures that provide the same information, but differ in their comparative nature. Specifically, we compare the effect of ranking vs. rating procedures on purchase commitment. In one condition, participants are asked to rank six chocolates. In another condition, participants are asked to rate six chocolates (on a 1-100 point scale). After the evaluations, all participants were asked whether they would like to receive a small pack of the top-ranked/rated chocolate or \$2 cash ($n=71$). Indeed, we found that in the rating condition, 32% chose chocolate over cash, but in the ranking condition, 56% chose chocolate over cash ($p<0.01$). Therefore, study 2 provided evidence that making explicit comparisons can lead to greater commitment to purchase even when information conditions are held constant.

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“The Effect of Depleted Resources and Weak Preferences on Consumer Choice”

On Amir, Yale University

Anastasiya Pocheptsova, Yale University

Ravi Dhar, Yale University

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The notion that consumer preferences are constructive and sometimes even formed on-the-fly is now well accepted. The focus has shifted to identifying the boundaries and mechanisms that explain the choice processes when clear strong preferences are not available. In this work, we point to an aspect of the self that has a profound influence on observed behavior and choice making—ego depletion (e.g., Baumeister, et al. 1998). In particular, we demonstrate the effects of depleting a common resource, thought of as regulating behavior and exerting self-control, on individuals’ choices in different contexts.

We examine three well-known effects of context on choices: compromise, attraction, and the preference for choice deferral. The compromise effect (Simonson 1989) occurs if the choice share of one option, b , relative to another existing alternative, a , is enhanced when a third option, c , which makes b a “compromise” (middle) option, is added to the set. The second effect has to do with the context under which consumers choose the no-choice option (Dhar 1997). In a recent paper, Dhar and Simonson (2003) show that both the choice of a compromise and of the no-choice option reflect preference uncertainty. Our main proposition in this paper is that, when individuals engage in choice tasks, they are drawing upon a resource that has traditionally been regarded as necessary for self-regulatory behaviors. We suggest that individuals that are depleted of this resource, after exerting self-control (e.g., refraining from eating forbidden sweets), will generally be more susceptible to the compromise effect and choice deferral.

Our first experiment demonstrated that depleted participants exhibit a greater tendency to select the compromise alternative, compared to a control group. The second experiment showed that depleted participants are more likely to opt out of the decision process by choosing the no-choice alternative (e.g., deferring choice). Our third experiment will look at the effect of depletion on the attraction (asymmetric dominance) effect (Huber, Payne, & Puto 1982). Dhar and Simonson (2003) point to an important distinction between the compromise and the attraction effects: a compromise option is selected due to preference uncertainty, whereas the more perceptual mechanism underlying the attraction effect creates the illusion that the asymmetrically dominating option is preferred because of its attractive attribute values. This study will compare and contrast the effect of resource depletion on compromise with the attraction effect.

In conclusion, our results expand prior research on preference construction and suggest that choices are influenced by the same resource used to regulate and control behavior and depend less on prior preferences than previously assumed. Furthermore, our findings depict contextual effects as events closely linked to previous as well as subsequent events in the daily life of the consumer.

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SPECIAL SESSION SUMMARY

New Approaches for Measuring Consumer Preferences for Really New Products

Donna Hoffman, Vanderbilt University

SESSION OVERVIEW

Consumer behavior researchers have long explored consumer preference for radical product innovations. One reason the topic remains key is that while new product development is a major activity of firms, most of the 25,000 products introduced in the United States each year fail (Goldenberg, Lehmann, and Mazursky 2001), perhaps due to their incremental nature. The product development process remains challenging for many firms because mainstream consumers have difficulty estimating the usefulness of a radical innovation relative to incremental innovations (Hoeffler 2003). What is needed, then, are new constructs that tap a consumer's propensity to adopt innovations, and methodologies for using consumer preferences of really new products to improve adoption rates. Considering the high failure rate of new product introductions, and the broader issue that innovation drives economic growth at the same time that it improves consumer welfare, consumer behavior constructs and methodologies that can aid in the product development process for really new consumer products is timely and appropriate.

The three papers in this special session utilize rich theoretical frameworks, and psychometric and experimental perspectives, to present new approaches for measuring consumer preference for innovations and examine the impact of these preferences for innovations on adoption.

Tellis, Yin and Bell take a global approach and develop a new consumer innovativeness scale using pre-tests in four countries and then test the scale across 16 leading economies of the world. Results show that a profile of the global innovator can be constructed and that countries differ systematically in the proportion of innovators. Their new measure of innovativeness bears a strong correlation to self-reported adoption of new products. Surprisingly, they find that some major world economies are not as strong on innovativeness as would be expected.

The paper by Hoeffler, Moreau and Kubowicz argues that companies that develop technological innovations have a tendency to position based on the newest attributes and benefits, but that these may be precisely the types of benefits for which consumers have the highest level of uncertainty. They conduct two studies to test these assumptions. The study partitions sources of uncertainty and confirms that subjects have more uncertainty for really new products relative to incremental products. In their second study, they show that different uncertainty positionings have a differential impact on purchase intention. This research fine tunes our understanding of consumer preference uncertainty for really new products and can help marketers better position really new products for consumers and improve ultimate adoption rates.

Hoffman, Kopalle and Novak conclude the session with a paper that introduces a new methodology to identify "emergent consumers" and proposes that identifying and using such consumers for concept development can: 1) aid in the successful development of radical new product concepts, 2) improve the chances of success in the marketplace for such innovations, and 3) help predict their acceptance by mainstream consumers. Drawing on information processing theory and the theory of self-organizing systems from biology, the authors develop a new scale to measure this construct and perform several laboratory studies to test their theories that emergent consumers are more effective in developing innovations that will ultimately be more desired by mainstream

consumers. Pilot studies, completed, demonstrate preliminary support for their framework. The remaining studies will be completed by the summer.

Donald Lehmann will serve as the session discussion leader. Professor Lehmann is an expert in the behavioral dimensions of innovativeness and his extensive knowledge of the subject matter guarantees a lively and exciting discussion period. The session has been organized so that there will be enough time for both summary comments from the discussion leader and questions and comments from the audience (managed by the discussion leader).

Taken together, these papers can extend consumer behavior researchers' growing knowledge base regarding consumer innovativeness and related constructs and their impact on adoption. We anticipate that the special session is likely to be of interest to a wide variety of consumer behavior researchers interested in the relationship among innovation and product preference explored from both psychometric and experimental perspectives.

"The Global Innovator and Country Innovativeness: A Cross-National Study of Consumer Propensity to Buy New Products"

Gerard J. Tellis, University of Southern California

Eden Yin, Cambridge University

Simon Bell, Cambridge University

Innovation—the use of new technology to create new products and services—is crucial to the growth of firms and economies. Technological innovation creates entirely new markets and improves the quality of products while also reducing prices. Thus, innovation simultaneously drives economic growth while improving consumer welfare. Firms at the leading edge of innovation also tend to dominate world markets and promote the international competitiveness of their home economy. Innovation also enables the creation of rent generating patents that can help corporations and entire countries. Thus, Governments throughout the world have realized the importance of innovation.

We posit that the innovativeness of consumers is a primary driver of the adoption and diffusion of new product in a country and thus of the economic vitality of that country in the global market place. Indeed, our past research indicates that the takeoff of new products varies dramatically by country (Tellis, Stremersch and Yin 2003). However, current measures of economics and culture do not explain all of these differences. In particular, Hofstede's four measures of culture, which are the most commonly used in cross-cultural research, are at best weak predictors of inter-country differences in takeoff of new products.

We hypothesize that the real differences in the takeoff and penetration of new products across countries is *consumer innovativeness*—consumers' propensity to adopt new products. Ironically, despite decades of research, this construct has not been studied in a systematic manner across the major economies of the world, especially those of America, Europe, and Asia.

Based on past studies, this study first develops a list of about 12 constructs and 60 items to measure innovativeness. With the help of four sequential pre-tests in four different countries, the authors then pared down this bank of items to an 11-item scale for consumer innovativeness. The authors took care to account for acquiescence, dis-acquiescence, extreme responses, midpoint responses, and social-desirability bias (Steenkamp and Baumgartner

1998). The scale was translated and back-translated into eight different languages. The authors then used the scale to assess the innovativeness of about 400 respondents in each of 16 leading economies of the world.

Covariates included 6 demographic variables (income, age, education, gender, children and mobility), 4 cultural variables (country, language, ethnicity, and region of residence) 10 covariate to measure differences in innovativeness across categories, and 11 items to measure adoption of new products, and 2 items to measure social desirability bias. Social desirability bias was clearly present in about 10 percent of the sample. This was factored out using methods factors in some analyses. In other analyses, these observations were dropped.

We used regression analysis to determine the effect of demographics and country or origin on innovativeness. We used factor analysis to probe underlying factors and a basis for summarizing the data. We used the adoption of new products by panelists and the penetration of new products in various countries, to validate the innovativeness scale. We added the scores on the 11 items of innovativeness to form a composite measure of individual-level consumer innovativeness.

There are systematic differences in innovativeness across countries. These differences account for 12 percent of the variation in innovativeness. There are five strong and highly significant demographic predictors of individual level innovativeness: gender, age, education, income, and mobility. These factors explain about 13 percent of the difference in innovativeness. These characteristics combine to provide a profile of the *global innovator*. Even after controlling for these factors in a multivariate regression, countries differ systematically in the proportion of individual level innovativeness. The measure of innovativeness bears a strong correlation to self-reported adoption of new products, *after controlling for social desirability bias*.

We used the proportion of highly innovative consumers, on this individual-level innovativeness scale, to develop an index of country-level innovativeness. We weighted the sample to make it representative of the population in each country, on the age, income and education variables. There are systematic differences in proportion of innovators across countries. Surprisingly, some major world economies are not that strong on innovativeness. The country level measure of innovativeness bears strong correlation to market reports of the penetration of new products in countries today.

“The Role of Positioning in Building Evolutionary Bridges for Revolutionary Products”

Steve Hoeffler, University of North Carolina at Chapel Hill

Page Moreau, University of Colorado at Boulder

Claudia Kubowicz, University of North Carolina at Chapel Hill

The goal of our research is to study how marketers can better position really new products for consumers. There are two key theoretical ideas examined in this research program. The first is the idea that what makes products “really new” for consumers is consumers’ difficulty or uncertainty in predicting the future utility of a new product (Hoeffler 2003). Since consumers are not familiar with the product, they are unable to predict how they will use the product and the benefits they will derive from using the product (Lehmann 1997). Therefore, our first goal is to gain a better understanding of how consumers predict the future utility of really new products (RNP). The second theoretical idea is that information obtained during preference measurement can be used to reposition or redesign products so that the benefits on which they are positioned are associated with less consumer uncertainty. It is our belief that positioning based on less uncertain, and more familiar

features will lead to faster adoption in the marketplace. Specifically, information obtained during preference measurement can be used to reposition or redesign products so that the benefits on which they are positioned are associated with less consumer uncertainty (Gatignon and Robertson 1991). The information about uncertainties in predicting utility is used to position the RNP so that the target market can readily understand and estimate the core benefit provided by the product (Moreau, Markman, Lehmann 2001).

The inherent newness of RNPs gives companies greater latitude in terms of the number of different positioning strategies that could be used to communicate the core benefits of the RNP. If companies don’t understand consumers’ uncertainty about the benefits of a RNP, then they may be positioning their product based on attributes and benefits consumers don’t understand or fully appreciate. In fact, we would argue that companies that develop technologically sophisticated products have a tendency to position based on the newest attributes and benefits. These may be precisely the types of benefits for which consumers have the highest level of uncertainty. Two completed studies are briefly described below.

Study 1: Partitioning Sources of Uncertainty: The goal of our first study was to explore the types of uncertainty that appear to drive the difficulty of measuring preferences for RNPs. In this study, we measured the types of uncertainty for some of the major sources of uncertainty identified during pilot studies and prior literature on new product adoption. We included scale measures associated with the following subcomponents of uncertainty: usage uncertainty, performance uncertainty, network externality uncertainty, switching cost uncertainty, learning curve uncertainty, price change uncertainty, symbolic uncertainty, and affective reaction uncertainty. Our hypothesis was that there will be higher uncertainty for each component tested for RNPs than INPs.

Ninety participants evaluated one member of 4 product categories, which was either incrementally new (INP) or really new (as identified in a pretest). The following products were used: TV (INP: Progressive Scan TV, RNP: 3D TV); Computer Display (INP: GLV Flat Screen, RNP: Roll-Up Display); Car (INP: Fuel Cell, RNP: Automatic Car); Camera (INP: Digital Camera, RNP: 3D Camera).

The results of this study confirmed our hypothesis that participants had greater levels of uncertainty for RNPs than INPs. In addition, this study included a more refined look at the types of uncertainty that consumers have when estimating their utility for a RNP. Five of the eight types of uncertainty tested had higher levels of uncertainty for RNPs than INPs (performance uncertainty, network externality uncertainty, switching cost uncertainty, symbolic uncertainty, and affective reaction uncertainty).

Study 2: Evolutionary versus Revolutionary Positioning for Really New Products: While the focus of our first study was on understanding uncertainty and how consumers behave during the potential adoption of RNPs, the goal of our second study was to shift the focus from understanding uncertainty to incorporating that understanding into positioning. The aim of study 2 was to incorporate knowledge learned during measurement about the sources of uncertainty in predicting utility into the task of improving the positioning and communication strategies for RNPs. Study 1 showed that when consumers had a low level of uncertainty associated with the anticipated benefits of a product they also tended to have higher benefit importance levels and higher purchase intentions. In this study we predict a main effect of positioning on purchase intention. Thus when a digital camera is positioned on the lower uncertainty attribute/benefit combination (costless preview) subjects will have higher levels of purchase intention.

Eighty-two participants saw a print advertisement for a digital camera, either positioned with low or high levels of uncertainty.

Each ad presented the title “Pentax Presents the System 3000 Digital Camera” with a corresponding picture of a Pentax digital camera and a list of benefits. Each ad listed the same five benefits. The positioning manipulation was performed by listing a benefit first and in a larger font size. For the high uncertainty positioning, the phrase “Store and manipulate images like a pro with the new System 3000 Digital Camera” was listed first. For the low uncertainty positioning, the phrase “Costlessly preview pictures before having them professionally printed with the new System 3000 Digital Camera” was listed first. In both ads, three common attributes/benefits were listed. The last attribute/benefit listed was the corresponding attribute not used in the positioning. The key to the design was that the total amount of information was held constant and the positioning was manipulated only by salience.

The key result predicted was a main effect of positioning on purchase intention. Indeed, we found that subjects who viewed the ad with the low uncertainty positioning had higher levels of purchase intention than subjects who viewed the ad with the high uncertainty positioning.

“Identifying and Using Emergent Consumers in Developing Radical Innovations”

Donna L. Hoffman, Vanderbilt University

Praveen Kopalle, Dartmouth University

Thomas P. Novak, Vanderbilt University

The challenge for the many consumer goods firms looking to develop and market radical innovations is to learn which consumers might be the “right” ones they should be talking to and how they might use them to further develop their concepts and improve their chances for success in the marketplace. Little research has focused on *which* consumers to use in the new product development process, particularly in the consumer goods industry. This is important because consumer packaged goods industry is the least radical in nature (Govindarajan and Kopalle’s 2003). Thus, the goal of this project is to develop a methodology to identify these “right” consumers. We call them “*emergent consumers*” and propose that identifying and using them for concept development in the consumer goods and services industries can: 1) aid in the successful development of radical new product concepts, 2) improve the chances of success in the marketplace for such innovations, and 3) help predict their acceptance by mainstream consumers. Identification of emergent consumers complements current concept testing methods and provides an “early warning system” for radical innovations targeted at typical consumers.

Two theoretical streams are relevant to our problem. A considerable body of research has differentiated two types of information processing thinking styles: experiential and rational styles (e.g. Epstein 1994; Pacini & Epstein 1999; Sloman 1996; Smith and DeCoster 2000). Research has also revealed individual differences in these two thinking styles (Epstein, Pancini, Denes-Raj, and Heier 1996; Pancini and Epstein 1999; Norris and Epstein 2003a, 2003b) and has shown that experiential thinking correlates with a number of measures of creativity, while rational thinking does not (Norris and Epstein 2003b). This suggests that experiential consumers are also more creative and have more imagination, in addition to being more holistic, associative processors compared to average consumers.

Self-organization among certain individuals, say experiential consumers, is a process by which, under a particular set of conditions, global patterns emerge based on numerous local interactions among the individuals, and the rules specifying interactions among the individuals are executed using only information from the local interactions (Camazine, et. al. 2001). Emergence refers to a process

by which a system of such interacting individuals acquires qualitatively new properties that cannot be understood as the simple addition of their individual contributions. The sum is more than the parts.

We propose that “*emergent consumers*” develop an intuitive, almost “instinctive” understanding of a radical innovation through a sequence of small scale, affective, and associative interactions. They are able to create this “global pattern” because they possess a high degree of experiential processing ability. Emergent consumers need not be the most innovative, nor possess the most expertise. Given their experiential nature, the holistic interplay among emergent consumers in a new product development context produces a radical innovation that will, in general, be more attractive to mainstream consumers relative to one that is produced by average, mainstream consumers themselves or consumers are high on innovativeness.

In a pilot study of 93 consumers, we measured several constructs of consumer innovativeness and information processing style. An exploratory principal component analysis showed that innovativeness, rational processing style, and experiential processing style are independent constructs. *Thus, experiential processing style, which we theorize is a characteristic of a consumer’s emergent nature, is a separate dimension from innovativeness.* We also provided respondents with a concept description and series of five questions about the SmartBox (a radical innovation for the home delivery of goods) and asked them to rate their interest. Results of regression models predicting responses to each of these five questions from factor scores for the three principal components showed that for all five questions, experientiality was a significant predictor of the extent to which consumers state they want the new product. Innovativeness, on the other hand, was only significant for one of the five questions (“use” conditional upon adoption), and rationality was not significant for any of the five. These results support our theoretical framework.

We are now conducting a calibration and validation study using standard psychometric procedures (Novak, Hoffman and Yung 2000) in which we are: 1) measuring structural relationships among a broad range of theoretical constructs related to innovation and thinking style, well as optimum stimulation level, susceptibility to normative influence, introspection, lead user status, creativity, product category involvement, and expertise; 2) fitting a series of confirmatory factor analysis models on calibration and validation subsamples to further refine the measurement of the emergent nature, lead user and innovativeness constructs; and 3) predicting response to both the SmartBox concept and an incremental innovation concept from emergent nature, lead user status, and innovativeness. A sample of 1000 respondents from the eLab Online Panel will be randomly split into equal calibration and validation subsamples. We hypothesize that scores on scales for experientiality, introspection, creativity, and imagination will load together on a factor that defines a consumer’s “emergent nature” and that orthogonal factors for rationality and innovativeness will again emerge. A second study will demonstrate how emergent consumers can be used in the concept development stage. Four groups of consumers (each high in one construct and average on the other two, plus one control group average on all) will be asked to further develop the SmartBox radical new product concept in a moderated electronic chat room/discussion board for four sessions of about 45-60 minutes over a four week period. Activities will include basic brainstorming, idea generation and “information pump” exercises (Dahan and Hauser 2002). Modified new product concepts will be prepared from each group and given to a sample of 250 mainstream consumers drawn from the Study One sample.

Respondents will rate the likelihood of adoption of each of the four new product concepts and we will test the main hypothesis that new product concept developed by emergent consumers for the radical innovation is significantly different from and evaluated more favorably relative to concepts developed by the other groups.

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A Grounded Typology of Consumer Conceptualizations of Failure

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ABSTRACT

Consumers often fail in their attempts to achieve desired goals in the marketplace. However, failure is an outcome that consumer researchers rarely explore. Using text from interviews with 23 informants in various stages of infertility treatment, we offer a grounded taxonomy of four conceptualizations of failure that influence consumer trying and persistence: Failure as a Mobilizing Challenge, Failure as an Unacceptable Outcome, Failure as the Will of Fate, and Failure as Nonfailure. We compare these conceptualizations along seven underlying dimensions, and discuss the implications of these findings on future research pertaining to goals and trying.

Compensatory Consumption and Narrative Identity Theory

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ABSTRACT

The theory of narrative identity (Ricoeur, 1984, 1992) suggests that in order to make time human and socially shared, we require a narrative identity for ourselves; that is, we make sense of ourselves and our lives by stories we can (or cannot) tell. This paper explores compensatory consumption through the experiences of two adult women and the stories they construct which help them situate themselves in time and place. The function of these stories is examined in relation to the materialisation and maintenance of identity within the context of the women's lived experience of shopping and compensatory consumption behaviour.

INTRODUCTION

Compensatory consumption is a complex area of consumer behaviour spanning a vast range of types of compensation and behaviour manifestations (Woodruffe, 1997). According to Gronmo (1988), the theories underlying the concept have been described as early as 1933 (Jahoda et al.) and the work of Caplovitz (1963) explored links between compensatory behaviour and consumption. However, the concept of compensatory consumption has attracted little attention from marketing academics and consumer researchers and yet exploration of the extant literature suggests possible relationships with other areas of consumer research which have been (and continue to be) the focus of much contemporary study; for example addictive consumption (e.g. Elliott, 1994), compulsive buying (e.g. O'Guinn and Faber, 1989) self-gift giving (e.g. Mick and DeMoss, 1990, Luomala, 1988), compensatory eating behaviour, (Grunert, 1998), mood repair (Rook and Gardner, 1993), and conspicuous consumption (e.g. Mason, 1981 and Page, 1992).

Narrative Identity Theory (Ricoeur, 1984) suggests we make sense of ourselves and our lives by the stories we can (or cannot) tell. Narrative provides an opportunity for construction of self in consumption and narrative research generates knowledge about the social or individual construction of reality through story telling (Hopkinson and Hogarth-Scott, 2001). In this paper, consumers' construction of fluent 'consumption stories' is examined in the light of narrative identity theory and the consumption experiences of two female consumers are explored through their utilisation of narrative forms to develop coherent meaning.

COMPENSATORY CONSUMPTION

Although compensatory consumption was identified by Dichter in the early 1960's (Dichter 1960, 1964), no further investigation of the concept appears until Gronmo's 1988 paper which sought to theorise and conceptualise compensatory behaviour specifically from a consumer and consumption perspective, within the critical sociology of consumption.

Gronmo presented his synthesis of a number of significant pieces of research carried out over a period stretching back over half a century (Jahoda et al, 1933, Lynd and Lynd, 1937, Chinoy, 1952, Bell, 1960, Mills, 1951, Caplovitz, 1963) which, he proposed "*have been or might be interpreted as indications or evidence of compensatory consumer behaviour*" (p.76). However, it is worth noting that the studies Gronmo examined focused on population groups who were suffering economic hardship and privation of various forms and he envisaged compensatory consumption as a response to underprivilege or repression.

Gronmo's (1988) understanding of compensatory consumption behaviour derived from the notion that while many consumer behaviour models are based on an underlying correspondence between action and needs an opposite approach could be equally valid in that parts of the consumer's behaviour are characterised by a systematic *lack* of correspondence between action and needs. Rather than satisfying specific needs, certain aspects of consumption may be reactions to a more general lack of need satisfaction—that is, to compensate for failure or weaknesses of some sort, for example:

"compensatory consumer behaviour means that consumption is heavily emphasised as a reaction to, and as an attempt to make up for, a general lack of esteem or self-actualisation" (Gronmo, 1988, p.68)

Grunert (1993) explored eating behaviour as compensatory consumption. Her development of the subject is significant in furthering understanding of the topic because although the focus is eating, she identified the possible use of various resources to satisfy a lack (of *x*) which were not always based on food or eating, such as a visit to the cinema to see a humorous film or an evening out with friends. She also reported that compensatory buying behaviour was reported in a study she conducted with others in West Germany (Scherhorn et al, 1988), although it was not the main focus of the study. Grunert defines compensatory consumption as follows:

*"In general terms, the phenomenon is that a lack of *x* could be cured by a supply of *x*, but may also be cured by a supply of *y*. If *y* is used, this process is called compensation."* (p.76)

Gould (1997) links the concept of compensation with consumption and mood management in his paper "An interpretive study of purposeful, mood regulating consumption: the consumption and mood framework".

Woodruffe (1997) examined compensatory consumption and, although the main focus was shopping behaviour, she also showed that the range of compensatory activities engaged in by consumers also included eating (at home or out), socialising and other forms of consumption, concurring with Grunert's analysis. In contrast to Gronmo (1988) who focused on groups who were suffering various forms of socio-economic privation or exclusion, Woodruffe's (1997) research suggested that compensatory consumption—whether in the form of buying objects, self-gift giving, shopping or the consumption of food, for example, or any kind of goods and services—could be seen in fact to be a 'regular' consumer activity and not restricted to groups who might be considered to be repressed, suppressed or underprivileged in some way. This view is supported by ideas put forward by Elliot (1994) in summarising aspects of 'normal' consumption with the view that an important function of consumption is to maintain consumers in a positive mood and also to work which indicates that it is widely used by people to 'repair' negative emotional states, (e.g., Cohen and Areni, 1990).

What emerges from a study of the existing literature on compensatory consumption and other related aspects of consumer behaviour (e.g., compulsive buying-O'Guinn and Faber, 1989, self

gift giving-Mick and DeMoss, 1990, addictive consumption-Elliott, 1994, conspicuous consumption-Mason, 1981) is a broader conceptualisation of compensatory consumption. The literature supports the notion that many facets of consumption behaviour are compensatory in nature. In the authors' view, compulsive buying, for example, is a chronic form of compensatory consumption behaviour in an extreme form. Other facets of the phenomenon mentioned by O'Guinn and Faber (1989) also add weight to this proposition. For example, they highlight the fact that for many people, compulsive buying seems to be strongly tied to their need for affection and support from others. In other words, the authors contend this can be interpreted as meaning that they are responding to a perceived 'lack', (suggested by the author in italics). Informants in their study spoke of their need to lead more exciting lives (*a lack of excitement?*), "feel alive" (*a lack of life? As in "get a life!"*), to coin a highly illustrative phrase), and be stimulated by their surroundings (*a lack of stimulation; boredom?*).

Motivational explanations for addictive consumption cited by Elliott (1994) include coping with anxiety states and stress (*a lack of calm, inner peace, well-being?*), links with self esteem (*a lack of self esteem?*), and construction of a 'self' (*lack of self?*).

Self gift-giving has been the focus of various studies (e.g. McKeage, 1992, Mick and DeMoss, 1990, Luomala, 1988) and a therapeutic role has been recognised (Mick and deMoss, 1990) which links clearly with compensatory consumption behaviour. As a respondent in their study stated: "I was feeling extremely frustrated (*a lack of opportunity?*) and hapless (*a lack of happiness?*) at work. I needed to have lunch with a friend and drink masala tea at the Indian restaurant." Another says: "Eating ice cream makes me feel calm and happy. It's smooth and cool. I felt more rational, more in control, ready to work my problem out." These two suggestions which reflect self gift-giving taking place in the form of compensatory eating behaviours illustrate links pointed out earlier in relation to Grunert's work and compensatory consumer behaviour.

This broader conceptualisation—as discussed above—is the basis upon which compensatory consumption is defined for the purposes of this study, defined as follows:

"Compensatory consumption is engaged in whenever an individual feels a need, lack or desire which they cannot satisfy with a primary fulfilment so they seek and use an alternative means of fulfilment in its place".

NARRATIVE IDENTITY THEORY

The theory of Narrative Identity (Ricoeur, 1984; 1992) suggests that in order to make time human and socially shared, we require a narrative identity for our self, that is, we make sense of ourselves and our lives by the stories we can (or cannot) tell. Thus we come to know ourselves by the narratives we construct to situate ourselves in time and place. The self is conceptualised in postmodernity not as a given product of a social system nor as a fixed entity which the individual can simply adopt, but as something the person actively creates, partially through consumption (Giddens, 1991). The consumer exercises free will to form images of who and what s/he wants to be, although, paradoxically, 'free will' is directed by values which are probably also a social product. Thompson (1995) describes the self as a *symbolic project*, which the individual must actively construct out of the available symbolic materials, materials which "*the individual weaves into a coherent account of who he or she is, a narrative of self-identity.*" The individual visualises her/his self according to the imagined possibilities of the self and Markus and Nurius (1986) suggest that "*an individual is free to create any variety of possible selves, yet the pool of possible selves derives from the categories made salient by the*

individual's particular socio-cultural and historical context and from the models, images, and symbols provided by the media and by the individual's immediate social experiences."

This task can be greatly aided by symbolic resources, the main one articulated by Ricoeur (1977) is literature which gives structure and meaning to the complexity and confusion of life by providing a causal model for the individual by linking disparate life events into a coherent sequence. Engagement with consumption, for example through advertising and the shopping experience, can also be used as symbolic resources to construct a narrative identity which helps the individual locate themselves and their behaviour in a logical sequence of meaningful action (Elliott and Wattanasuwan, 1998).

Narrative psychology (Sarbin, 1986) posits that stories are used by individuals to make sense of their (phenomenological) world, whilst Shotter and Gergen (1989) point to the conflict between the individual experience of identity and the social processes involved in its construction. Rosenwald and Ochberg (1992) develop a performative theory of identity where self-narratives actively construct the individual rather than reflecting behavioural events. Kotre (1984) suggests that some narratives have a generative potential which enables individuals to overcome life crises such as old age.

CHRONOTOPES AND NARRATIVE

Bakhtin (1941/1981) proposes *chronotopes* as an analytical tool for identifying a synthesis of time and space, where history is melded with narrative to form an interpretive schema. Bakhtin's analysis gives particular significance to the narrative logic of place and we can understand the meaning construction of identity by studying locations and actions and how individuals cope with key Bakhtinian themes of *chance, consciousness and reversibility* (Murray, 1995). In a consumption context we may expect consumers to weave a coherent meaning for their consumption behaviour (compensatory and functional) through the utilisation of narrative forms. These 'consumption stories' may function to locate the individual's behaviour in a predictable world and to reduce the uncertainties of lived experience.

As part of a much larger study into compensatory consumption, this paper explores the consumption experiences of two adult women and attempts to identify chronotopic narrative forms and their function in relation to the materialisation and maintenance of identity.

METHODOLOGY

The research took the form of phenomenological interviews, adopting the format and context outlined by Thompson, Locander and Pollio (1989). Phenomenological descriptions were interpreted in line with the criteria noted by Thompson et al.; additionally, while the notion of multiple interpretation is acknowledged, it should be emphasised that the interpretations presented here reflect a "*fusion of horizons between the text and the researcher*" (Gadamer, 1975)—in other words, provide insight into the phenomenon of compensatory consumption. Existential-phenomenological understanding is attained by describing lived experiences and the meanings that emerge from them (Thompson et al., 1989) and this is the means by which it is hoped that an understanding of narrative identity in relation to compensatory consumption may be developed.

The sampling method is purposive, which is a characteristic of interpretive research and respondents were selected for interview on the basis of screening questions designed to identify individuals who are aware that they do use shopping and other forms of consumption as compensatory behaviour to some degree. Ques-

tions asked are along the lines of “do you like to go shopping when you’re fed up?” or “how do you like to cheer yourself up when you’re feeling down?” These questions are designed to be quite ‘light’ in nature and unlikely to cause embarrassment, prompting spontaneous responses. The criteria for selection of interviewees has been based on their participation in this behaviour although respondents interviewed (27 in all) were of varying ages and represent a wide range of backgrounds, including students, people in full employment and retirement. The interviews were held on an individual basis in strict confidence and were, on average, of between one and two hours’ duration. Interviews were tape recorded and the respondents offered the opportunity to view the transcripts.

INDIVIDUAL NARRATIVE EXCERPTS AND DISCUSSION

Janet

As the concept of ‘self’ is so central to our discussion, aspects of ‘self’ revealed in these excerpts are explored in relation to the literature on ‘self’ when appropriate. In Janet’s case, she talks about her own ‘self-image’ in disparaging terms which is redolent of the self-hatred identified by Horney (1950) when individuals make a comparison between the actual self they see, in Janet’s case:

“I get it in my head, because some times I go through really bad phases where I’m just thinking, oh God look at the state of me. It may be a situation where I’m just going to the shop and I’ve got all dressed up I’m going out to have a nice time and then 3 people make arsey comments to me before I’ve even got out the building like ‘look at you you’re really weird, you’re really tall’ and then it makes me feel down like I’m really weird but I’m not it’s a horrible feeling when you feel like everybody’s staring at you like you’re a freak or something”

and the idealised self of their vision, described this way by Janet:

“Yeah I think it’s still going to be me but a me a really cool me, how you imagine yourself if you imagine that you could transport yourself in any way. Sort of shorter, thinner.”

Janet is very tall—around 6’3” in bare feet. Her height (as well as her weight) contributes to her negative view of “self” and her lack of positive self regard (Rogers’ theory, 1959) stems a great deal from the attitudes of others, as shown in the passage above, but also from her own ‘self’ where the self becomes almost a significant other (Rogers, 1961). This may be leading her to distort her true self in order to gain the approval and positive regard of other people necessary for positive self regard, in line with Rogers’ theory as the following passage illustrates:

“I’ll start buying things that aren’t going to suit me but they’re going to suit a me that’s going to blend in, like things are going to hide you”

Janet distinguishes here between “me” which could be true ‘self’ and “a (different) me” which reflects a different, distorted ‘self’, to the extent where her own narrative shows how she engages in activities like denial, which is a defense mechanism arising from Freudian psychoanalysis (Liebert and Speigler, 1974):

“If I’m feeling really down about myself and I’m trying to convince myself that I can fit into clothes that are designed for

people of average height quite often I will come away with the crazy idea that I can let the sleeves down, or I can do something to them that will make them longer or shoes that I can get them stretched at the shoe shop and then they’re going to fit and so I’ve got loads of stuff like that. Trousers that I thought I could take the hem down a bit they only add half an inch and they’re four inches too short. A lot of stuff where I meant to adapt in some way. There are things that are too tight as well.”

However, Janet recognises that she can get dressed up to express her individuality and to create a variety of possible selves (Markus and Nurius, 1986) especially when going shopping which she says has an escapist element:

“Yeah, especially if I’m dressed up, ’cos I like to think that I’m not just a student with no money, but just wandering around, I could be anybody—an advertising exec—you could be anybody though couldn’t you, ’cos nobody knows you”

Sometimes it seems that the best way to start to understand what is really taking place in the ‘shopping-as-compensatory-consumption’ episode is to look at an individual account of the whole shopping trip, as this excerpt from Janet’s interview shows. What emerges is a sort of picture like a jigsaw, where the pieces fit together to make the experience particularly exciting, relaxing or fulfilling. Janet recalls a particular shopping trip which was triggered by boredom from her job as well as feeling unhappy about a personal situation involving her friends:

“yeah, at Christmas after the January sales I hadn’t been able to go out anyway because I had been working and I’d been working really hard and sort of got some money together and I was down about work anyway ’cos I had to work in the centre of Leeds, which meant I had to get up at 6’oclock in the morning just to beat the traffic and it was doing my head in, it was a very boring job, but I was getting money for it, and then, but being at home things were a bit stressful at home....and everything sort of being sort of, really kind of looking forward to this chance to go to the shops, and I’d been the first time and I hadn’t found anything, so I was really pissed off, and em, so I remember I went and then I took the day off work, and which is quite bad, and then I went in and I went to Harvey Nicks, which is em, em, and then I blew the lot. On a dress but it was all half price so it was just fine, and then, and then I remember ’cos I was really like, unhappy ’cos some of my friends were really having a hard time, and I was really worried about them, and then we were going out em, we were all going to go out and have a really nice night and I was really looking forward to it, so I wanted to be really special and so I wanted to buy this, then I bought this dress and I remember seeing this dress and it was a bit expensive for me but I thought well I’d try it on, and I tried it on and I thought it fitted really well and I felt really good in it. So when I bought it I felt as if we were going to have a really good night because I’ve got this dress, and we did but I don’t know if it was just because I was really sort of um, happy ’cos I’d got this outfit, and, er, I don’t know it was nice cos we all got on really well and everything and a lot of the things that seemed sort of bad they weren’t as bad.

Here the outcomes were that she bought a dress which was a bargain which made her feel really good and that made everything seem less of a problem.

Emily

Financial stress is frequently a trigger for compensatory consumption activity in Emily's life as this example shows:

"A few weeks ago, I don't remember what triggered it but I assume it must either have been a huge bill of some sort probably a huge Access bill-usually the reason. If I get a bill or something like that, I don't want to cook I want to go out to dinner instead, we usually go to a popular restaurant, which is never a good idea when you are in a bad mood to go out with a 3 year old to dinner but this is quite standard at home, is that financial bad news then going out to dinner. I think that is the most recent example I can think of."

However, on reading the following passage, many minor frustrations and irritations about her husband, their home life and their financial position come to the fore in exquisite detail. Financial stress appears secondary to the role her husband plays in creating some of their financial problems and his attitude and general lack of concern which extends to mundane shared responsibility of household tasks as well. Emily agrees that spending money when they are faced with financial problems is "rather conflictual" but elaborates on *why* eating out has become an important ritual for her. At the end of this passage it can be seen that the real meaning Emily associates with eating out is not having to cook family supper in an untidy kitchen strewn with yesterday's washing up which her husband will have left undone. She links this graphic description of the state of her kitchen with the state of her husband's finances and it seems that the left-over washing up becomes a metaphor for her frustrations with her husband's lack of organisation and unstructured approach to working:

"But yes it is rather conflictual but I just don't feel like stomping about. My husband's job is washing up, mine cooking and he doesn't have such a tight idea of.... like I wouldn't dream of cooking supper the next day after it was due where he doesn't seem to have a problem washing up the day after. Thinking I'm going to have to go back to a filthy kitchen and crash about through all the dirty pans from yesterday tends to put me off. And I associate the fact that we have got a bill, usually with my husband anyway because he is a great spender and not a great earner, but he is a very interesting person in how he keeps a project on the go and he is involved in all sorts of cultural and artistic activities, he's busy, busy, busy all the time, but very few of his projects actually bring any money, in any sort of regular wage. His photography he sells but not in a regular way. We will get a great lump of money from his agent but then not get any for months, then get another great lump because they've sold some of his picture. So usually I know that if I go home and cook I know that I am going to be crashing around in amongst the dirty pans and wanting to kill him. Whereas if we go out then that's OK."

Emily's description of the house they live in shows some idea of the meaning consumers themselves invest in products. They like the house they live in because it looks grand and they could not see themselves in "little ordinary houses".

"We are renting (a house), we like a nice looking house and we like big space and we are very lucky to have fallen on our feet because we live at a place called The Grange which is a big 19th Century house which is cut up into flats and cottages and so very little money because the place is falling down and the agents don't do anything to it. We've got this very very flash

looking house with huge stone gothic porch and oak panelling and a big fire place and whatever. It's kind of damp and grotty but it looks flash. We can't cope with little ordinary houses, we've lived in them for a while, I think both of us get severely depressed, and we are lucky that The Grange is cheap because we probably otherwise would have ended up spending a lot on rent. My London friends have a fit when they come up because we pay a month what they pay for half a week....it is very cheap. Its good, because it is a bit run down everyone there is either eccentric or poor or both so you don't have the pressure from the neighbours. There are no Mondeos at The Grange.....mostly clapped out old Land Rovers. It's good to get out of that pressure thing because there is nobody that you can compete with".

One of the most fascinating things in that passage is Emily's reference to Mondeos. She mentions the model name of a popular brand of car but the meaning she invests in that name can be interpreted as heavily loaded because it can be linked to a certain image or lifestyle which she is saying does not match hers. In a similar vein, her description of the house they live in also says something about lifestyle; it does not matter that it is falling apart, it looks very flash. This illustrates the point made by Firat and Venkatesh (1993) when they say that:

"...the postmodern consumer appreciates that value is not a property of the product, the thing, but a property of the image; that the image does not represent the product but the product represents the image" (original emphasis) (p.244)

CONCLUDING COMMENTS

These women appear to be fluent at constructing 'consumption stories' which help them to situate themselves in time and place and to be using aspects of their consumption activities and experiences to weave together a coherent narrative by the use of chronotopic forms. These narratives help construct a seamless web that draws upon personal history to legitimate current behaviour and which seems able to give the individual some control over chance and fate. They help the women to form their own identity where "identity provides an escape from uncertainty" (Baumann, 1996). Their utilisation of chronotopic narrative forms when the issue of identity arises occurs when they are coping with uncertainty and the stories they weave may change with time and space in line with conditions of postmodernity.

These women engage in compensatory consumption not only to deal with a specific 'lack' or difficulty, but also as part of a chronotopic rendering of life experiences which draws on many other resources. This paper has identified chronotopic narrative forms and their function in relation to the materialisation and maintenance of identity within the context of their lived experience of shopping and consumption behaviour.

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Goal-Motivated Reasoning: The Lure of the “Yes, I Can” Conclusion

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EXTENDED ABSTRACT

Both anecdotal evidence and experimental research have made us aware of the fact that we, as decision makers, often behave in ways that suggest the existence of prejudice, partiality, and other such biases that tend to lead us to a favored conclusion. Previous research in consumer behavior has shown how prior attitudes toward products affect the processing product information, analyzing the phenomenon within the *motivated reasoning* paradigm (i.e., Jain and Maheswaran 2000). Still, the scope of motivated cognitions is not limited to brand loyalty effects or existing product attitudes.

In the present research, we propose that certain forms of consumer motivated reasoning stem from strong drives derived from the pursuit of personally relevant goals, and that these motivated cognitions manifest themselves in the search and processing of product information, and in the formation of product attitudes. In particular, our research shows that these motivated cognitions help explain sometimes paradoxical behaviors—instances in which consumers make decisions that are not necessarily warranted by the information available to them in their environment.

Specifically, we propose the pursuit of a goal, and more in particular, the inherent desire individuals have to perceive their goals as attainable, are situational factors that affect consumer cognitive processes in the evaluation of products.

In a series of experiments we show that, when placed in situations where goal attainability is put into question, consumers resort to products that claim to make the target goal achievable. Then, the more critical the product is for goal attainment (i.e., the fewer alternative pathways to goal attainment the individual has) the more motivated the consumer is to evaluate the product as potentially effective. In order to reach this favorable product evaluation, the consumer gathers and processes product information in a biased manner, so as to arrive to the desired conclusion of goal attainability. The pursuit of a favored conclusion fits squarely within the motivated reasoning paradigm (Kunda 1990), in which individuals are driven by a need for specific closure (Kruglanski 1990). In our model, goal-pursuing consumers—particularly those lacking confidence regarding the attainability of their goals—engage in *goal-motivated reasoning* in order to arrive at the conclusion that their goal is attainable. These consumers select cognitive processing strategies and generate beliefs that help them convince themselves that their behavior (i.e., purchasing and consuming a product or service that supposedly is a means to goal attainment) is rationally justified. We provide supporting evidence to our model in three studies that have been conducted so far.

Study 1 provides evidence suggesting that, even in the presence of minimum product information, consumers who lack confidence regarding goal attainability (vs. those who have higher confidence) develop more favorable attitudes toward products that present themselves as means to goal attainment. Furthermore, we find a two-way interaction of attainability confidence and number of product alternatives, indicating that the incidence of goal-motivated reasoning is exacerbated as the number of available alternatives becomes smaller, because in such cases concluding that a particular goal-related product is effective becomes more critical.

Study 2 delves into the information search and evaluation process, and provides evidence suggesting that goal-motivated consumers assign lesser diagnosticity to negative goal-related product information than do non-motivated consumers. In a product information search task, participants lacking confidence about goal attainability required a larger amount of product-unfavorable information to conclude that the product was ineffective, compared to participants high in attainability confidence. Furthermore, and despite looking up more pieces of product-unfavorable information, participants low in attainability confidence formed less negative product attitudes than did participants high in attainability confidence.

Lastly, Study 3 shows that goal-motivated individuals exhibit a bias towards sources of information that are likely to be supportive of their favored conclusion (namely, that the product in question is effective). When given the choice of two sources of information differing in objectivity and product-favorability (i.e., a product brochure, and a newspaper article about the product), participants lacking in goal attainability confidence favored the product-favorable source (i.e., product brochure) over the impartial and potentially product-unfavorable source (i.e., newspaper article), while participants high in attainability confidence exhibited a more even-handed choice of information sources.

This research makes three main contributions to the consumer behavior literature: first, it describes instances in which consumer attitude formation is top-down (i.e., driven by personally-relevant goals) rather than bottom-up (i.e., driven by product information). Second, the goal-motivated reasoning model can lead to predictions that are quite different from what would be expected by traditional information processing models that assume impartial or non-motivated processing. Third, it identifies a novel set of antecedents to motivated reasoning: goal relevance, and a-priori confidence that the goal can be achieved. Significant implications can be derived from the present findings: results show that goal-pursuing consumers who lack confidence in goal attainability are inherently more prone to forming favorable attitudes toward products that present themselves as means to goal attainment, both in the presence of minimum information (i.e., simple product claims) and when information from different sources is at hand. As a corollary, it follows that consumers may make low-quality decisions regardless of the quality of the available information, and that consumers' vulnerability to certain marketing practices is at least as much a question of situational variables (i.e., boost confidence in goal attainability) as it may be of traditional demographical markers.

Pursuit of Regulatory Goals and the Use of Self-Regulatory Resources

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ABSTRACT

This paper proposes that pursuit of a prevention goal demands more self-regulatory resources than does pursuit of a promotion goal. As a result, depleting self-regulatory resources should be more likely to adversely influence the pursuit of a prevention goal than the pursuit of a promotion goal. Two studies are conducted in the contexts of hypothesis generating and endowment effect to test this proposition. Results of the studies provided support for the proposition.

INTRODUCTION

Regulatory focus theory (Higgins 1997; Higgins 2002) has recently drawn great attention from consumer behavior researchers and has been applied in areas such as persuasion (Lee and Aaker forthcoming; Aaker and Lee 2001), information processing (Zhu and Meyers-Levy 2003), and decision making (Crowe and Higgins 1997; Liberman 1999; Liberman et al. 2001). The theory proposes that individuals can pursue two distinct types of regulatory goals. Promotion goals entail achieving positive outcomes whereas prevention goals demand avoiding negative outcomes. People may differ in chronic accessibility of either of the two regulatory goals and the goals may also be activated temporarily by situational factors.

One aspect of the theory that has received limited attention is the process distinction between pursuit of a promotion goal and pursuit of a prevention goal. That is, how pursuit of a promotion goal is different from pursuit of a prevention goal in terms of the physiological and psychological processes involved. According to a recent model of self-regulatory resources (Baumeister et al. 1998; Muraven, Tice, and Baumeister 1998), pursuit of regulatory goals entails utilization of self-regulatory resources, which are limited in supply and can be temporarily depleted or fatigued by demands that are induced by situational or chronic regulatory goals. This paper investigates how pursuit of a promotion goal and pursuit of a prevention goal differ in the amount of self-regulatory resources demanded.

THEORETICAL BACKGROUND

Goals are “representational structures that guide the system in its pursuit of a reference or end state” (Markman and Brendl 2000, p. 98). Regulatory focus theory (Higgins 1997; Higgins 2002) distinguishes between two basic types of goals: promotion goals and prevention goals. The desired end state associated with a promotion goal is the presence of positive outcomes such as gain, achievement, and advancement. The desired end state associated with a prevention goal is the absence of negative outcomes such as loss, failure, and punishment.

Individuals can differ in chronic accessibility of either of the two regulatory goals. Individuals for whom promotion goals are more accessible than prevention goals have a promotion focus whereas individuals for whom prevention goals are more accessible than promotion goals have a prevention focus. According to regulatory focus theory (Higgins and Silberman 1998), differences in chronic regulatory focus may arise from different parenting styles. A parenting style that emphasizes protection and uses punishment as discipline induces a prevention focus whereas a parenting style that emphasizes encouragement and uses love withdrawing as discipline induces a promotion focus.

Regulatory goals can also be temporarily induced by situational factors. For example, regulatory goals can be activated by

advertising messages that focus on either a positive outcome achieved by consumption (thus activating a promotion goal) or a negative outcome avoided by consumption (thus activating a prevention goal) (e.g., Aaker and Lee 2001). Regulatory goals can also be activated by engaging in thoughts about hopes and aspirations (thus inducing a promotion goal) or duties and responsibilities (thus inducing a prevention goal) (e.g., Liberman et al. 2001).

Regulatory focus theory also proposes that individuals with a different regulatory focus differ in their strategic inclination in pursuing their goals. Specifically, an “eagerness” means is utilized to pursue a promotion goal whereas a “vigilance” means is deployed to pursue a prevention goal. To illustrate, consider a signal-detection situation where people are asked to decide whether a stimulus is present or not. There are four possible outcomes of each signal-detection trial: 1) a hit—accepting a correct stimulus, 2) a miss—rejecting a correct stimulus, 3) a false alarm—accepting a false stimulus, and 4) a correct rejection—rejecting a false stimulus. Individuals with a promotion focus are likely to use an “eagerness” means and thus are most concerned about obtaining a hit whereas individuals with a prevention focus are likely to use a “vigilance” means and thus are most concerned about avoiding a false alarm.

Consistent with the above theorizing, Crowe and Higgins (1997) found that promotion-focused individuals were inclined to say “yes” when asked to judge whether or not they’d previously seen the nonsense syllable currently presented whereas prevention-focused individuals were inclined to say “no” when performing the same task. In a series of study, Liberman et al. (2001) asked people to generate hypotheses with regard to a number of ambiguous objects or events (e.g., generate guesses for ambiguous pictures, generate explanations for ambiguous behaviors, etc.) and recorded the number of hypotheses generated. They found that promotion-focused individuals generated significantly more hypotheses than prevention-focused individuals. In another series of studies, Liberman et al. (1999) demonstrated that promotion-focused individuals prefer change, while prevention-focused individuals have a preference for maintaining the status quo. For instance, prevention-focused individuals are more inclined than promotion-focused individuals to resume an interrupted task rather than do a substitute task that may fulfill the same goal and to exhibit a reluctance to exchange currently possessed objects or previously possessed objects for money or objects with equal monetary values (i.e., the endowment effect; Kahneman, Knetsch, and Thaler 1990, 1991). This is because, consistent with regulatory focus theory, individuals with a prevention focus are more risk-averse than individuals with a promotion focus.

While much has been done with regard to the consequences of regulatory focus, so far little is known about the process distinction between pursuit of a promotion goal and pursuit of a prevention goal. How does pursuit of a promotion goal differ from pursuit of a prevention goal in terms of the physiological and psychological processes involved? A recent model of self-regulatory resources (Baumeister et al. 1998; Muraven, Tice, and Baumeister 1998) suggests that pursuit of a promotion goal may differ from pursuit of a prevention goal in terms of the amount of self-regulatory resources required.

Self-regulation refers to the self’s capacity to alter its own states and responses. Usually, self-regulation overrides one incipient pattern of response and replaces it with another (Baumeister 2002). According to the theory of self-regulatory resources, one’s ability to regulate (i.e., alter one’s own states and responses) is

governed by a finite pool of resources. This pool of resources can be temporarily depleted or fatigued by self-regulation demands induced by chronic personal goals or goals that are activated situationally.

A number of studies have provided clear evidence for the view that the pool of self-regulatory resources is finite and thus can be depleted or fatigued after usage (see Baumeister et al. 1998; Muraven, Tice, and Baumeister 1998). In these studies, subjects first engaged in some self-regulation activities intended to deplete self-regulatory resources. These activities included stifling (or amplifying) one's emotional response to an upsetting film, suppressing thoughts about a white bear, resisting the temptation to eat chocolates and cookies so as to force oneself to eat radishes instead (Baumeister 2002). The same subjects then engaged in a second task requiring self-regulatory resources. Their performance on this task was compared with that of a control group. A consistent finding has been that subjects who initially engaged in self-regulation and thus whose self-regulatory resources were depleted performed significantly worse on the second task requiring self-regulatory resources than those in the control group.

The theory of self-regulatory resources has been applied in studies investigating various phenomena such as consumer impulsive buying (Vohs and Faber 2003), subjective experience of time (Vohs and Schmeichel 2003), and information processing (Schmeichel, Vohs, and Baumeister 2003). For example, Vohs and Faber (2003) consider impulsive buying as a result of one's failure to self-regulate or control one's impulse to buy. They argue that one of the important reasons for this failure to self-regulate is the depletion of self-regulatory resources. They examined this theorizing in two studies. In both studies, subjects were asked to watch a six-minute videotape, without audio, that featured a woman being interviewed by an off-camera interviewer and were told that they would later be asked to make personality judgments about the interviewee. In addition to the woman being interviewed, the tape also showed common, one-syllable words (e.g., play, tight, greet) presented individually at the bottom of the screen. Each word appeared for 30-seconds. Subjects in the resource depletion condition were asked not to look at the words and focus their attention to the woman and those in the control group were given no explicit instructions. After watching the video, all subjects performed some tasks designed to tap into their tendency to engage in impulsive buying. It was found that depleting self-regulatory resources significantly increases one's tendency to engage in impulsive buying.

It is important to note that the theory of self-regulatory resources posits that self-regulatory resources are mainly used to override one response with another (see Baumeister and Vohs in press). Overriding an incipient response with another needs to draw from the finite pool of self-regulatory resources but executing the incipient response needs not to draw from the pool of resources. In the case of impulsive buying, overriding the urge to buy consumes self-regulatory resources whereas unleashing the urge to buy does not consume self-regulatory resources. This theorizing has important implications for delineating the process distinction between pursuit of a promotion goal and pursuit of a prevention goal.

According to regulatory focus theory, pursuit of a promotion goal entails an "eagerness" means, which strives for achieving positive outcomes. A basic strategy for maximizing the probability of the presence of a positive outcome is to execute as many trials as possible (Lieberman et al. 2001). Thus, in the process of pursuing a promotion goal, there are relatively fewer cases wherein one needs to override an incipient response with another one since an incipient response often gets executed. Consequently, pursuing a promotion goal demands relatively fewer self-regulatory resources. In contrast, pursuit of a prevention goal entails a "vigilance" means, which

strives for avoiding negative outcomes. A basic strategy for maximizing the probability of the avoidance of a negative outcome is to execute as few trials as possible (Lieberman et al. 2001). Hence, in the process of pursuing a prevention goal, there are relatively more cases wherein one needs to override an incipient response with another since an incipient response often does not get executed. Consequently, pursuing a prevention goal demands relatively more self-regulatory resources.

To illustrate, consider a hypothesis-generating situation. With a promotion goal, one often adopts the strategy of generating as many hypotheses as possible to maximizing the probability of "hit"—accepting a correct hypothesis (Lieberman et al. 2001). Thus, whatever that comes to mind that seems to be a plausible hypothesis will be accepted as true. In this case, one needs not to engage in self-regulation by replacing an incipient response (i.e., accepting an initial plausible hypothesis) with a new one (i.e., not to accept this initial plausible hypothesis). Therefore, relatively fewer self-regulatory resources are required here. In contrast, with a prevention goal, one often adopts the strategy of generating as few hypotheses as possible to maximizing the probability of avoiding a "false alarm"—accepting an incorrect hypothesis (Lieberman et al. 2001). Thus, while one's initial response is to accept a plausible hypothesis, this initial response is often curbed and the hypothesis reevaluated to ensure against false acceptance. In this case, one needs to engage in self-regulation by replacing an incipient response (i.e., accepting an initial plausible hypothesis) with a new one (i.e., not to accept this initial plausible hypothesis). Therefore, relatively more self-regulatory resources are required here.

The same reasoning can also be illustrated within an object substitution situation. In this situation, an opportunity for change is presented (i.e., an opportunity for exchanging one's object with another one with an equal monetary value). The presence of this opportunity may induce an initial response to exchange. When the goal is preventional, this initial response is often coerced and replaced with a safer option (i.e., denying the exchange and keeping the original object). The process of replacing the initial response with a different response requires self-regulatory resources. Thus, pursuit of a prevention goal should demand self-regulatory resources. On the other hand, when the goal is promotional, the initial response of exchanging is often not curbed but executed. In this case, no self-regulatory resources are needed. Therefore, pursuit of promotion goal should demand few self-regulatory resources.

A direct implication of the above reasoning is that depleting self-regulatory resources will be more likely to adversely influence the pursuit of a prevention goal than the pursuit of a promotion goal. In a hypothesis-generating situation, the successfulness of pursuing a particular goal can be operationalized as the number of hypotheses generated. The pursuit of a promotion goal is more successful if more hypotheses are generated since a larger number of hypotheses implies a greater probability of achieving a positive outcome (i.e., accepting a correct hypothesis). The pursuit of a prevention goal is more successful if fewer hypotheses are generated since a smaller number of hypotheses implies a greater probability of avoiding a negative outcome (i.e., avoid accepting an incorrect hypothesis). Therefore, when a prevention goal is more accessible, depleting self-regulatory resources should increase the number of hypotheses generated. In contrast, when a promotion goal is more accessible, depleting self-regulatory resources should have no effect on the number of hypotheses generated. More formally:

H1: depleting self-regulatory resources will significantly increase the number of hypotheses generated with regard to an ambiguous object when a prevention goal is more accessible but will have no effect on the number of

hypotheses generated when a promotion goal is more accessible.

In an object substitution scenario, the successfulness of pursuing a particular goal can be operationalized as the tendency of exchanging one's object for another object with an equal monetary value. The pursuit of a promotion goal is more successful if there is a stronger tendency to exchange since exchange opens opportunities for positive outcomes. The pursuit of a prevention goal is more successful if there is a weaker tendency to exchange since exchange may lead to potential losses. As argued previously, depleting self-regulatory resources will be more likely to adversely influence the pursuit of a prevention goal than the pursuit of a promotion goal. Consequently, when a prevention goal is more accessible, depleting self-regulatory resources should increase the tendency to exchange. In contrast, when a promotion goal is more accessible, depleting self-regulatory resources should have no effect on the tendency to exchange. More formally:

H2: depleting self-regulatory resources will significantly increase the tendency to exchange one's object for another object with an equal monetary value when a prevention goal is more accessible but will have no effect on this tendency when a promotion goal is more accessible.

STUDY 1

This study tests H1, which posits that depleting self-regulatory resources will significantly increase the number of hypotheses generated with regard to an ambiguous object when a prevention goal is more accessible but will have no effect on the number of hypotheses generated when a promotion goal is more accessible. Thus, a significant interaction effect of self-regulatory resources (depleted vs. normal) and regulatory focus (promotion vs. prevention) on the number of hypotheses generated is predicted.

Method

Participants and Procedure. 40 undergraduate students from an introductory communication class participated in this study in exchange for extra credits. Each subject was randomly assigned to one of the four experimental conditions by receiving a booklet previously shuffled. On the first page of the booklet, subjects were told that they were about to engage in three unrelated tasks. The first task was actually a manipulation of self-regulatory resources. The second task was a hypothesis-generating task similar to the one used in Liberman et al. (2001). The third task was to respond to a scale measuring chronic regulatory focus. The subjects performed these tasks at their own pace.

Manipulation of Self-Regulatory Resources. The manipulation of self-regulatory resources was similar to the one used in Vohs and Faber (2003). All subjects were told that the first task required them to read a short article from a recent issue of *New York Times* (an article about medical bills with about 250 words) and their memory for specific facts mentioned in the article would be tested later. The article appeared in the middle of the next page. There was a picture both above and below the article. The upper picture showed a group of young people and the lower picture featured a famous movie star (Richard Gere). The pictures were reasonably eye-catching. Half of the subjects were asked to focus on the article and not to look at the pictures. They were also told that in case they found themselves looking at the pictures while reading, they should immediately refocus their attention on the article (the "depleted" condition). The other half of the subjects were not given explicit instructions with regard to the pictures (the "normal" condition).

The Hypothesis-Generating Task. After completing the first task, subjects engaged in a hypothesis-generating task, similar to the one used in Liberman et al. (2001). Subjects were given the following instruction: In this task you will be presented with pictures of familiar objects. The pictures were somehow truncated and blurred, so that the objects are difficult to recognize. Your task will be to guess what the original object is. You may list as many or as few answers as you want. The next page featured a picture of an ambiguous object (a truncated and blurred picture of a baseball). Under the picture were several blank lines on which subjects could write down their hypotheses.

Measure of Regulatory Focus. Regulatory focus was measured by a scale developed by Lockwood, Jordan, and Kunda (2002). The scale was comprised of 18 items, 9 of which were related to a promotion focus and the other 9 items were related to a prevention focus. Subjects were asked to rate themselves on each of the 18 items. Ratings were made on a 9-point scale with endpoints labeled 1 (not at all true of me) and 11 (very true of me). Scores on the 9 items measuring promotion focus were averaged to form an index of promotion focus and scores on the 9 items measuring prevention focus were averaged to form an index of prevention focus. Subjects were classified as predominantly having a promotion focus or predominantly having a prevention focus on the basis of a median split of the difference between the average score for promotion focus and the average score for prevention focus.

Results

It is predicted that depleting self-regulatory resources will significantly increase the number of hypotheses generated with regard to an ambiguous object when a prevention goal is more accessible but will have no effect on the number of hypotheses generated when a promotion goal is more accessible. Thus, an interaction between self-regulatory resources (depleted vs. normal) and regulatory focus (promotion vs. prevention) is expected. A 2x2 ANOVA was performed to examine the interaction effect. The dependent variable was the number of hypotheses generated, which represented the degree to which a promotion or a prevention goal was successfully pursued. For a promotion goal, a larger number of hypotheses generated indicates a more successful pursuit of the goal; for a prevention goal, a larger number of hypotheses generated indicates a less successful pursuit of the goal. Results of the ANOVA revealed an interaction between self-regulatory resources and regulatory focus that approached to significance ($F(1, 36)=3.59, p<.07$). The main effects of self-regulatory resources and regulatory focus were both insignificant (see Table 1 and Figure 1). To gain a better understanding of the nature of the interaction, planned contrasts were conducted. Results of the contrasts revealed that for promotion-focused individuals, depleting self-regulatory resources had no effect on the number of hypotheses generated ($M_{\text{depleted}}=2.00, M_{\text{normal}}=2.18, t=.47, p>.60$) whereas for prevention-focused individuals, depleting self-regulatory resources significantly increased the number of hypotheses generated ($M_{\text{depleted}}=2.36, M_{\text{normal}}=1.56, t=-2.33, p<.04$). Additionally, under normal condition (i.e., self-regulatory resources were not depleted), promotion-focused individuals generated somewhat more hypotheses than prevention-focused individuals ($M_{\text{promotion}}=2.18, M_{\text{prevention}}=1.56, t=-1.59, p=.13$), consistent with previous findings (Liberman et al. 2001).

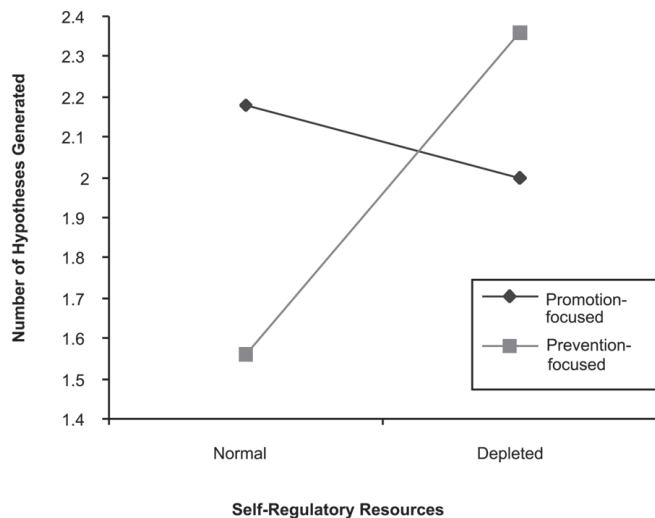
STUDY 2

This study tests H2, which posits that depleting self-regulatory resources will significantly increase the tendency to exchange one's object for another object with an equal monetary value when

TABLE 1
Number of Hypotheses Generated by Regulatory Focus and Self-Regulatory Resources

Regulatory Focus	Self-Regulatory Resources	
	Depleted	Normal
Promotion	2.00 (.71)	2.18 (.98)
Prevention	2.36 (.81)	1.56 (.73)

FIGURE 1
The Interaction between Self-Regulatory Resources and Regulatory Focus



a prevention goal is more accessible but will have no effect on this tendency when a promotion goal is more accessible. Thus, a significant interaction effect of self-regulatory resources (depleted vs. normal) and regulatory focus (promotion vs. prevention) on the tendency to exchange one's object for another object with an equal monetary value is predicted. Study 2 had a similar experimental design as Study 1.

Method

Participants and Procedure. 40 undergraduate students from an introductory communication class participated in this study in exchange for extra credits. Data from three subjects were dropped because of largely incomplete information provided on their questionnaires. Each subject was randomly assigned to one of the four experimental conditions by receiving a booklet previously shuffled. Each subject was given a pen and was initially told that the pen was given as a gift for participation. On the first page of the booklet, subjects were told that they were about to engage in two unrelated tasks. Subjects first responded to the same 18 questions measuring regulatory focus used in Study 1. The second task was a manipulation of self-regulatory resources, which was similar to the one used on Study 1. Subjects then responded to a manipulation check question (i.e., while reading the New York Times article, you tried hard to control yourself not to look at the pictures) answered on a 1-9 scale with "1" representing "strongly disagree" and "9" repre-

sented "strongly agree." A straight line and a thank you note appeared below the manipulation check question, making the impression on the part of the subjects that they had reached the end of the study. A surprising message appeared below the straight line and the thank you note:

In fact, I have some extra pens, each of which is worth the same amount of money as the one you have now (i.e., \$1.50). If you like, you can exchange your current gift pen with one of the extra pens.

Subjects were asked to indicate how much they would like to exchange their current gift pen with one of the extra pens on a 1-9 scale with "1" representing "not at all" and "9" representing "very much."

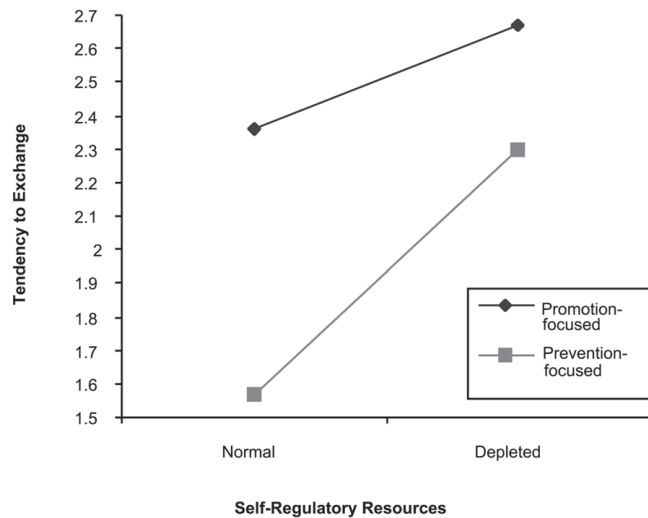
Results

It is predicted that depleting self-regulatory resources will significantly increase the tendency to exchange one's object for another object with an equal monetary value when a prevention goal is more accessible but will have no effect on this tendency when a promotion goal is more accessible. Thus, an interaction between self-regulatory resources (depleted vs. normal) and regulatory focus (promotion vs. prevention) is expected. A 2x2 ANOVA was performed to examine the interaction effect. The dependent vari-

TABLE 2
Tendency of Exchange by Regulatory Focus and Self-Regulatory Resources

Regulatory Focus	Self-Regulatory Resources	
	Depleted	Normal
Promotion	2.67 (1.87)	2.36 (1.80)
Prevention	2.30 (1.70)	1.57 (0.78)

FIGURE 2
The Interaction between Self-Regulatory Resources and Regulatory Focus



able was the tendency to exchange one's gift pen, which represented the degree to which a promotion or a prevention goal was successfully pursued. For a promotion goal, a stronger tendency to exchange indicates a more successful pursuit of the goal; for a prevention goal, a stronger tendency to exchange indicates a less successful pursuit of the goal. Results of the ANOVA revealed a pattern of interaction between self-regulatory resources and regulatory focus that was consistent with H2, but was statistically insignificant. Both main effects were not statistically significant. From Table 2 and Figure 2, we can see that for subjects involved in Study 2, those with a promotion focus in general had a stronger tendency to exchange their gift pens than those with a prevention focus, which was consistent with the previous finding that prevention-focused people show a stronger endowment effect than promotion-focused people (Liberman et al. 1999). For subjects in Study 2, depleting self-regulatory resources had a stronger effect on the tendency to exchange one's gift pen for those with a prevention focus than those with a promotion focus. For those with a prevention focus, depleting self-regulatory resources increased the tendency to exchange one's gift pen, indicating a less successful pursuit of one's prevention goal, which was to keep the status quo.

DISCUSSION

This paper offers some general theoretical propositions and reports the procedures and results of two pilot studies testing these

propositions. The central argument of this paper is that pursuit of a prevention goal demands more self-regulatory resources than does pursuit of a promotion goal. According to the theory of self-regulatory resources, overriding an incipient response and replacing it with another one consumes self-regulatory resources, which are finite and can be depleted or fatigued by usage (Baumeister and Vohs in press). Because pursuit of a prevention goal often involves overriding an initial response with another, it is expected to consume self-regulatory resources. On the other hand, since pursuit of a promotion goal often involves executing an initial response and thus does not require controlling the incipient response, it needs not to consume self-regulatory resources. A direct implication of the central argument is that depleting self-regulatory resources will be more likely to adversely influence the pursuit of a prevention goal than the pursuit of a promotion goal.

This reasoning provides a basis for more specific predictions. According to Liberman and colleagues (2001, 1999), individuals with a prevention focus will generate fewer hypotheses with regard to an ambiguous object/event than individuals with a promotion focus. In addition, prevention-focused individuals will be more inclined than promotion-focused individuals to resume an interrupted task rather than do a substitute task that may fulfill the same goal and to exhibit a reluctance to exchange currently possessed objects or previously possessed objects for money or objects with equal monetary values. Thus, the successfulness of pursuit of

regulatory goals can be operationalized either as the number of hypotheses generated with regard to an ambiguous object or as the tendency to exchange one's object for another object with an equal monetary value. Consequently, it is predicted that depleting self-regulatory resources will significantly increase the number of hypotheses generated with regard to an ambiguous object when a prevention goal is more accessible but will have no effect on the number of hypotheses generated when a promotion goal is more accessible (H1). In addition, it is proposed that depleting self-regulatory resources will significantly increase the tendency to exchange one's object for another object with an equal monetary value when a prevention goal is more accessible but will have no effect on this tendency when a promotion goal is more accessible (H2).

The results of Study 1 provided support for H1. A significant interactive effect between self-regulatory resources and regulatory focus on the number of hypotheses generated with regard to an ambiguous object emerged. Specifically, for promotion-focused individuals, depleting self-regulatory resources had no effect on the number of hypotheses generated. This implies that pursuit of a promotion goal does not draw upon the finite pool of self-regulatory resources. In contrast, for prevention-focused individuals, depleting self-regulatory resources significantly increased the number of hypotheses generated. This implies that pursuit of a prevention goal does consume self-regulatory resources that are in limited supply.

More perplexing were the results from Study 2. The results showed a general pattern that was consistent with findings by other researchers and H2. Specifically, subjects with a promotion focus in general showed a stronger tendency to exchange their gift pen than those with a prevention focus, which was consistent with Liberman et al.'s (1999) study on endowment effect. In addition, depleting self-regulatory resources seemed to increase subjects' tendency to exchange their gift pen and this effect was more prominent for those with a prevention focus. However, because the results were not statistically significant, generalizations cannot be made based on the results of this study. Small sample size might have made it difficult for significant results to emerge. Future studies may include more subjects and see whether something more substantive was responsible for the insignificant results.

Although regulatory focus theory has recently drawn great attention from consumer behavior researchers, the process distinction between pursuit of a promotion goal and pursuit of a prevention goal, has rarely been explored. This paper is among the first a few attempts to bridge the research on regulatory focus and the research on self-regulatory resources and offer a specific prediction with regard to the relative amount of self-regulatory resources required by pursuit of a promotion goal vs. pursuit of a prevention goal. This proposition received some empirical support and more studies are needed to test the validity of this proposition and to find boundary conditions that may exist.

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If The Table for McWorld Has Been Set by Hollywood, What is Served by Bollywood?

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ABSTRACT

Globalization is embraced for bringing international goods to new places and critiqued for creating a homogenized world where multinational brands supersede indigenous cultural offerings. We present a framework to explicate differences in attitudes toward glocalization; it operates on a continuum from acceptance (globally synchronous) to reactance/boycott (Swadeshi). Glocalized marketing strategies and consumer response to these strategies are assessed within the context of product placements in Bollywood films. A content analysis of brand placements within Bollywood films at four points in time since liberalization (1991, 1996, 2001, 2002) shows a rise in the number of brands, particularly multinational brands, which are more likely to be woven into the plot than domestic brands. According to results of a survey, middle-class Indians report both positive and negative attitudes toward international brands and brand placements. Brand placements are interpreted as a Western marketing practice and are embraced among globally synchronous consumers who look to films for cues for their own purchase behaviors. International brand placements and brands are critiqued for their potential negative influence on the Indian economy among Swadeshi consumers. Swadeshi (or home economy) was a nonviolent movement initiated by Mahatma Gandhi in the early 20th century. Gandhi urged Indians to boycott British goods as a form of protest against the Imperial power and to work towards local self-sufficiency. The recent introduction of multinational brands seems to evoke memories of this historic event among the young consumers and motivates their brand choice in the present day.

Gentrification and Consumption: An Exploratory Study

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ABSTRACT

This study explores the relationship between gentrification and consumption, through an ethnographic study of a gentrified neighborhood in Istanbul, Turkey. Specifically, we discuss gentrification as a spatial manifestation of a wider consumption ideology, and gentrifiers as a critical consumption community. We hope to contribute to both gentrification and consumer behavior literatures by offering an emic understanding of gentrifiers and their consumption practices. We also hope to generate interest on the topic among consumer behavior scholars.

INTRODUCTION

Consumption collectivities received considerable research attention (e.g., Kates, 2002; Kozinets, 1997, 2001; Muniz and O'Guinn, 1995, 2001; Schouten and McAlexander, 1995; Thompson and Troester, 2002). These studies explored the nature, composition and dynamics of various forms of consumption communities. We aim to contribute to this literature by examining gentrifiers as a consumption community. While gentrification has been extensively researched outside the marketing discipline, it has not been adequately discussed from a consumption theory perspective. Gentrification is typically viewed as a consumption practice through which new middle classes seek to distinguish themselves from the old middle class. However, these accounts of gentrification depend too much upon implicit assumptions about the nature of consumption practices and lack an emic understanding of the actual practices of gentrifiers. In this study, we aim to contribute to both gentrification and consumer behavior literatures by examining gentrification as a spatial manifestation of a wider ideology of consumption, and gentrifiers as a critical consumption community. We also hope to contribute to these literatures by offering a study of gentrification in a non-Western context, Istanbul, Turkey, and add new insights to our understanding of gentrification.

Given the lack of interest within the marketing discipline, we first offer a review of gentrification literature, and discuss the implications of gentrification for marketing. Next, we explain the study we conducted by briefly outlining the gentrified neighborhood and our research methodology. In the findings section, we discuss two main results, gentrifiers as a consumption community and the transformation of the retailscape in the gentrified neighborhood. We conclude by a discussion of why gentrifiers constitute a critical consumption community and future research areas.

GENTRIFICATION

The term "gentrification" was first introduced by Ruth Glass in 1964 (Ley, 1986; Schaffer and Smith, 1986; Smith and Defilippis, 1999; Smith, 2002) to refer to the process whereby a new urban "gentry" transformed working-class quarters in London. Gentrification is defined as a process "by which poor and working-class neighborhoods in the inner city are refurbished by an influx of private capital and middle-class homebuyers and renters" (Smith, 1996, p.7). Since the introduction of the term gentrification, a voluminous literature on the topic developed. As Zukin (198, p.29) points out, the early research on gentrification focused on documenting its extent as a process of neighborhood change, and "speculating on its consequences for reversing trends of suburbanization and inner-city decline." Most of the existing literature on gentrification focuses on the cases that took place in cities

in advanced capitalist countries such as Melbourne (Cole, 1985), Sydney (Bridge, 2001) and Adelaide (Badcock, 2001) in Australia; Toronto (Caulfield, 1994; Ley, 1986) and Montreal (Cole, 1985) in Canada; New York (Schaffer and Smith, 1986; Mele, 1994), New Orleans (O'Loughlin and Munski, 1979), San Francisco (Robinson, 1995), and Washington D.C. (Lee *et al.*, 1985) in the U.S.; Paris (Brun and Fagnani, 1994) in France; Glasgow in Scotland (Bailey and Robertson, 1997) and London (Butler and Robson, 2001) in the U.K.

The difference between earlier experiences of rehabilitation and contemporary gentrification is that the latter is far more systematic and widespread. Gentrification became an international process synchronized with larger economic, political, and social changes (Zukin, 1987). According to Hackworth (quoted in Smith, 2002) the first wave of gentrification was what Ruth Glass observed as a sporadic and quaint process of urban renewal in the 1950s. The second wave—the *anchoring* phase as Hackworth labels it—became evident in 1970s and 1980s as gentrification became entangled with wider processes of urban and economic restructuring. Gentrification did not remain as a process, which is exclusive to the largest cities such as New York and London, it also took place in other cities, such as previously industrial cities (e.g., Cleveland and Glasgow) or smaller cities (e.g., Malmö or Grenada), and even small market towns (e.g., Lancaster, Pennsylvania, Ceske Krumlov in the Czech Republic). At the same time, gentrification became a global phenomenon, evident in many cities around the world, "from Tokyo to Tenerife, Sao Paulo to Pueblo, Mexico, Cape Town, to the Caribbean, Shanghai to Seoul" (Smith, 2002, p.439). Hackworth identifies the final wave of gentrification, which has been occurring since 1990s, as "generalized gentrification"—a component of the liberal urban strategy. Today gentrification is a global phenomena and "is densely connected into the circuits of global capital and cultural circulation" (Smith, 2002, p.427).

The debates over the causes of gentrification focus on "the shifts in the urban structure versus shifts in the value preferences of the baby boom generation" (Cordova, 1991, p.27). The production-based explanation focuses on the supply side of the process and stresses the role of state and capital in producing both the potential and reality of gentrification (Schaffer and Smith, 1986). According to Cordova (1991) gentrification is a creation of real estate agents, property developers, and banks who control the "who" and "where" of urban property shifts. Similarly, Smith argues that gentrification takes place in neighborhoods where there is a significant "rent gap"—the disparity between "the actual capitalized ground rent (land value) of a plot of land given its present use and the potential ground rent that might be gleaned under a 'higher and better' use" (Smith, 1987, p.462, also see Smith, 1996). When the gap is significant enough, land developers, landlords and "occupier developers" make profit by reinvesting in abandoned inner-city properties and preparing them for new inhabitants. Furthermore, changes in the economic structure may trigger gentrification. Gentrification becomes a manifestation of "a white-collar residential style" (Zukin, 1987, p.135) indicating the agglomeration of large companies and their professional, managerial, and technical staffs and related business services in the urban core.

Demand-side (consumption-based) explanations of gentrification, on the other hand, stress consumer preference for the buildings and neighborhoods that become gentrified. Several fac-

tors underlie consumer preference: the taste for the inner city neighborhoods characterized by social and cultural diversity; the allure of distinctive architecture of the housing stock; attractiveness of the proximity of gentrified neighborhoods to central city; and changes in household structure—higher number of single adults living together, higher female labor participation rate, higher divorce rate, etc. (Ley, 1986; O’Loughlin and Munski, 1979; Schaffer and Smith, 1986; Zukin, 1987). Demand-side analyses perceive gentrification as a spatial manifestation of the values of the “new middle class.” The new middle class, an offspring of post-Fordism, urges to stay away from tastes and values associated with old middle and working classes (Featherstone, 1991; Lury, 1996). One of the hallmarks of this new middle class has been its ability to exploit the emancipatory potential of the inner city, and indeed to create a new culturally sophisticated, urban class fraction, less conservative than the old middle class (Ley, 1996). As Zukin argues the new middle classes’ “generally high educational and occupational status were structured by—and in turn expressed—a distinctive *habitus*, a class culture and milieu in Bourdieu’s sense. Thus, gentrification may be described as a process of spatial and social differentiation” (1987, p.131).

IMPLICATIONS FOR MARKETING

Gentrification has long been viewed as a consumption practice through which a certain fraction of the new middle class seeks to create distinction from the old middle class, especially suburban middle class (Jager, 1986; Warde, 1991; Ley, 1996). However, as Warde (1991: 224) argues accounts of gentrification depend too much upon *implicit* assumptions about the nature of consumption practices due to “the absence of an acceptable, articulated theory of consumption.” It appears that despite the existence of a voluminous literature on gentrification, a consumption-oriented understanding of gentrification, which is attentive to the community-place-consumption dynamics and actual practices of the gentrifiers, is absent. We argue that rather than studying gentrification only as a consumption practice we need to conceptualize gentrification as a spatial manifestation of a wider strategy of consumption in which place-community interaction helps individuals not only to create distinction from mainstream consumption practices but also to criticize these practices. It is this reversed relationship between gentrification and consumption—that is studying consumption through gentrification rather than the other way around—renders gentrification a topic worth for studying by consumer behavior researchers.

Gentrification involves consumption of buildings/homes and neighborhoods, which are potent sources of identity (Belk, 1988). As Jager (1986) argues the most visible tool for distinctiveness is the residential environment of gentrifiers, especially their historical houses and neighborhoods. Gentrification related consumption, however, also includes practices such as shopping and attendance in cultural and social amenities, which are expressive of lifestyles. As gentrifiers seek distinctiveness through consumption, “gentrification’s consumption markers are explicitly identified with a specific type and use of space” (Zukin, 1995, p.40). The retailscapes of gentrified neighborhoods provide clues about the consumption practices and lifestyles of gentrifiers. Accordingly, we can conceptualize gentrifiers as a consumption community gathered around a lifestyle embedded in a particular space and time composition, rather than narrowly as a geographical community.

The term “consumption community” was first introduced by Daniel Boorstin (1973) to refer to informal groups expressing shared needs, values, or lifestyles through distinctive consumption patterns. In the following years, several studies addressing con-

sumption and community linkages appeared in the marketing journals. Researchers examined subcultures of consumption (Kates, 2002; Kozinets, 1997; Schouten and McAlexander, 1995); cultures of consumption (Kozinets, 2001); brand communities (Muniz and O’Guinn, 1995; 2002); and, consumption micro-cultures (Thompson and Troester, 2002). These collectivities can be concentrated in a particular location or scattered throughout the country; they may occasionally meet or continue their existence on virtual space. The social context may be rich in terms of personal interaction among members or there may be few personal interactions other than those required by the activity. While some collectivities are stable and enduring, others are temporary or periodic. The basis of identification may range from leisure pursuits to particular brands or commonalities that are prevailing in the members’ live, such as homosexuality. In some cases, the consumption object becomes the catalyst of the collectivity; in others, the activity becomes the locus.

Consumption can create communities and these new communities can disintegrate and replace traditional communities (Boorstin, 1973). However, neighborhoods still operate as a source of identity (Cole, 1985). As other communities, neighborhoods are defined in terms of what it is as well as what it is not. The neighborhoods are socially constructed in relation to other neighborhoods and their residents. This construction creates a sense of belonging, which is composed of others with perceived similarities. These perceptions create norms and rules with which the relationships within the community are shaped and mediated. Moreover, similar to the sense of community emerged in the traditional neighborhood, the contemporary neighborhood still has a “linking value” (Cova, 1996) that gathers people around a perceived common identity.

As any other neighborhood, gentrified neighborhoods are socially constructed. We argue that, apart from a common residential choice and a shared geographical area, a sense of community is created and reinforced as the neighborhood is gentrified. This gentrified community resembles brands in the sense that they become commodified by both residents and non-residents. Often, this construction is facilitated by mass media through the stories and images articulated about the neighborhood. As the imagery of the gentrified community circulates in the public discourse, the area attracts more people and a particular sense of community intensifies. This sense of community involves markers of traditional communities, such as consciousness of kind, shared ethos and beliefs, and traditions. Increasingly this shared consciousness becomes reflected in consumption practices of gentrifiers, creating a sense of what are appropriate consumption practices and what are not.

THE STUDY

Guided by our conceptualization of gentrification as a reflection of a wider consumption strategy of creating distinction from various other social collectivities, we explore the relationship between consumption and gentrification through a study of a recently gentrified neighborhood in Istanbul, Turkey. Gentrification is a relatively new phenomenon in Turkey and is observed uniquely in a district called Cihangir, which is located in what is historically known as the Pera district of Istanbul. It is a dense residential neighborhood where the settlement dates back to 17th century. During the Ottoman period, the area was inhabited mostly by non-Muslim members of the empire and foreigners who dealt with trade. After the establishment of the Turkish Republic, the district went through an intense Turkification process and lost much of its cosmopolitan nature. Once an upscale residential area, Cihangir gradually lost its flair, and beginning in the 1960s became a target of internal migration. The area was increasingly populated by rural

immigrants from Eastern Turkey, and became associated with poverty, crime and prostitution. The fate of the neighborhood, however, began to change in the 1990s, during which the municipality of Istanbul executed a project to rehabilitate the greater area of Pera. Since the beginning of the 1990s, both the physical and social composition of Cihangir changed drastically. The district gradually turned into a popular inner-city neighborhood with increasing rents and renovated building and streets.

Given the exploratory nature of the study, we employed qualitative research methods. The data were collected by the first author through a forty-two days field study between April and June 2003. In-depth interviews and participant observation were the main data collection methods. Observations were made in public places, such as cafés, restaurants, parks, and streets, as well as in meetings, such as protests and regular meetings of the neighborhood association. Extensive field notes and visual data supported in-depth interviews.

Sample selection for the interviews is based on the statistical data provided by the neighborhood principal. The data included age, education, gender, marital status, occupation, religion, and address of 4,662 Cihangir residents. Four different groups of individuals were interviewed during the research: gentrifiers; old residents; shopkeepers and retailers; and professionals, such as architects and real estate agents. To identify gentrifiers, we followed Ley's (1996) classification, which categorizes gentrifiers into two groups: pioneers and followers. The pioneers choose the inner-city locations because of their cultural amenities, lifestyle and historical value. They are viewed as the risk-oblivious segment. The second group, followers are risk-averse, and they move to the newly upgrading neighborhoods not only because they appreciate urban core lifestyle but also they perceive these areas as investment opportunities. Our sample includes both pioneers and followers. In order to differentiate between these categories, we used date of moving to neighborhood as a key determinant. In order to understand the production side dynamics and to trace the temporal dimension of the gentrification process, interviews with real estate agents and other professionals interested in the neighborhood, such as architects, were conducted. The analysis suggested that gentrification of Cihangir begun in the beginning of 1990s, and reached its zenith between 1997 and 1999. Based on this observation, those who moved between 1990 and 1997 were categorized as pioneers, and those who moved later as followers. In both groups, we sought to interview informants with diverse backgrounds in terms of occupation, education, gender and age. The informants' ages range from 26 to 67. We interviewed gentrifiers who have been living in the area for more than ten years as well as those who have moved less than a year. The interviews with gentrifiers lasted 60 minutes on average, ranging from 30 to 100 minutes. Almost all of the interviews were tape-recorded and transcribed verbatim. On the other hand, old residents were interviewed to elucidate their reactions toward gentrification and newcomers. Interviews with retailers and shopkeepers were conducted to acquire further insights about the gentrification process, to which many of them were close witnesses.

In analyzing our data, we followed the general procedures of grounded theory (Strauss and Corbin, 1990). First, each interview is coded and analyzed individually. Categories and themes identified for each interview is, then, compared with other interviews, first within their respective groups (i.e., pioneers or followers), and then across groups. Finally, we established relations among the emerging patterns and identified how they relate to pertinent theoretical constructs. Due to space limitations, we discuss only two of our findings, gentrifiers as a consumption community and the transformations in the retailscape, and omit informants' quotes.

FINDINGS

Gentrifiers as a Consumption Subculture

Pioneers and followers constitute a significant portion of the population of Cihangir. Pioneers consist mostly of university students, academics and artist who moved to the neighborhood when it provided affordable housing at the early stages of gentrification. Followers, on the other hand, usually have more income and hold positions in creative sectors, such as advertising and design, as well as white-collar jobs in the service sector. They express a taste for historical buildings, and usually seek dilapidated apartments, which provide an opportunity for large-scale restoration. They consider the neighborhood as a livable residential alternative, as well as an investment opportunity.

Both pioneers and followers, almost unanimously, state that proximity of Cihangir to the urban core as their reason of moving to the area. Being close to the center reduces the burden of transportation in a congested city like Istanbul. Living in the urban core also provides easy access to cultural amenities, a factor that is valuable especially for pioneers. The informants also mention the physical landscape, characterized by stone buildings with extravagant facades, built in the 19th and early 20th centuries, as an important motive for their settlement. However, what emerges as the most important reason for their preference of Cihangir is an enthusiasm for social diversity. They still consider the area as highly cosmopolitan, comprising of artists, students, lower and working class households, prostitutes, drug dealers, subcultures of different sexual stances—transvestites and homosexuals—and foreigners that work at the nearby foreign high schools and consulates. Many informants state that the existence of such diversity creates a feeling of anonymity, a sentiment that is perceived as emancipatory (Caulfield 1994).

Informants depict a prototypical resident, the *Cihangirli* [translates as one who resides in Cihangir], who is a frequent attendant of cultural amenities, tolerates and appreciates social diversity, and is interested in the historical character of the neighborhood. The *Cihangirli* possesses a proper combination of cultural and economic capital. While cultural capital is appreciated more, economic capital is also necessary, as one needs substantial financial resources in order to afford residing in the neighborhood. The *Cihangirli* identity stands in opposition to several other residential typologies present in contemporary Istanbul.

First, there are those who stay away from Cihangir because they view the urban core as “unclean”—characterized by security problems, threats of social diversity, congestion, etc. They are, according to the informants, *site* people. *Site*, a gated, suburban housing complex, is viewed as socially homogeneous and homogenizing, conformist, controlling, sterile, and artificial (for a detailed analysis of *site*, see Öncü, 1997). In concurrence with Caulfield's observation that gentrifiers “find suburbs and modernist spaces unlivable” (1994, p.124), most of our informants explain their choice of living in Cihangir as a reaction to the sterile urban life. In a “sterile” environment, everybody looks similarly, thinks similarly, and behaves similarly.

Another group that *Cihangirli* identity stands in opposition to is the *Televole* type. *Televole* is a television show, which has been broadcasted since 1995. It first appeared as a football commentary program, then turned into a magazine show articulating the lives of football players, models, pop singers, TV and movie stars, and the like. For many, it has become manifestation and celebration of the materialist values triggered by the liberal economic policies that the government pursued in the late 1980s (Sandikci and Ger, 2001). As the spectacle of *nouveaux riches* and celebrities, *Televole* has become one of the most important symbols of degeneration of

moral values within the society. As the epitome of a materialist culture, *Televole* type is disdained by the residents of Cihangir. According to our informants, these shallow and ignorant people worship nothing but money. They consume only Western brand name products, spend most of their leisure time in big shopping malls, and live a life revolving mainly around conspicuous consumption. They construct themselves a world immune from lower classes and problems of a developing country where income difference is enormous. Similar to *site* people, they refrain from any encounter with social diversity and chaos of urban core.

The *Cihangirli* identity stands in opposition to old, conservative middle classes as well as recently emerged conspicuous middle classes. Materialist consumption values and practices, typified in suburbs and malls, are viewed as imported from the West—especially from the United States of America—as a result of the global flows of capital, are resisted. The construction of the *Cihangirli* identity indicated the existence of a consumption community that seeks to distinguish itself not only from the old middle class but also from various new middle classes. As this community has been articulated through particular consumption preferences and practices, the retailscape went through a significant transformation as gentrification proceeded.

Transformations in the Retailscape

As Cihangir went through gentrification, its retailscape transformed drastically. There is now an abundance of real estate agencies, food related businesses including groceries, convenience stores, butchers, cafes, restaurants, gourmet food sellers, pet shops and veterinary clinics, hair dresses and beauty salons, as well as banks, pharmacies and hardware stores. We learned from our informants that while there were less than ten real estate agents prior to gentrification, the area now hosts more than hundred. As one of the oldest agent states, the neighborhood has become so profitable for real estate business is that there is fierce competition, which sometimes results in one real estate agent selling an apartment already sold by another real estate agent. The number of pet shops and vet clinics are also on the rise. In line with the informants' image of Cihangir as a "colony of singles," a large portion of the residents has pets. The high rate of pet ownership signals potential for making profits and, consequently, attracts related businesses to the area.

Many informants remark that the number of cafes and restaurants has also increased rapidly. Common characteristic of these establishments is that they provide meals with reasonable prices and hospitable service. They do not only cater to residents who are reluctant to cook food at home but also serve as spaces of socialization. Most of these restaurants are run by the residents of Cihangir, which modifies the buyer-seller relationship into that of one between neighbors. Such personalized transactions between buyers and sellers seek to "rehabilitate from the impersonality of corporate marketing" (Ley, 1996, p.185) and manifest resistance towards global chains such as McDonald's and Starbucks.

Apart from cafes and restaurants there also several specialty food stores, such as wine and organic and gourmet food sellers. Wine and gourmet foods entered into the Turkish consumptionscape in the last decade, and have become status markers (Bali, 2002). The proliferation of wine/gourmet food sellers in Cihangir invokes similar developments observed in gentrified neighborhoods in North American and European cities. As Ley (1996) argues, retail districts in gentrified neighborhoods serve as external markers of cultural identity sought by gentrifiers. Food and wine preferences, taste and practices become means of distinction for gentrifiers. Rejection of fast food and appreciation of ethnic, organic and homemade food, express opposition to the Americanization of

Turkish society as well as tolerance for diversity. The knowledge of wine, on the other hand, operates as a cultural capital used strategically to distinguish one from *nouveaux riches* personified as the *Televole* type.

CONCLUSION

Scholars studying gentrification perceive gentrification as a consumption practice of the new middle class. However, they fail to capture the emic meanings of gentrification for the gentrifiers; rather they conceptualize gentrifiers as fictional characters yearning to create and maintain distinction from the old middle class. Moreover, existing studies try to explain gentrification in terms of consumption. An alternative approach, as we try to argue, is to conceptualize and explain gentrification as a spatial manifestation of wider consumption ideologies. The reversal of the relationship between gentrification and consumption proves useful in two respects. First, we can recast gentrification as a by-product of consumption, and in a broader sense, of urban lifestyle. Second, we can study gentrifiers as a critical consumption community who does not only seek to create distinction from middle class but also from a diverse range of local and global consumption collectivities.

For the members of a subculture, subcultural ideologies and practices draw the boundaries between the mainstream and the subculture (Thornton, 1995), and serve as a means of inclusion and exclusion. Through subcultures, members express their distinctiveness from the undifferentiated mass. We believe that gentrifiers constitute a consumption community through the rejection of not only the mainstream consumption ideologies and practices but also various subcultures of consumption, such as suburban and *Televole*. They construct an alternative life-world through a shared commitment to a particular space. This life-world is socially constructed as a network of ideologies and related consumption practices, and entails an ongoing process of creation through constant contestation of the mainstream and subcultural values. The gentrifiers construct a narrative of how to be a *Cihangirli*. This narrative guides acceptable and unacceptable behaviors within the community, and defines who they are, who belongs to their community, and who is excluded.

Toleration and appreciation of social diversity embedded in this narrative resonate with cosmopolitan inclinations. Few studies looking at the relationship between cosmopolitanism and consumption present opposing views. Some suggest that cosmopolitan consumers tend to avoid the parochial culture of their local surroundings in favor of new and exciting experiences, such as exotic foods and music, as they construct their reference groups on a national or international basis (Holt, 1998; Cannon and Yaprak, 2002). Thompson and Tambyah (1999), on the other hand, study how expatriates employ cosmopolitan consumption behavior as a strategy to acquire status and cultural capital, a behavior that requires a mingling with and an appreciation of local tastes, meanings, and habits. This study contributes to the existing literature by offering a "local-cosmopolitan" perspective based on Hannerz (1990) and Abbas (2000) who contend that today's cosmopolitanism has become an appreciation of social diversity in the local settings. Our findings suggest that local-cosmopolitans employ cosmopolitanism as a strategy to achieve distinctiveness through the valuation of inner urban living and an appreciation of the social diversity of the urban core.

Caulfield (1994) perceives gentrification as a "critical social practice," which represents a resistance to post-war urban development and the dominant ideals of suburbia. In our case, we conceive the gentrifiers of Cihangir as a critical consumption community, opposing both the modernist institutions and city forms, such as

suburbs and malls, and the social homogenization aimed by the modernist ideology. The alternative identity embodied in the term *Cihangirli* is a criticism of, on the one hand, new middle classes increasingly shaped by the global flow of goods and culture, and on the other hand, the Turkish project of modernism which sought to create an ethnically and culturally homogenized nation (for a discussion of Turkish modernity, see Kasaba, 1997). The appreciation of social and ethnic diversity, the taste for history, the interest in cultural and artistic activities, and the preference for local and smaller retailers constitute components of a yet another consumption ideology, for which gentrification becomes a means of articulation.

This study offers an initial attempt to explore gentrification from a consumption behavior perspective. Given its exploratory nature, it points at future studies. While we briefly talk about the transformations in the retailscape, further studies are needed to better understand how these retail spaces are used by gentrifiers as well as business and marketing strategies of retailers. Furthermore, while we discuss only the values and practices of the gentrifiers, an investigation of how other residents in the gentrified neighborhoods respond to and negotiate these consumption strategies is needed to get a complete understanding of the phenomena. The Turkish case also demonstrates that consumption-gentrification relationship is likely to have globally common and locally specific aspects. Future studies on non-Western examples of gentrification are likely to be helpful in the development and extension of existing understandings.

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Bridges to Displaced Meaning: The Reinforcing Roles of Myth and Marketing in Russian Vodka Labels

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EXTENDED ABSTRACT

This paper explores the use of McCracken's (1988) 'displaced meaning' in the context of modern day Russia. It identifies vodka as a product that is replete with cultural significance and therefore can be used as a 'bridge to displaced meaning'. Vodka labels are analyzed and categorized into themes of 'mythification' which help in accessing 'displaced meaning'. Barthes (1972) discussion of myth is offered as an explanation for this unusual use of vodka labels to recreate and mythify historical fact in Russia's search for national identity in a turbulent post soviet era.

This paper outlines the historical and cultural significance of vodka and of the use of vodka labels over the past in Russia. It argues that Russia is going through a crisis of national and regional identity in its post soviet period. Having been the centre of the Soviet Union and having shared its cultural identity with the USSR, Russia today finds itself with little that was not part of the shared Soviet identity. The vodka labels and their unusual use are presented as the process by which Russia is reclaiming its individual identity from the collective past. Thus displaced meaning from the past is being accessed using vodka labels as a 'bridge to displaced meaning'. Mythification (Barthes 1972) is identified as a means of facilitating this process of access.

Over 150 vodka labels used today in Russia, were examined and classified into broad themes; 'Greatness of the Russian Past' and 'Regional Significance'. Various sub themes were also identified within these two themes. The themes are explained using McCracken's (1988) 'displaced meaning'. It is suggested by McCracken (1988) that meaning is displaced along time and space continuums. He uses the examples of such displacement - the 'glorious past' and the 'pastoral other' as means of displacing cultural meaning by cultures in time of turbulence. In the example of the vodka labels, one sees the two major themes of the 'greatness of the Russian past' and of 'regional significance' fitting with McCracken's (1988) shaping of displaced cultural meaning. Having displaced meaning, the need to access these 'cultural reserves' becomes imperative in future times. The use of material products or objects that are culturally rich to access this displaced meaning has been suggested by McCracken (1988). Vodka is seen to be a culturally a very 'potent' product in the Russian historical context. Thus we suggest that vodka serves as a 'bridge' to displaced cultural meaning. Building of the bridge is carried out by using the vodka label images to recreate and establish historical and mythical stories of the past and of specific regional histories and folklore. This rich mythical 'bricolage' is best described by using Barthes'(1972) notion of myth creation. The idea of form, concept and signification are highlighted and explained in this example. The need for myth making is discussed as identity creation and search for stability in a time of socio-political uncertainty. It is argued that Russia is in a period which is 'mythologically ripe'. Barthes' process of 'mythification' explains the actual images and stories told by the labels which provide a vivid and idealized picture of 'Russianess'. These images are shaping and reinforcing Russian cultural identity at the same time that the myth thus created is helping the marketing of vodka. This symbiotic relationship is discussed in the context of historical and commercial realities.

Maintaining Family Identity Through Meals in Post-Mao Urban China

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EXTENDED ABSTRACT

The wide-sweeping economic and social changes in urban China have transformed almost every aspect of Chinese lives, including education, work, leisure health, and the home. In the West, modernity and globalization has often been associated with an increasing trend toward individualization (Beck and Beck-Gernsheim 2002; Giddens 1991). Beck (1992) views individualization as an outcome of the process of modernity that leads to a loss of traditional social institutions that help form norms and values and create personal identities. The social phenomenon of individualization has been closely linked to a number of factors accompanying modernity, including improvements in living standards, changes in the labor market, and changing gender roles—all changes that have been associated with the reforms in China.

To date, individualization has been predominantly identified as a western phenomenon. Given the increasing number of non-western nations that have opened their borders to forces of globalization and modernity, an important question that is emerging is whether or not individualization is also an important trend in developing, non-western societies. In addition, as nations, like China, introduce systems that lead to greater societal inequalities, the question of how social groups, including families, operate to protect and reproduce social capital in a dynamic society becomes an important area of study. Research is needed to investigate how food-related activities in the home have been contributing to family stability and unity and fostering the reproduction of social capital during China's reform era.

To explore these questions, we convened three focus groups, each representing a different age group of women, in Changchun, China in the summer of 2003. The focus group participants were guided through a series of question related to changes in family life, involvement in family activities, and the meanings of family meals. Interpretation of the data was achieved by systematically analyzing the focus group transcripts to uncover common themes across the experiences of the participants in relation to life changes and family activities and meals.

The economic and social changes that have occurred as a result of reforms to China's economy have directly affected virtually all of the urban focus group participants in important ways. When asked about the changes in their families' lives that have occurred during the last five years, several of the participants spoke of significant economic improvements to their lives that have resulted from higher income and material acquisitions, including improved housing and new appliances. However, other participants spoke of financial pressures that they have been experiencing as a direct result of China's economic changes. The transition from state-sponsored jobs, with stable salaries and secure benefits, has introduced more uncertainty and risk in their lives. In particular, many of the social services, including housing, health care services, and educational costs that were once subsidized heavily by the Chinese government have become privatized in recent years. As a result, many of the participants worry about their abilities to handle their living expenses.

When asked about meal patterns in their homes, most participants claimed that, while breakfasts and lunches are often eaten away from home, their families almost always eat dinner together.

For many participants, the family dinner is an enjoyable, relaxed time that provides a respite from their busy lives. Participants also feel that the family meal is important for connecting with other family members and providing time to learn what is happening in one another's lives. Also, many participants stated that mealtime is a crucial time for family members to discuss problems they are facing both inside and outside of the home.

For families with school-age children, family meals also seem to serve an important purpose of socializing and imparting important skills to the children. Meals are used to teach proper values, emphasize filial relationships, and reinforce manners. Families with growing children or grandchildren use meals to reinforce family ties and transmit important social material to the children.

Within the context of urban China, our research reinforces the role that meals can serve in the construction and reproduction of family, as also found in research focusing on western families (Devault 1991, Lupton 1991, Warde 1997). Like many western families, Chinese families may well be experiencing a trend toward individualization, as seen by reports of breakfasts and lunches eaten individually or away from home. However, the family dinner has a vital role in maintaining the family and fostering communication. As Devault (1991) found in her study of American family dinners, Chinese family meals serve the important purpose of "producing" families.

Furthermore, and perhaps most significant in this child-centered, education-driven society, our study suggests that Chinese families find the family meal to be an important site for transmitting important norms, values, and other social material to children. This finding reinforces the importance that western researchers (Bourdieu 1984, Coleman 1988, Putnam 2000) have assigned to families related to the fundamental role that family life plays in the accumulation and transmission of social capital.

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Examinations of Relatedness between Direct Consumer Premiums and Promoted Products: Assessing Impact in Different Time Periods

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EXTENDED ABSTRACT

Direct consumer premiums (DCPs) have been defined as package-related, free bonus items offered by manufacturers to consumers when they purchase promoted products. Manufacturers have delivered DCPs to consumers in one of four ways: located in display units near the product and given away free at the point of purchase, contained within the product package, attached to the product package, or as the product package itself.

Previous consumer sales promotion studies on the impact of DCPs have dealt with its short-term effects on promoted product evaluation in promotion time periods. The long-term delayed effects of DCPs in postpromotion time periods have received almost no research attention.

Almost three decades ago, Prentice (1975, 1977) identified different levels of complementary linkage (i.e., relatedness) between DCPs and promoted products, and suggested that DCPs might be viewed as existing along a continuum from high to low, or no, association with the promoted product's use. Prentice proposed that higher-related DCPs (e.g., free toothbrushes given with toothpaste, free razor blades attached to cans of shaving cream) might stimulate more enduring effects in postpromotion time periods than lower-related DCPs (e.g., free aspirin given with toothpaste, free razor blades attached to cans of soft drinks). However, there has not been any study that has specifically investigated these differences. Further, some researchers have identified an apparent contradiction between Prentice's propositions and promotion practice. In practice, U.S. consumer packaged-goods manufacturers have used lower-related DCPs much more than higher-related ones.

The purpose of the current research is to investigate the impact of different levels of direct consumer premium relatedness in different time periods. The basic issue that this research addresses is: if DCPs stimulate favorable effects in promotion time periods, do certain DCPs continue to stimulate delayed effects in postpromotion time periods? From managerial decision-making perspectives, an understanding of whether certain DCPs might have different effects in any or all time periods than other DCPs would seem to offer much to the discipline.

Some allied studies dealing with advertising have examined the long-term attitudinal effects of related- vs. nonrelated-advertising cues. For example, findings from research on advertising-evoked attitudes and attitude persistence by Sengupta, Goodstein, and Boninger (1997) indicated that advertising cues that are related to the promoted product allow for creation of strong memory linkages. Their study used different types of endorsers for a new brand of mouthwash. In one case the new mouthwash was endorsed by the makers of a well-respected brand of oral hygiene products (i.e., Crest) and in the other case by a well-liked television celebrity (i.e., Jerry Seinfeld). Results from a pilot study confirmed that the Crest cue was significantly more related to mouthwash than was the Seinfeld cue. While both types of endorsers led to favorable initial attitudes, attitudes of individuals exposed to the mouthwash associated with Crest persisted longer than attitudes of individuals exposed to the mouthwash endorsed by Seinfeld. Although attitudinal effects of advertising cues might be different from effects of DCPs, previous research on relatedness cues and other forms of marketing communications help to provide guidelines for the current research.

Previous work by Haugtvedt and Petty (1992) and others (e.g., Haugtvedt and Strathman 1990; Petty and Cacioppo 1986; Petty, Cacioppo, and Schumann 1983) on the Elaboration Likelihood Model (ELM) are used to help develop the hypotheses. Studies on the ELM focus on the extent to which individuals' attitudes are determined by careful scrutiny of available information in the persuasion environment. In some instances, individuals are both motivated and able to extensively process and elaborate on issue-relevant information in forming or changing attitudes (persuasion via central route). In other instances, individuals' attitudes are formed or changed through simple associations rather than scrutiny of information (persuasion via peripheral route). Previous studies have found that attitudes developed or changed via the central route decayed slower than attitudes formed via the peripheral route. If principles derived from the ELM can be used in predicting response to DCP promotions, then it is believed that higher-related DCPs serve as high-association cues and induce individuals to think more carefully about promoted products and lower-related DCPs only influence attitudes via the peripheral route.

The current research uses two repeated-measures-experiments. The experiments specifically consider two levels (higher and lower) of relatedness between DCPs and the promoted products. Both experiments examine the effects of different DCPs in promotion time periods (i.e., when individuals are exposed to DCP promotions) and postpromotion time periods (i.e., after retraction of DCP promotions). Experiment-two is used to substantiate findings from experiment-one and to examine delayed effects in a more extended postpromotion time period.

Both studies use similar control groups and between-subjects factors (i.e., higher- and lower-levels of relatedness between the DCP and the promoted product, and one level of DCP desirability); yet incorporate different within-subjects factors (i.e., repeated measures over different time periods). Experiment-one investigates effects in three time periods (two promotion time periods and one short-term postpromotion time period), and experiment-two considers four time periods (two promotion time periods, one short-term postpromotion time period, and one more-extended postpromotion time period).

Preliminary results indicate that both higher- and lower-related DCPs stimulate initial favorable attitudes in promotion time periods. The results also indicate that only higher-related DCPs continue to stimulate enduring effects in postpromotion time periods.

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Expectation for a Future Deal: Discount Depth, Timing, and Product Availability

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EXTENDED ABSTRACT

According to Prospect Theory (Kahneman and Tversky 1979), buyers may not perceive a current price as an absolute financial term, but rather as a gain or loss relative to a reference price(s). A current discounted price can be perceived as "a good bargain" when it is compared against the regular price (pre-discounted price). However, if a buyer is preoccupied with the price that is likely to be offered in the future, the current discount offer may not generate as positive an evaluation as was intended. Indeed, the current discount offering may be evaluated negatively in light of the expected future price. It follows that two important questions need to be answered. First, compared to a current discounted price, how influential is an expectation of a future discount, acknowledging a certain level of uncertainty? Second, how will the two opposite reactions (gain and loss) derived from the different price reference points be reflected in the purchase decision? The competitive relationship between current and future reference prices has been relatively little researched in the marketing literature to date. The purpose of our study was to examine the influence of an expectation for a future deal (EFD) on the effectiveness of a current discount. The expectation was examined in terms of future discount depth (EFD depth). The impact of EFD depth was further examined by testing potential moderators (i.e., EFD timing, future product availability, and current discount levels) to gain a more comprehensive picture of how EFD is factored into purchase decisions.

We proposed a conceptual model to explore EFD and promotion effectiveness. Promotion effectiveness depends on buyers' perception of value associated with the purchase. The value of a purchase can be derived in two different forms, transaction value and acquisition value (Thaler 1983), both thought to be antecedents of purchase behavior (Grewal, Monroe and Krishna 1998; Monroe and Chapman 1987; Urbany et al. 1997). Acquisition value is an evaluation of product quality relative to a price paid (i.e., CD). Transaction value is an outcome of a comparison of CD with a reference price, EFD depth. As depicted in the model, the influence of EFD depth on transaction value is expected to be moderated by expectations for timing when the future deal occurs (EFD timing), the likelihood that the product will be available when the future deal is offered (product availability), and CD depth. The relations hypothesized in the model were tested in two experiments.

Respondents for the two studies were recruited from undergraduate classes at a large public American university. They were randomly assigned to the experimental conditions. Respondents were provided with a booklet containing the experimental stimuli and survey questions. This booklet included a scenario depicting a local department store running a sales promotion. Respondents were asked to imagine a hypothetical situation where they were shopping for a semi-formal jacket for themselves. They were informed about CD, EFD depth, EFD timing, and product availability selectively corresponding to the design of each study.

Study 1 contained a 2 (EFD depth: 10% and 40%) x 2 (CD depth: 10% and 40%) x 3 (future product availability: 20%, 50%, and 80%) between-subject design. A MANCOVA with planned contrasts test was conducted with three dependent variables (transaction value, acquisition value, and purchase intention) and three covariates (shopping compulsiveness, sale proneness, and gender). The findings suggest that EFD depth is a key reference price for transaction value, but not for acquisition value. A deeper discount

expected in the future is likely to lower the transaction value perception and subsequently purchase intention of the current deal. The effect of EFD depth appears to be greater than the effect of CD depth on purchase intention. A future deal involving uncertainty could have a significant impact on purchase intention, offsetting the positive effect of a current discount. Study 1 also investigated if product availability moderated the extent of the impact of EFD depth. The impact of EFD depth on transaction value and purchase intention appears to be more salient when product availability is high.

A 2 (EFD depth: 10% and 40%) x 4 (EFD timing: 1, 4, 7, and 10 weeks) x 2 (Future product availability information: present and absent) between-subjects design was employed in Study 2. Data were analyzed using a MANCOVA with planned contrasts test as in Study 1. Study 2 examined the influence of EFD timing on the effectiveness of a current price promotion. The influence of EFD timing was investigated in relation to EFD depth and future product availability. We found that the extent to which EFD depth influences transaction value perception appears to be a function of how close a future deal is in time to the present deal. If the EFD is perceived as being a long way off, the shopper is more likely to lose interest in the EFD and be more susceptible to the current deal. The significant effect of future product availability found in Study 1 was further explored. Product availability is not typically provided in numbers as executed in Study 1. We investigated whether the expectation of how likely a certain product will be available in the future is naturally factored in by shoppers when a price change in the future is considered. The overall results suggest that product availability is subsumed in consideration of future deal timing.

The two studies presented in this paper investigated the influence of knowledge of a future deal on the effectiveness of a current price promotion. When consumers have an expectation for a future deal, their response to a current deal can be substantially weakened. Specifically, the reported findings support that expectations for future discount depth change the perception of transaction value and, consequently, purchase intention; this relationship is further moderated by other future deal factors such as deal timing and product availability. The conceptual model proposed was supported overall.

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Attitudes and Promotions

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EXTENDED ABSTRACT

I study how a gift with a restriction attached affects receivers' behaviors and attitudes toward the giver. Specifically, I look at a minimum purchase restriction in promotional coupons. Most promotional offers include some kind of restriction, and it is important to know the effect of different configurations of promotions. In previous work, it has been shown that in social contexts, people not only care for what they are given but also care for *why* it was given (e.g., Ames, Flynn & Weber, 2004). It seems that this is also the case in the market context when the gift is a coupon; consumers care for the outcome (e.g., price), but also for the motivation that is driving the promotion, and the wider implications the promotion has on them, on other consumers and on the specific stores/marketers (Kahneman, Knetsch & Thaler, 1986a, b; Campbell, 1999a, b; Darke & Dahl, 2003; Brehm, 1966; Labroo & Isen, working paper).

In a series of three studies, I look at the effect a minimum spending restriction has on peoples' behaviors and attitudes. The results suggest that the economic value (i.e. the actual discount) does not necessarily dominate consumers' consideration set. Drawing on the existing literature, I propose that in some cases, giving something and adding a restriction will be perceived as unfair by the recipient. This perception of unfairness, in turn will translate to a less favorable attitude toward the deal and the store, and will manifest itself in both explicit and implicit measures of attitude, as well as in actual behavior.

In study 1, participants received restricted (minimum \$20 purchase) or unrestricted \$10 coupons to be used at the university's book store. The results show that an unrestricted coupon may indeed be superior to a restricted coupon in terms of redemption rate, spending behavior and attitude towards the store (measured before the study, and 3 weeks after it ended). Studies 2 and 3 were run in the lab and were aimed at better understanding the underlying process driving the results. Both studies used a coupon similar to the one used in Study 1. Study 2 shows that the two promotional offers produced significantly different fairness perceptions; an unrestricted promotion is perceived to be significantly fairer than the restricted one. A mediation analysis revealed that fairness perceptions of the offer are actually driving peoples' likelihood to use them. In addition, willingness to have future interactions with the store was significantly higher with the unrestricted offer and was also mediated by fairness perceptions. Another important result of Study 2, gives rise to the possibility that participants inferred ulterior motives on the side of the store (as observed from analyzing thoughts listing items as reported by participants). Although both studies elicited negative thoughts listing, these thought listings were significantly higher with the restricted offer. One "concern" raised by participants was that the store was tricking them by trying to seduce them to come to the store, and spend on virtually unnecessary items. Study 3 tried to find a factor that would moderate the fairness perceptions as captured by study 2. Following on the above reported thoughts listings (i.e., "they are trying to lure me to the store in order to spend more than I need to"), I chose to use a scenario in which subjects are instructed to imagine they received the coupon *while already in the store* (with some idea of what they needed to purchase). As predicted, under this scenario, fairness perceptions of the two offers were not statistically different, not were the other measured parameters statistically different. The only exception was the likelihood to use, which was still significantly higher with the unrestricted coupon.

I conclude by proposing that a gift is not enough. A marketer aiming for a gift to result in positive attitudes and desirable behavior should pay special care for factors that might otherwise backfire. People care about fairness and the formations of a person's fairness perception depends on multiple factors. This paper looked at two such factors: a minimum spending restriction and the circumstances under which the offer is extended. Although this study was done in a consumer choice context, the literature reviewed as well as the theoretical framework proposed give reason to believe that the findings can also be applied to other types of giving (e.g., social context).

Future research will try to further understand the preliminary results presented here. One direction would be an attempt to distinguish between fairness and other factors that may be playing a role. Another direction would be to provide additional empirical evidence to support the long term effect of the positive/negative attitudes induced by the unrestricted and restricted offer, respectively.

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Mall Entertainment and Shopping Behaviors: A Graphical Modeling Approach

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ABSTRACT

The shopping landscape is filled with malls, each competing for their share of the consumer's wallet. A significant method of trying to differentiate the mall product and increase market share has been an attempt by mall developers and management to increase the entertainment component of the mall. The current research was designed to examine the relationship between the multiple ways that malls may create entertainment value for the consumer and certain shopping behaviors.

The findings of the research clearly identified a relationship between certain specific entertainment values in a shopping mall environment and shoppers' mall visits but not all entertainment values are directly associated.

INTRODUCTION

Why do consumers go to shopping malls? There is no doubt that malls provide necessary and desired products for consumers in a modern economy. However, a mall may also provide a pleasurable diversion from everyday activities and chores (Bloch, Ridgway, and Dawson, 1994; Eastlick, Lotz, and Shim, 1998; Hirschman and Holbrook, 1982). It is this latter category of consumer benefits that has been the focus of attention in current mall management and development. Malls are now being built with large entertainment centers including rides, skating rinks, amusement parks, tens of movie theaters, museums, and virtual reality centers. As competition between malls increases, enhancing the entertainment value for the consumer appears to be becoming an important way of differentiating the mall "product."

Marketers have frequently suggested that the entertainment value of a shopping mall is an important area for study (Christman, 1988; Eastlick, Lotz, and Shim, 1998; Hoban, 1997; Wakefield and Baker 1998). However, empirical research of the relationship between entertainment and consumer shopping behaviors and/or attitudes has been suggestive but not conclusive. Sherman and Smith (1987) found that positive moods were related to self-reported purchase and spending. Wakefield and Baker (1998) found that consumers who rated the mall environment to be exciting tended to stay longer, have higher repatronage intentions, and were less likely to go outshopping. In an extensive literature review Langrehr (1991) presented an impressive array of studies which showed the influence of environmental stimuli on perceptions and behaviors in non-shopping environments. Langrehr speculated that these stimuli acting in a natural retail/mall arena would have the positive impact of facilitating shopping and spending behavior.

It is possible that part of the reason for the weak relationship found between mall entertainment and shopping behaviors and/or attitudes is that mall entertainment has been loosely defined and is not a unidimensional construct. No one has tried to look at how individual entertainment aspects are related to each other and whether some mall entertainment aspects may be mediated by others. Thus not all entertainment aspects would make a mall attractive directly. Only entertainment aspects directly associated with shopping behaviors and/or attitudes would make malls attractive.

This study begins by developing an instrument to measure a wide range of mall entertainment attributes. These attributes will

then be analyzed through the Coefficient of Belonging analysis procedure, which will then be used to graphically model the relationship between the mall entertainment factors and certain shopping behaviors.

DEVELOPMENT OF SURVEY INSTRUMENT

The extant literature was examined for previous scales used to measure the entertainment value of a mall. No scale or set of scales was found, however a study by Wakefield and Baker (1998) did use a number of scales to assess the level of excitement at the mall. These items measured three aspects of the physical environment of the mall; the variety of retail offerings at the mall; and how involved the individual was with the activity of shopping. It was believed that the items measuring the physical environment of a mall were an excellent starting point, but did not capture the full range of what makes a mall entertaining. It was also believed that there is a difference between the concept of exciting and entertaining. Excitement is commonly associated with a stimulation of the senses associated with high levels of pleasure and arousal (cf. Wakefield and Baker 1998). Entertainment is "something that amuses, pleases or diverts, especially a performance or a show" (*Random House Dictionary* 1993). There is an undeniable overlap between the two concepts, however, they do not appear to be interchangeable. An entertaining mall may make shopping more pleasurable or a welcome diversion from daily life without reaching what may be termed a high level. It is possible that exciting malls may be malls with intensive levels of entertainment. For example, your local regional mall may provide a pleasant shopping experience that provides some level of entertainment, while the Mall of America with its indoor amusement park and walk-through aquarium may be an exciting place to shop.

The next step was to conduct two focus groups to elicit what makes a mall entertaining to consumers. The focus groups consisted largely of individuals known to the researchers, but were acknowledged shoppers of many different malls across the country. A number of ideas arose from these discussions including the physical environment of the mall, activities which took place at the mall (e.g., special exhibits and events), and the people who worked and shopped at the mall.

A set of fifty-one items were generated, based upon the focus groups and the literature search. These items were then examined for clarity, conciseness, and relevance (DeVellis, 1991) by a set of three academic researchers not involved in the research and six graduate students. The reviewers were all fully briefed on the purpose of the scale, previous research in this area, and the ideas that had come from the focus groups. These individuals suggested a number of items for elimination from the scale. The primary researchers then used these suggestions to reduce the scale to thirty-eight items.

A survey instrument was developed that would be administered through the mail. This survey included the thirty-eight entertainment items measured by seven point (Strongly Agree to Strongly Disagree) Likert scales, the number of visits to the stimulus mall within the last thirty days, the number of items purchased at the mall during the last trip, and a number of demographic questions. The survey was then given to a convenience sample of consumers to see

if they understood the directions and if it was easy to read and respond to and they reported no problems with it.

DATA COLLECTION

The next step was to develop a sample for the survey. The researchers had previously purchased a commercially available computer program which listed malls and their mall management across the country. Thirty malls which were in excess of 500,000 square feet of gross leaseable area were randomly selected to be the stimulus mall for the consumers answering the surveys. Malls of this size are typically classified as regional or super-regional malls and are the ones most likely to have the ability and resources to make themselves more entertaining (Berman and Evans 2001). Once the malls were selected, a sample of one hundred households within a fifteen-mile radius of the location of each mall was purchased from a commercial research service. This provided a total of 3,000 households for the sample.

Each household was mailed a survey, a cover letter, and a postcard. The letter asked for the respondent to complete the survey and provided information about an incentive that was being given for their cooperation. The respondent was asked to fill out the survey and the postcard and mail both of them back to the researcher. The postcard entered the respondent in a drawing for two prizes of \$50 each and because the survey came back under a separate cover it assured anonymity of the respondent. Of the 3,000 surveys mailed, only twenty-two came back for bad addresses. A total of 485 completed surveys were returned for a response rate of 16.3%. The individual response rate by mall varied from 4% to 25%.

DATA ANALYSIS

The sample was overwhelming female (314 females, 140 males, 31 no response), which is not surprising given that the survey was sent to a household and females still tend to do the majority of shopping of all types for the family. The age of the respondents was split about evenly between under and over 45. About half of the respondents reported a family income of under \$50,000 and half were over this amount. The number of visits to the stimulus mall within the last thirty days ranged from 0 to 25, with a mean of 3.6 visits. The number of items purchased at the stimulus mall during the last trip ranged from 1 to 6, with a mean of 4.6 items.

The first step was to look at the distribution of scores on all items. The mean value for each scale item ranged from 3.2 to 5 on a seven-point scale. The standard deviations ranged from 1.3 to 2.1. The total score across the thirty-eight items created an entertainment index of a mall—the higher the score the greater the entertainment value in that mall.

Before the main analysis, the thirty-eight mall entertainment items were classified into non-overlapping groups by using the Coefficient of Belonging (B -coefficient) (Holzinger and Harmon, 1941). When factor analysis is employed simply as a statistical tool to group of variables, a procedure is readily available under the assumption that the variables of a group identifying a factor have higher inter-correlations than with the other variables of the total set. Such an index is designated as the B -coefficient, measuring the degree of cohesiveness of variables in a group. Thus, the B -coefficient focuses on the positive relations of variables in a group rather than maximizing total explained variance in the principal component method.

The B -coefficient is defined as 100 times the ratio of the average of the intercorrelations among the variables of a group to their average correlation with all remaining variables (Harmon, 1976). Thus, a value of $B=100$ means that the average correlations of the variables in a group is the same as the average correlation of

the remaining variables.

The detailed grouping procedures based on B -coefficient are as follow:

1. Select two variables which have the highest value of B -coefficient as an initial group and denote the B -coefficient at this step as $B(G_i)_j$, where G_i is a set of these two variables for group i and j denotes the grouping step.
2. Add another variable to the group G_i which maximizes the B -coefficient of the existing variables in the group G_i . Denote the B -coefficient at this step as $B(G_i)_{j+1}$.
3. Evaluate the difference between the two values of the previous steps $\Delta B(G_i)_{j+1}=B(G_i)_{j+1}-B(G_i)_j$.
4. Let $j=j+1$ and do step 2 and step 3 as long as $\Delta B(G_i)_{j+1}$ is decreased. Or stop the grouping process for group i and designate the variables in G_i as a group of variables that belong together. Let $i=i+1$ and go to step 1 for another group.
5. Do 1-5 until all variables are grouped.

For example, among the thirty-three questions, item 22 and 25 were initially selected because of their high B -coefficient value ($B(G_1)_1=208.90$, $G_1=\{22, 25\}$). Then item 23 was added as the next variable which maximizes the sum of B -coefficient with item 22 and 25 ($B(G_1)_2=197.64$, $\Delta B(G_1)_2=11.26$, $G_1=\{22, 25, 23\}$). Item 24 was the next variable. However, item 24 ($B(G_1)_3=183.64$, $\Delta B(G_1)_3=13.99$) was withdrawn because $\Delta B(G_1)_3$ was bigger than that of item 23, $\Delta B(G_1)_2$. Item 24 was put back into the set of remaining variables to be considered for the next grouping procedure. Each of the remaining 34 items was considered for grouping with items 22, 23, and 25 but none of them improved the B -coefficient for the group. Then the two items with the next highest B -coefficient were selected for the nucleus of the next group and the procedure for grouping was repeated.

Since the B -coefficient is the ratio of two averages, it is sensitive to total number of variables in a subset. Also, as the number of variables in B increased, the average of the intercorrelations of the variables in a subset (the numerator of B) tends to decrease and the average of the remaining variables (the denominator of B) tends to increase, since the variables are added on the basis of highest correlation with those already in the argument B . Thus, in general, the B -coefficient within a subset is decreased as the more variables are included.

In step 3 and 4 of the above procedures, instead of using a single cutoff standard (e.g. 30 point drop in B) applying for all groups, we used a relative standard based on $\Delta B(G_i)_{j+1}$ in each group. In other words, a 30 point drop of B may be enough in one group to deleting the newest item, while a 30 point drop in another group may be not enough to justify dropping the item. As result of this process all 38 items were grouped into nine groups and each group has at least three, but at most five entertainment items (see TABLE 1). The title of each group was decided based on the contents of questions in a group. For example, Group 1 has been titled 'Layout' as the group meaning since item 22, item 23 and item 25 are questions regarding the layout of the mall.

In order to estimate the internal consistency of each group, a Cronbach's alpha was computed for the items in each group. TABLE 1 shows that all coefficients except Group C and Group I were well above Nunally and Bernstein's (1994) criteria in an applied study, which is at least .80. Although, two groups were below the criteria, Group C was included for further analysis because of its high B -coefficient, while Group I was excluded.

In the main analysis, the graphical-modeling (GM) approach was used to determine the relationships among eight individual

TABLE 1
Results of *B*-Coefficient Analysis with Individual Items

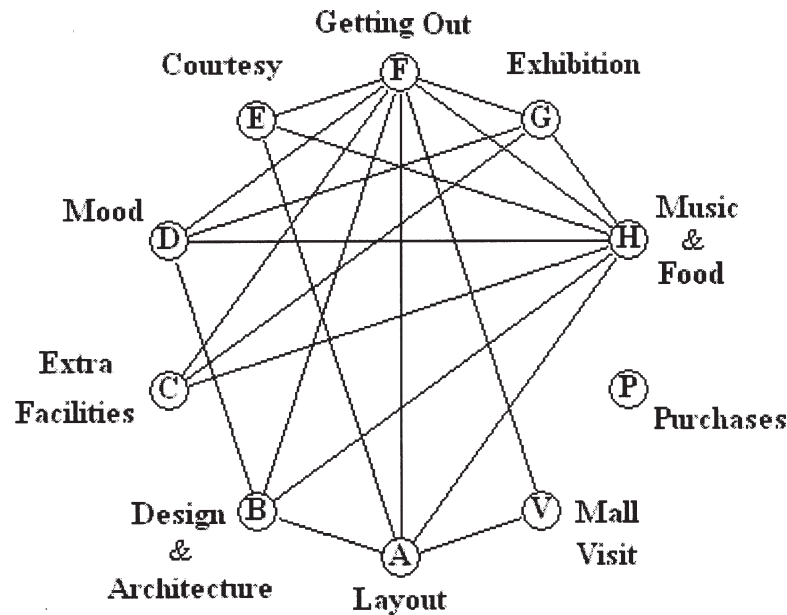
Group	Item Number	Group Title	Item	<i>B</i> -Coefficient	Cronbach's Alpha
A	22	Layout	The layout of the mall makes it easy to get to the stores you want	197.64	.90
	25		Overall, the layout makes it easy to get around		
	23		The layout of the mall makes it easy to get to the food areas		
B	19	Design & Architecture	The mall is decorated in an attractive fashion	185.06	.95
	20		The interior wall and floor color schemes are attractive		
	18		The mall's architecture gives it an attractive character		
	21		The overall design of the mall is interesting		
C	32	Extra Facilities	Has a good amusement area for children	165.25	.77
	33		There is more to do at the mall than just shopping		
	31		Has a good movie theater		
D	1	Mood	There is an air of excitement in the mall	154.99	.92
	2		There is always something new and interesting going on at the mall		
	3		The sights and sounds at the mall are fun		
	4		There is always something fun to do at the mall		
E	27	Courtesy	Has stores with friendly employees	137.00	.87
	28		Is a friendly place to shop		
	12		One of the best things about shopping at the mall is the people who work there		
	11		I look forward to visiting with people at the mall		
	37		I enjoy socializing with people at the mall		
F	9	Getting Out	Is a good place to go with friends	134.24	.91
	13		Is a fun place to go		
	36		Is a good place to go to just "get away"		
	30		I am never bored at the mall		
	35		Is a good place to go with the family		
G	8	Exhibition	Has good special exhibits	127.16	.82
	34		Has good special events or shows		
	5		Has a good amusement area for adults		
	14		Has a good video and/or game arcade		
H	16	Music & Food	The mall plays music that I like	112.46	.81
	17		Mall music is played at an appropriate volume		
	15		Has a good restaurant/bar in or near the mall		
	7		Has good place to get "mall food"		
	6		The mixture of sights and sound at the mall add pleasure to my shopping experience		
I	26	Hanging	Is a good place for "people-watching"	90.56	.58
	29		Has unique stores		
	38	Around	Is a good place for "window-shopping"		
	24		The layout of the mall makes it easy to get to the restrooms		

entertainment aspects, mall visit frequency and number of purchased items. GM is a form of multivariate analysis that uses graphs to represent a model. A graph, $g=(n,\epsilon)$, is defined as a structure of a finite set n of nodes and a finite set of ϵ edges between these nodes (Edwards, 2000). Edges are a straight line drawn between the nodes ("Groups" in this research) to represent the relationship. In terms of using a graph to represent a clear cut of relationships between variables, GM is similar to Structural Equation Model (SEM). In general, GM provides more understanding of multiple equivalent models and following statistical properties than SEM. SEM is used to formulate a theory-driven model based on temporal ordering of variables, and then evaluate it. However, GM requires no variable

order and searches through all possible classes of models that fit best.

The relationships among the constructs in graphical-modeling can be undirected (i.e., bidirectional) yet it has the ability to conduct a directed one like SEM. Also, SEM expresses the dependent variables as a function (usually linear) of those variables which determine it causally, together with an error term. However, GM represents conditional independence relations without an error term. Thus, recursive SEMs without correlated errors are special case of directed GM. In a large number variable set without the variable ordering knowledge, although it is theoretically possible to use SEM but practically impossible because of the complexity of

GRAPH
Relationship of Entertainment Group Variables, Mall Visits, and Purchases



the possible model (e.g. if this research uses SEM, 40,320 (8!) models should be evaluated).

In this research, there was no previous research that provided guidance on which entertainment aspects may directly affect shopping behaviors or may mediate other entertainment aspects. It was thus determined to use an undirected graph in which all the edges are undirected and all nodes have equal probability to be considered as the first node.

The model was tested using MIM, graphical-modeling software Version 3.1 (Edwards, 2000). The total score of each group was used to represent each entertainment aspect. Thus, the value of each node was the sum of items in a group (i.e. $Layout = I22 + I25 + I23$).

Edges were added based on one-step forward selection stepwise method. In other words, at each step, the edge with the smallest p -value, as long as the whole model was significant at $p = .01$, was added to the current model. Finally the partial correlations between the linked nodes in the obtained model were computed to find out the independent relationship from the given remaining nodes.

RESULTS

The obtained model provides a clear illustration of the ties between the groups (see GRAPH). The resulting model yielded the following fit statistics against the previous stepwise model: Deviance = 41.33, $df = 25$, $p < 0.01$, Adjusted $R^2 = 0.95$ ($1 - [G^2(M_0)/df_0] / [G^2(M_i)/df_i]$, where $G^2(M_0)$ is deviance of resulting model, $G^2(M_i)$ is deviance of complete independent model which has no edge between the nodes). In general, all included entertainment groups have at least three edges to other groups in the graph; however some groups are more densely tied to others. This result suggests that groups such as "Getting Out" "Music & Food" and "Layout" are perceived by the shoppers as common elements of entertainment which they can enjoy in the shopping mall environment.

The graph also provides a visual linkage between the types of entertainment available through mall shopping and the two shopping behaviors of visit frequency and purchasing. The graph

suggests that visit frequency is related, either directly or indirectly, to a number of the mall entertainment values while the number of items purchased is not. The two entertainment groups that have a direct effect on visits are the "Layout" of the mall and simply "Getting Out" for the consumer. In other words, only "Layout" and "Getting Out" groups are conditionally dependent of mall visit frequency.

One implication of the model is that to predict the mall visit, "Layout" and "Getting Out" groups are sufficient. These two groups seem to be related to both utilitarian use of the mall and hedonic (pleasurable) use of the mall (Babin, Darden, and Griffin 1994). A mall with an easy to shop layout would allow the shopper to complete their shopping tasks efficiently and effectively. The "Getting Out" group certainly seems to suggest that the mall is viewed as a place to go to socialize, to be with friends and family, to simply get away from it all. The concept that shoppers may experience both utilitarian and hedonic value from a shopping trip has frequently been suggested in the literature (e.g., Babin, Darden, and Griffin 1994; Bellenger and Korgaonkar 1980). This research provides additional support for this notion. Although "Layout" and "Getting Out" are the only groups that directly influence mall visiting in this research, the other entertainment groups may have an indirect influence on mall visits. However, since the edges between the variable groups are undirected (or bi-directional), it is difficult to say whether these groups had an indirect influence on mall visits through the two variables with direct ties to the number of visits. It is noticeable that there is no significant dependency between any of entertainment aspects and purchasing behavior. This result indicates that the shoppers' number of mall trips and possibly the amount of time spent at the mall are influenced by the entertainment aspects of a shopping mall while the actual purchasing or number of purchase item is influenced by other factors if there is any.

A fitted partial correlation analysis between the groups shows that all correlations are positive (see TABLE 2). The fitted partial

TABLE 2
Fitted Partial Correlation Matrix for Linked Edges

A	1.00									
B	0.31	1.00								
C			1.00							
D		0.21		1.00						
E	0.19				1.00					
F	0.09	0.18	0.16	0.30	0.32	1.00				
G			0.35	0.18		0.05	1.00			
H	0.10	0.08	0.07	0.28	0.14	0.16	0.11	1.00		
V	0.09					0.12			1.00	
P										1.00
	A	B	C	D	E	F	G	H	V	P

All values are significant at $p=.05$.

Empty cell represents zero partial correlation.

correlation was calculated after fitting the resulting undirected model into the data. Thus, only linked edges between the nodes have the value of partial correlation. Since the partial correlation is generated based on the variance overlaps of the corresponding variables, it has the same meaning as the standardized parameter estimates in a linear model. The great value of the partial correlation is that it expresses the effect of one variable on another without regard to how differently the variables are scaled. In general, if shoppers have more values in A and F entertainment groups, they tend to visit the mall more often. Thus, we can conclude that the higher entertainment values related to "Layout" and "Getting Out" directly results in more mall visits.

DISCUSSION AND CONCLUSION

The myth of the female shopper who wanted to nothing more than to go shopping for a day as a means of entertaining herself has been replaced by the myth of the female shopper who finds shopping a chore and wants to complete the task as quickly as possible. Neither of these views is entirely correct or incorrect. Today's shopper is time pressured, but can still find enjoyment through the act of shopping. Mall developers and managers have been working hard to try to make the shopping trip as enjoyable as possible and provide our shopper with a reason to stay in the mall longer and to come more often. Malls are largely trying to accomplish this goal through making the shopping trip more entertaining, but they have been lacking in basic research as to what creates an entertaining shopping trip.

The current research developed an instrument to tap into multiple dimensions of what makes for an entertaining mall visit. Possibly the most important finding of the research was that only two dimensions of mall entertainment appeared to be driving the number of visits to the mall. One of these dimensions could be easily categorized as having a hedonic experience while shopping. However, the other appears to largely be a utilitarian dimension of the shopping trip. Since both of these dimensions had a direct and significant relationship with the number of shopping visits, it is important for mall developers and managers to remember that shopping is an economic activity which provides the shopper with desired items. Making sure that the mall has the right mix of stores to address the needs of the target market should remain a prime consideration.

The current research also demonstrated that while entertaining the shopper is important, it does not necessarily have to include large amusement areas, theme parks, or strolling troubadours. Shoppers just wanted a place to get away from their daily grind, a place to visit with friends and family. There are a number of ways that malls help provide the means for consumers to engage in these activities, such as staying open at night, having food courts where multiple types of food are available, having special exhibits keyed to consumer interests and activities (e.g., boat shows, camping shows, bridal shows), and having seating areas where people can rest and visit. These features are not necessarily expensive to produce, but they provide great value and incentive for the consumer to visit the mall.

While this research provides a clear cut of relationship between the entertainment aspects in the shopping mall and shopping behavior, it suggests several additional avenues for future research. For example, at present, it is unknown what portion of influence to the shopping behaviors comes from the children in a family. Obviously, a significant portion of household shopping behavior may be influenced by children. The age and gender composition of the family's children may also play a role. For example, a family with two teen-aged girls may be encouraged to go shopping more frequently than a family with a single male toddler at home. Further, the gender difference in shopping behavior is not discussed in the study. It is well known that males are not generally shoppers, but identifying key entertainment aspects for males may help mall managers develop programs encouraging greater participation in shopping by males.

The mall has become the downtown for many suburban communities. As such, it is expected to provide more than just necessary products for the consumers in the community. It has become the preferred gathering place for teenagers, a place to meet friends after work, a place for early morning physical conditioning, as well as a convenient location for buying merchandise. The mall is a hub of both economic and social activity (Feinberg, Meoli, and Sheffler 1989) and what encourages people to engage in consumer activity in these locations is an important area for further research.

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ROUNDTABLE
Rethinking Family Consumption–Tracking New Research Perspectives
Karin M. Ekström, Göteborg University

Marketers, social policy makers, and consumer advocates have for a long time been interested in family consumption. Even though the influence of family on consumption is pervasive, a review of consumer behavior literature shows a predominant focus on individual behavior. We witnessed an increased interest in family behavior research during the 1970s and 1980s, but have seen a decline during the 1990s (e.g., Commuri and Gentry 2000).

The purpose of this roundtable was to encourage discussion on family consumption as an important area of research and propose directions for future research. The intention was not merely to refocus consumption ongoing in families as a vital area of research, but to track new research perspectives, theories and methods for understanding these issues. Families are culturally determined and subject to change in a continuously changing society. A multitude of family types and different ways to be a family exist. The family is constructed in different contexts where family activities in private as well as public spheres involving continuous negotiations need to be considered. Rethinking family consumption requires rethinking both the concept of family and consumption in a family context.

Stacey (1990) describes the family as a locus, not of residence, but of meaning and relationships. An individual belongs to a social network, part of which can be described as a family in terms of its meaning to the individual. There is a need to consider the plurality of family structures which exist today. A majority of previous family research has focused on decision making. There is a need to consider consumption at large. It is through an understanding of family activities that we can gain a better understanding of the family life involving consumption and production issues. To what extent does consumption connect or disconnect families? To what extent is consumption in families causing happiness, stress or disruption? A majority of family consumption research has been based on survey research. There is a need to increase the use of interpretive methods in order to gain a better understanding of family consumption. Also, interdisciplinary research is believed to benefit the study of family consumption.

Vivid discussions around the roundtable generated many good ideas for developing research on family consumption and make it more visible on the agenda, both at conferences, in journals, and in books.

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SPECIAL SESSION SUMMARY

Consumer Activism: Boycotts, Brands and Marketing Communications

N. Craig Smith, London Business School

SESSION OVERVIEW

Consumer boycotts and consumer activism more generally are increasingly relevant for marketing decision-making and yet have received little research attention (Klein, Smith and John, 2004; Sen, Gurhan-Canli and Morwitz 2001). A poll of 25,000 citizens in 23 countries found that over the previous year 40% had at least thought about punishing a specific company they viewed as not behaving responsibly and 20% reported actually avoiding a company's products or speaking against the company to others (Enviro-nics 1999). While less mainstream, a diverse assortment of consumer activists from anti-globalization protestors inspired by Naomi Klein's *No Logo* to culture jammers, are challenging brand marketing and offering radical critiques of consumer culture. This session focused on why consumers participate in boycotts and how they respond to marketing communications from boycott targets. (Unfortunately, due to scheduling conflicts, the session was unable to include a third paper on how consumer activist attacks on corporate brands question what we mean by branding).

The first paper, by Klein, Smith and John, examined consumer motivations for boycott participation, proposing a cost-benefit approach grounded in the helping behavior and boycott literatures. Their framework had been tested with a nationally representative sample during a high profile boycott of a European firm over factory closures. Support was found for the effect of perceived egregiousness on boycott participation and for cost-benefit motivators (make a difference, self-enhancement, counterarguments and constrained consumption) that directly and indirectly affect boycott participation. Other findings related to the effects of the estimated participation of others and management communications about the factory closures as well as the impact of the boycott on brand image.

In the second paper, Morwitz and Sen examined factors influencing the effectiveness of marketing communications by boycott targets. Pro- and anti-boycott communications play an important role in influencing consumers' boycott decisions. They asked: how and when should a boycott target respond to the call for a boycott of their products/services? Building on earlier work (Sen et al. 2001), Morwitz and Sen also used a cost-benefit approach to boycott participation, examining anti-boycott information content (that might reduce the perceived benefit of boycotting, increase the perceived cost, or reduce the perceived likelihood of boycott success) and information order (before or after consumers learn about the boycott). A first experiment found a direct effect for information order and that it interacts with the type of information communicated. A second experiment found effects for message focus (costs versus benefits, success likelihood) and message order (with an interaction of message focus and issue importance).

John Lynch, as discussant, observed that the two papers were linked by the question: "What is it that makes people see a company's action as egregious?" He offered an alternative perspective emphasizing the role of rhetoric. The session concluded with remarks on both papers amidst a wide-ranging discussion.

Klein, Jill G., N. Craig Smith and Andrew John (2004), "Why We Boycott: Consumer Motivations for Boycott Participation," *Journal of Marketing*, 68 (July) 2004.

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SPECIAL SESSION SUMMARY

Tracing the Daisy Chain: Post-Purchase Affect and Its Influences on Subsequent Consumption

Anirban Mukhopadhyay, Hong Kong University of Science and Technology

SESSION OVERVIEW

Session Objective

Purchase decisions made at one point in time can often have an impact on subsequent behavior. The purpose of this special session was to present ongoing research that examines one aspect of the dynamics of such intertemporal behavior patterns, and to provide an integrative platform for a discussion of fruitful research directions.

Overview

Although much of consumer research addresses single purchase decisions, from need recognition to post-purchase evaluation (e.g. Howard and Sheth 1969), there are a few streams of research that study behavior across purchase occasions. One area, researched in depth, has looked at repeated behavior in the context of brand loyalty and variety seeking (e.g. Tucker 1964). A second well-researched perspective addresses a priori preferences on configurations of purchase decisions (e.g. Loewenstein and Prelec 1993). There is, however, a third stream that concerns itself with how consumers feel contingent on having made a purchase, and how this purchase decision affects behavior at a subsequent decision point. Research on the processes underlying such interdependence of purchase decisions across periods is surprisingly scant.

Recent work in marketing (Dhar, Huber, and Khan 2003) and psychology (Muraven and Baumeister 2000) has shown that behavior at one point in time can have varied and interesting effects on subsequent behavior. The three papers in this session add to this stream by looking at affective consequences of purchase decisions, and how they influence responses to subsequent consumption opportunities. As discussed below, the affect considered here is distinct from decision satisfaction and cognitive dissonance reduction, and the subsequent behavior is more generalized than repeat purchases of the same brand.

Papers

The three papers in this set demonstrated that purchases cause affect, which then influence responses to subsequent consumption opportunities. In the first paper, Patrick and Park looked at “consumption chains” that arise from “trigger” purchases of products that don’t fit with one’s existing possessions. Such purchases may cause unhappiness with one’s existing possessions, and hence set off a series of additional compensatory purchases. The circumstances under which the trigger purchase was acquired, for instance a self-bought item versus a gift, influence the level of dissatisfaction and consequently the buying behavior. In the second paper, Cheema, Chakravarti, and Sinha studied differences in the regret that auction participants feel, contingent on the result of the auction. They demonstrated cognitive and motivational antecedents of regret, which when combined with the auction’s outcome influence behavior in a subsequent auction. Here the purchase decision has been made, but the outcome, and hence the outcome-dependent affect, may not be in ones control. Nevertheless, the outcome and the affect influence subsequent behavior. Finally, Mukhopadhyay and Johar examined responses to unintended purchase opportunities, such as a sale encountered unexpectedly. They found that decisions to

either buy or not buy in such situations lead to complex affective responses, with buying causing happiness, guilt, and remorse more than not buying, which causes pride. These mixed emotions then color responses to different types of emotional appeals in advertising for other unrelated offers. The underlying theme is that across all three papers, purchase decisions of different sorts lead to affect, which then influences subsequent consumption directed behavior.

Contribution

The topic of the interdependence of purchase decisions is at the cutting edge of consumer research. Each of the three papers in this session presented novel and interesting results. Taken together, they constituted a significant step in the study of intertemporal behavior, across domains such as shopping, auctions, and ad response. At the conclusion, the audience and authors engaged in a discussion of the ideas presented as well as future research directions in the session’s context.

LONG ABSTRACTS

“When One Thing Leads To Another: Consumption Chains and Consumer Satisfaction”

Vanessa M. Patrick, University of Georgia

C. Whan Park, University of Southern California

This research is concerned with the interdependence of consumption experiences. Most traditional models of decision-making in consumer behavior begin with consumer problem/need recognition and end with post-consumption evaluation and behavior (Engel et al. 1968; Howard and Sheth 1969; Nicosia 1966). In these models, and in the majority of consumer research, a purchase is assumed to be a single and isolated event. In this research we reexamine this assumption by investigating the interdependence of consumption experiences. The basic premise of this research is that consumption rarely occurs in isolation and the purchase of one item often leads to a series of successive purchases, forming what we refer to as a consumption chain.

While previous research has examined how the purchase of a product can lead on to a stream of repeat purchases of the *same* product (McConnell 1968; Tucker 1964) and even how the “momentum” of shopping can lead to making other *unrelated* purchases (Dhar et al. 2003), this research examines the stream of related purchases generated from a single “trigger” purchase. Moreover, this research posits that consumption chains are activated in order to enhance the overall satisfaction derived from the “trigger” purchase. Specifically, we propose a broadened conceptualization of satisfaction to suggest that satisfaction with a product is dependent not only on product performance but also on the “fit” of the product with one’s existing possessions (for a similar notion of satisfaction as active, dynamic and context-dependent, see Fournier and Mick, 1999).

Three studies have been conducted to examine the notion of consumption chains and to discern the potential causes and consequences of the interdependence of consumption experiences. The first qualitative study using real-world examples of consumption chains (N=314) reveals the universality of this phenomenon and provides real-world instances of consumption chains. In this study,

participants were asked to illustrate an example of “one purchase leading to another.” The objective of this study was to understand whether and how consumers relate to the notion of consumption chains, and to determine the characteristics of “trigger” purchases that initiate consumption chains. Moreover, this study provides evidence of the complexity of consumption chains by examining the number of “chains” of consumption that arose from the “trigger” purchase, the number of purchases generated by a single trigger purchase and the diversity of the consumption chain.

A second study (N=171) examines the conditions under which consumption chains are likely to be generated. In this study, the nature of the consumption (painting (hedonic) vs. toaster (functional)), the degree of controllability (self-bought vs. gifted) and the “fit” of the product (high vs. low) with existing possessions (in this case the décor of one’s home) are manipulated. We find that satisfaction with products that “fit” is higher than satisfaction with products that do not fit (main effect of fit). Moreover, for items that have low “fit”, satisfaction with hedonic purchases is higher than satisfaction with utilitarian purchases and satisfaction with purchases that do not fit is lower than satisfaction with gifts that do not fit (main effect of controllability) and obviously satisfaction with products that fit better is higher than satisfaction with those that do not (main effect of “fit”). Examining the effect on the likelihood of purchasing additional items, a three item “trigger likelihood” index was created. Results reveal that hedonic purchases are more likely to trigger consumption chains than are functional purchases (main effect of nature of purchase), purchases are more likely to trigger consumption chains than are gifts (main effect of controllability) and a significant nature of product X controllability interaction in which hedonic purchases are most likely while utilitarian purchases are least likely to trigger consumption chains.

In the third study (N=83), we look at hedonic purchases only and examine one potential explanation as to why one purchase often leads to other related purchases. Our primary proposition for this study is that hedonic purchases that have low “fit”, instead of increasing overall satisfaction, in fact decrease overall satisfaction with one’s possessions by making the deficiencies or “what one does not have” salient. These “trigger purchases” initiate a string of successive purchases that aim to enhance the overall satisfaction that may be derived from the trigger purchase itself. Thus, in this study we look at a hedonic trigger purchase (a shirt) and manipulate the degree of controllability (self-bought versus gifted) and the “fit” of the product (high versus low) with existing possessions (in this case one’s wardrobe). This study reveals that whether purchased or gifted, satisfaction with the product is higher when the fit with existing possessions is good versus bad (main effect of “fit”). In addition, purchases are more likely than gifts to trigger consumption chains, and, when a purchase is hedonic, the satisfaction with the purchase itself is high but the satisfaction with other possessions decreases thereby triggering a chain of consumption to enhance overall satisfaction. In sum, a new hedonic purchase that has a low fit, *decreases the satisfaction with one’s existing possessions, and simultaneously increases the likelihood of buying additional items to complement the new purchase.*

In conclusion, this research investigates the “consumption chains” phenomenon, explores the characteristics of the “trigger” purchase that initiates the consumption chain, examines potential explanations underlying this phenomenon and discusses the implications for marketing and consumer behavior.

“Antecedents and Consequences of Outcome Contingent Regret in Descending and Ascending Auctions”

Amar Cheema, *Washington University in St. Louis*
Dipankar Chakravarti, *University of Colorado – Boulder*
Atanu Sinha, *University of Colorado – Boulder*

This paper examines how motivational (i.e., a winning-oriented or a prudent, value-oriented focus) and cognitive antecedents (precision of value information and its salience during the auction) influence first consumers’ experienced regret contingent on auction outcome (winning versus losing), and then behavior in a subsequent auction. We compare the pattern of direct and interactive effects in two experiments (involving a descending and an ascending auction respectively) that embed manipulations of the available deliberation time (short/long) at each auction step. The contrasting patterns of effects are interpretable in terms of how mechanistic differences in the auction procedures influence how the manipulated variables drive the evolution of bidding strategies and value.

In contrast with prior work in economic auction theory (Klemperer 2000) the conceptual premise of this work is that consumers do not enter auction situations with known and immutable values (Bazerman 2001; Chakravarti et al. 2002). Rather, they sometimes have no prior value for the object, or know it only imprecisely. Moreover, what is known about value may be more or less salient during the auction, depending on the cognitions activated by prior circumstances. Furthermore, consumers may approach the auction in different mindsets related to a chronic or induced regulatory focus (Higgins 1997) on winning the auction versus acquiring the object at a prudent, value-focused price.

These motivational and cognitive variables, combined with the amount of deliberation opportunity available at each auction step should influence how the objects’ value evolves for the consumer. For example, the variables may influence consumers’ attention to during-auction events (e.g. competitive bidding and entry/exit behavior), what they infer about their own and competitors’ values, how they bid, and their probabilities of winning (losing) the auction. Consequently, they may have direct and interactive effects on the regret that consumers experience as a function of winning or losing.

Regret, a sense of disappointment or distress experienced as a function of a goal-incongruent outcome, generates a sense of dissonance that needs mitigation (e.g., Looms and Sugden 1987; Cooper and Fazio 1984). Therefore, contingent on the auction outcome, consumers may attempt to mentally manipulate their own values, as well as their perceptions of others’ values relative to their own (or their opponents’) winning bid. Such labile values (Fischhoff 2000) provide a means to managing regret, whether it is a winner’s fear of having paid too much or a loser’s sense of having compromised their ownership option. Therefore, the experienced outcome-contingent regret may mediate the post-auction values that consumers report and also influence their behavior in a second, subsequent auction.

We offer formal propositions regarding how such processes may operate, and then examine these propositions in two laboratory auction experiments. The auction environment is computer-simulated and subjects bid for a set of objects (calibrated for their aesthetic and functional properties) against a set of pre-programmed robot bidders. The subjects’ goals are manipulated using conceptual primes that elicit primarily a winning versus a prudent, value-oriented focus during the auction. The precision with which the object’s price is known is manipulated by providing an estimated price range that is either wide or narrow (centered on the same mean). Value salience is manipulated by the presence or absence of

a pre-measurement procedure in which subjects are asked to estimate their own and others' value for the product.

Experiment 1 examines a descending (Dutch) auction environment in which prices drop from a high value in fixed 50-cent steps with deliberation time at each step manipulated to be either short (2 seconds) or long (5 seconds). Subjects participate in two consecutive auctions. Following the first auction, they provide measures of experienced regret, followed by measures of their post-auction value for the auction object, and task reactions. We examine the direct and interactive effects of the manipulated variables on experienced regret and the extent to which these patterns are contingent on the auction outcome (win / loss). Experiment 2 repeats the study in an ascending auction (Japanese variant of an English auction, i.e., with open bids and irrevocable exit). The focal variables are manipulated identically, with deliberation time pre-calibrated to be either short (5 seconds) or long (10 seconds) to allow for procedural differences.

The studies reveal starkly different patterns of direct and interactive effects of the manipulated variables on regret. On average, regret levels are higher in the descending (versus the ascending) auction. The manipulated variables show few main effects in either auction, but influence regret interactively. The interaction patterns are qualitatively different. For example, in the ascending auction, the goal manipulation has few direct or interactive effects with other manipulated variables. However, in the descending auction, it shows complex higher order interactions, suggesting that its impact is significantly moderated by variables such as the deliberation time, value salience and value precision.

Moreover, while the win/loss outcome affects regret directly in the ascending auction, its impact is moderated by a selected set of the manipulated variables (e.g., bidder goals and deliberation time) in the descending auction. Thus, the regret experienced in the ascending auction (which reveals more information and allows subjects more control over the outcomes) involves a simple outcome contingency (winning/losing). However, the sudden-death and low information characteristic of the descending auction creates more complex contingencies for the regret experience, involving not just the win/loss outcome, but also selected other manipulated variables. Among subjects for whom value was pre-measured, the regret experience was more predictable for losing bidders than winning bidders as a function of the gap between the pre-measured values (self and others) and the winning bid.

We model experienced regret as a function of the discrepancy between the winning bid (their own or an opponent's) and prior value (their own or perceived others'). Patterns of results demonstrate that the importance of own and others' perceived values differ as a function of the auction outcome. Moreover, the outcome from the first auction (and the following regret) affects behavior in a second, subsequent auction. Interestingly, this pattern holds for the descending auction but not for the ascending auction. These effects are interpreted in terms of differences in the information availability and inferential dynamics permitted by the two auction mechanisms.

“Unintended Purchase Opportunities: Goal Conflict, Mixed Emotions, and Intertemporal Effects on Persuasion”

Anirban Mukhopadhyay, Hong Kong University of Science and Technology

Gita V. Johar, Columbia University

Consumers spend substantial proportions of their expenditures on products they had not intended to buy. Correspondingly, marketers spend billions of dollars trying to influence purchase incidence. How do consumers feel after they give in to such

temptations, or hold back from them? And how does this affect influence responses to subsequent consumption opportunities? This paper investigates consumers' mixed emotions deriving from their decisions to either buy or not buy at an unintended purchase opportunity, such as a sale encountered by chance, and how these reactions can affect responses to subsequent tempting offers.

Stern (1962) defines “suggestion impulse buying” as a purchase prompted by a need activated on exposure. That is, seeing a product on offer may activate a certain goal, which may be achieved by acquiring and using the product. However, buying the product also involves the temptation to spend money where one had not intended to, and hence exposure to an attractive offer could also simultaneously cue a goal of not spending one's money unnecessarily (Fishbach, Friedman, and Kruglanski 2003). These two goals could be in conflict, as either decision—to buy or not buy—would result in protecting or furthering one goal at the cost of the other. Buying furthers the goal served by acquisition while violating the goal of not spending, and not buying protects the goal of not spending while sacrificing the goal served by acquisition. Now, progress towards a goal can generate positive affect, while lack of progress towards or giving up on a goal can generate negative affect (Carver and Scheier 1990). Hence both buying and not buying should generate positive affect from one source (acquisition or not spending), but also negative affect from the other source. Further, specific to unintended purchase, hypothesized emotions would be: *pride* at protecting the goal of not spending or *guilt* for having spent money unplanned on the one hand, and *happiness* at having acquired something inherently pleasurable or *regret* at passing up a tempting object (Carmon and Ariely 2000) on the other (Rook and Gardner 1988).

The first two studies in this sequence tested the above predictions. These studies supported the hypotheses that consumers' responses to unintended purchase opportunities can have complex affective consequences, combining feelings of pride, happiness, guilt, and remorse. Specifically, faced with an unintended purchase scenario (a sale on software products encountered unexpectedly), participants who chose to buy the products on offer reported significantly stronger feelings of happiness, marginally more guilt and remorse, and significantly less pride, than those who decided not to buy. This finding was robust across the studies, and did not depend on the nature of the software on sale, or whether attention was drawn to the product involved (i.e. the goal served by acquisition) or the act of spending.

The aim of the next study was to investigate how these mixed emotions play out across purchase opportunities. In Experiment 3, participants were shown an advertisement for an attractive sale (for software products) being held by their university bookstore. The ad appeal was manipulated to be a pride appeal, a happiness appeal, or a mixed pride-and-happiness appeal. The timing of the ad exposure was also manipulated, such that participants either saw the ad after a no-buy decision at a scenario involving a sale on books (thereby presumably generating mixed emotions of pride and unhappiness), or were shown the ad without any shopping history, when they would have been at a baseline affective state. Results showed that the nature of the advertising appeal had sharply differing effects depending on when the ad was viewed. At a baseline affective state, with no recent shopping history, appeals that emphasized only pride or only happiness were seen to be more effective than mixed appeals. However, mixed appeals were more effective if viewed after a no buy decision, which presumably had caused both pride and unhappiness. This is in contrast to past research as well as traditional advertising wisdom, that mixed emotional appeals are not favored by Western cultures (Williams and Aaker 2002; Ries

and Trout 1981). Indeed, when viewed in a state of mixed emotions generated by a recent decision to not buy, pure happiness appeals tended to perform worse than the pride or mixed appeals. This pattern of results held down the hierarchy of effects from ad attractiveness through attitude to the ad, attitude to the product, and purchase intention.

In Experiment 4, respondents were allowed to choose to buy or not at the first scenario, and then shown either the pride or the happiness appeal. The extent of discount at the first sale was also varied, such that it was either the same as in Experiment 3 (\$55 marked down to \$29.95), or heavier (\$19.95). When the first sale was at the lower regular discount level, respondents who choose to not buy preferred pride and mixed appeals, replicating Experiment 3. Moreover, those who choose to buy preferred pure happiness appeals, thereby extending the above result. However this pattern did not hold for those who had seen the heavier discount. Participants in these conditions did not respond well to the pride appeals, and process measures indicated that this may be because these respondents report feeling angry, rather than proud, about their decision to not buy.

This research contributes in two ways to the literature on mixed emotions. First, it demonstrates how specific combinations of mixed emotions can result from situations that are not uncommon in the real world. And second, it demonstrates how these mixed emotions can themselves influence responses to different types of persuasion appeals. Mixed appeals are not always undesirable, and indeed may sometimes even be recommended. Essentially, this research shows that if as a marketer you know what your target has just done, you have a better idea as to how they're feeling, and also guidelines on how to tailor your communication appropriately.

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SPECIAL SESSION SUMMARY
Fluency and Feelings of Attraction, Belief, and Interest
Ian Skurnik, University of Toronto

SESSION OVERVIEW

The idea of a subjective experience of “fluency,” or ease of mental processing, is often invoked in psychology and consumer behavior research. For example, fluency has been used to explain effects of repetition on liking for advertisements (e.g., Janiszewski, 1993), on consideration set formation (Shapiro, 1999), on belief in repeated brand claims (Hawkins and Hoch, 1992), on complexity and spacing effects for advertising elements such as logos (Janiszewski and Meyvis, 2001), and the match between regulatory focus and persuasive appeals (Lee and Aaker, 2004). In addition, notions of fluency are commonly used within consumer psychology to describe performance on memory tasks as varied as old-new recognition and spreading activation in a semantic network.

The three presentations in this session attempt to develop the notion of fluency as it applies to basic experiences and judgments likely apply to consumer behavior. The first two presentations report effects of fluency-like differences in processing derived not from prior exposure to stimuli, but from features of the range of current stimuli, to both memory-related judgments and subjective judgments such as attractiveness, truth, and involvingness.

Benoît Monin reported his findings on the “warm glow heuristic,” where the pleasantness we feel from attractive stimuli and the feeling of familiarity from prior exposure can substitute for each other. That is, under many circumstances, we tend to think that attractive stimuli look familiar from prior exposure, even if we have never encountered them before. This finding has far-reaching consumer behavior implications, from product design to promotional strategy. Ian Skurnik, in collaboration with Benoît Monin and Tarun Dewan, described research showing that fluency from rhyming advertising slogans can increase the perceived truth of the statements. People rate rhyming slogans (e.g., “The Bank of Bend will give you a lend”) more familiar, more likeable, and also more true than non-rhyming but semantically equivalent counterparts (“The Bank of Bend will give you a loan”). This effect of rhyme on truth was mediated by perceived familiarity—that is, rhyming structure made statements feel familiar, and therefore judged more true. Finally, Bruce Whittlesea discussed his SCAPE framework of memory, which provides a conceptual integration of both the causes and consequences of “fluency” experiences. This framework does not treat fluency as an unanalyzable construct, but a specific set of consequence of our evaluations of ongoing mental processes. A unique insight arising from this framework is that the same dimensions of mental processing that give rise to what we call remembering also influence a range of subjective feelings about current and novel stimuli; especially feelings such as pleasantness, interestingness, and involvingness. His work allows a reinterpretation and elaboration of prior thinking about fluency effects, and points out new directions for research in consumer topics.

“The Warm Glow Heuristic: When Liking Leads to Familiarity”

Benoît Monin, Stanford University

One ingredient that is sometimes relied on when making familiarity judgments about a stimulus is the positive affect that it elicits. Thus, when there is no other obvious criterion for judgment, pleasant stimuli, e.g., attractive faces or positively valenced words, should feel more familiar, even if they are in reality novel. I call the reliance on positive affect when making judgments of familiarity

the ‘Warm Glow Heuristic’ (Monin, 2003) in reference to Titchener’s introspective descriptions of the feeling of familiarity, and propose that it results from misattributing the agreeableness elicited by the stimulus to the fluency of prior exposure.

Garcia-Marques and Mackie (2000; 2001) have proposed that familiarity is inherently a positive feeling, and that positive mood might sometimes be erroneously attributed to familiarity. The recurrent finding that positive mood leads to shallower processing of persuasive arguments (e.g., Bless, Bohner, Schwarz, & Strack, 1990) might thus be attributable to the fact that when in a good mood, we think we have encountered the arguments before and feel less of a need to scrutinize them.

If our first reaction to stimuli is affective (Zajonc, 1980, 1998), and later judgments are influenced by our immediate affective reaction (Slovic, Finucane, Peters, & McGregor, 2002; Schwarz, 1990), then it is possible that affective/evaluative reactions (“Do I like X?”) are used to make judgments that are on the surface unconnected to affect (e.g., “Have I seen X before?”). In effect, we answer a hard question by addressing an easier one instead, a process referred to as *attribute substitution* by Kahneman & Frederick (2002), and assumed to underlie most of the heuristics that have been studied in the literature (e.g., Tversky & Kahneman, 1974). Schwarz proposed that affect often serves as the basis of cognitive judgments in his “feelings-as-information” model and with the “How do I feel about it?” heuristic (Schwarz, 1990; Schwarz & Clore, 1988, 1996). He argued that affective states can play an informative role in controlled inference processes, even in non-evaluative judgment tasks.

One way in which a positive reaction may lead to a feeling of familiarity is that it may be mistaken for or misattributed to ease of processing in meta-cognitive judgments. The experience of fluency has been shown to be an important factor in familiarity judgments (Jacoby and Kelley, 1987; Jacoby, Kelley & Dywan, 1989; Jacoby, Kelley, Brown & Jasechko, 1989; Jacoby & Whitehouse, 1989). Previously encountered stimuli are easier to apprehend because we have formed a representation of them. Thus ease of processing when encountering a stimulus is interpreted as an indication of previous exposure in the absence of any basis for analytical judgment, a shortcut dubbed the “fluency heuristic” (Jacoby & Dallas, 1981; Johnston, Dark & Jacoby, 1985; see also Whittlesea & Williams, 2000, 2001). Furthermore, Reber, Winkielman and Schwarz (1998) demonstrated that manipulating the perceptual fluency of a stimulus influences how much that item is liked. Thus fluency is pleasant, and may serve as a common denominator underlying the effect under study here.

In a first study, 80 faces picked randomly from a college yearbook were rated by separate groups of judges on attractiveness, familiarity (confidence that you have seen this person before on campus—in reality all pictures were new), and several other dimensions. Average ratings of familiarity ($n=40$) were highly correlated with ratings of attractiveness ($n=34$), $r=.64$, $p<.001$. In a second study, 40 faces were first presented and 50 participants quickly indicated the gender of each face. Then, after some filler tasks, they were asked to recognize these previously-seen faces among an array of 40 new faces. Using attractiveness ratings from Study 1, we found that the attractiveness of a given face significantly increased the probability that it be called ‘old’, regardless of whether it was actually seen before.

In a third study, we sought to go past the correlational nature of the first two studies by manipulating attractiveness experiences directly by contrast. Participants rated three blocks of pictures: one block of average-attractiveness pictures, one block of either very attractive or very unattractive pictures, and then another block of average pictures. The first block served as a covariate, the middle block was the manipulation, and the third block was the d.v. Twenty-seven participants rated attractiveness throughout, and showed the expected contrast effect (Wedell, Parducci & Geiselman, 1987): after unattractive faces the average faces looked more attractive, whereas after the attractive faces they looked less attractive. Another 28 participants rated the familiarity of the average faces in the first and third block: they showed a similar pattern on familiarity. After rating the attractiveness of unattractive faces, average faces looked more familiar than after rating the attractiveness of attractive faces.

A fourth study explores the conditions under which people will rely most on the warm glow heuristic, by using the recognition procedure of Study 2, but by adding two levels of decreasing difficulty, one in which they were warned that a recognition test would follow, and one they received the warning and were tested without delay. As expected, the reliance on attractiveness to make judgments of recognition was greatest under conditions of uncertainty replication Study 2, but when recognition was easy, attractiveness only impacted the responses for new items, not for old items. This suggests that the warm glow heuristic is only called upon in the absence of other reliable cues or of a clear memory trace.

Study 5 takes the investigation away from pretty faces by using semantically valenced stimuli. Thirty-five participants engaged first in a bogus subliminal task where they believed they were presented with words under the threshold of conscious perception when in reality they only saw strings of X and & flashing on a computer screen. Later they were presented with (new) words and asked to guess which they might have seen subliminally by tapping into their feeling of familiarity. As predicted, positive words were significantly more likely to be erroneously recognized ($M=52\%$) than neutral ($M=45\%$) or negative words (44%), even controlling for the frequency of the words used.

“Fluency Effects on Form vs. Content: Rhyming Makes Information Seem True”

Ian Skurnik, University of Toronto

Benoît Monin, Stanford University

Tarun Dewan, Ryerson University

The subjective sense of fluency, or ease of processing a piece of information, can affect a variety of judgments related to the information. For example, fluent processing of information increases judgments of familiarity (Whittlesea, Jacoby, & Girard, 1990) and preference (Mandler, Nakamura, & VanZandt, 1987). Researchers have established feelings of fluency using a number of methods, chiefly by changing a feature of the context in which information is presented. For example, subjective fluency is heightened by prior exposure, and by greater perceptual clarity. Fluency can also be induced by rhyme. Whittlesea and Williams (2001) found that presenting words in the context of rhyming non-words (e.g., pingle–single) increased the familiarity of the rhymed words, apparently by increasing the momentary fluency with which they were processed.

The present research investigates the impact of rhyme-induced fluency on judgments of truth. McGlone and Tofighbakhsh (2000) suggested that rhyming information might seem more true than non-rhyming information as a direct consequence of fluency on truth. Another theoretical possibility is that rhyme has an indirect influence on perceived truth, through familiarity. Past research has

found that making claims familiar by repeating them increases their perceived truth. Because familiarity is a common attributional consequence of fluency, other methods of increasing processing fluency—such as rhyme—should also indirectly increase truth ratings.

Experiment 1 investigated how rhyme increases subjective truth, and Experiment 2 explores some behavioral consequences of this effect on product choice. In Experiment 1, people read a list of 30 statements and rated each one for perceived truth and familiarity. Half of the statements had a rhyming structure and the other half did not. There were 2 versions of the list of statements to counterbalance rhyming and non-rhyming versions of a statement, so that a rhyming statement (e.g., “Variety prevents satiety”) in one list appeared in a non-rhyming version (e.g., “Variation prevents satiety”) in the other list. Ratings for both truth and familiarity were made on a seven-point scale, and the order of these ratings was blocked and counterbalanced across participants (i.e., participants rated all statements for truth before rating them for familiarity, or *vice versa*). Including the counterbalances, the study design was 2(rhyme vs. non-rhyme) X 2(truth or familiarity rated) X 2(truth rated first or familiarity first) X 2(list 1 or list 2) mixed factorial, with the last two factors between subjects.

In overview, results showed that rhyming statements, compared to non-rhyming versions of the same statements, were rated more familiar ($t(156)=5.02, p<.001$) and more true ($t(156)=2.86, p=.005$). In addition, statements received higher ratings of truth or familiarity on the second presentation (e.g., truth ratings were higher for people who rated familiarity first and then rated truth than for people who rated truth first, and vice versa, all $ps<.01$), replicating standard effects of repetition on both familiarity and truth. To test for mediation, we conducted two sets of regression analyses—this approach was necessary because of the difficulty of systematically controlling the timing of participants’ familiarity and truth judgments. One set of regressions showed that familiarity predicted truth ratings, and that the intercept was not different from zero. In contrast, a reversed regression using truth to predict familiarity ratings produced an intercept significantly different from zero. In other words, when there was no difference in familiarity due to rhyme, there was no difference in truth ratings, but the reverse was not the case. This pattern strongly argues that familiarity mediates the relation between rhyme and truth, and that rhyme-induced fluency does not have a direct effect of truth judgments.

There were no differences in time spent reading and rating rhyming and non-rhyming statements (all $ts<1.3, ps>.18$). This finding helps rule out an alternative to a fluency-based account of the rhyming effects: that people took rhymes as a cue to literariness, leading people to interpret the words more broadly and to search a wider variety of contexts onto which the content might map. Such a processing difference between items would suggest longer response times for rhyming than non-rhyming statements.

In two additional studies, people read a series of advertisements with a brief product description and either a rhyming or non-rhyming claims at the end (e.g., “Miller tastes good, like a light beer should”). Participants rated rhyming slogans as more familiar, more likeable, and more credible than their non-rhyming counterparts. In addition, participants were more likely to choose a product that had been introduced with a rhyming slogan vs. a non-rhyming slogan in a forced choice task.

These findings add to our knowledge of the range of judgmental effects of fluency. In addition, they help specify the process through which the form that information takes (rhyming vs. non-rhyming structures) can influence perceived truth. Fluency from rhymes can influence perceptions of truth, and in turn may enhance the probability of choice in a consumer setting.

“Fluency and Judgments of Pleasantness, Interest, and Involvingness: Memory Evaluation as a Basis for Subjective Experience”

Bruce Whittlesea, Simon Fraser University

The SCAPE framework is a general, integrative framework of memory that accounts for effects of fluency and the perceptual experience of heightened ease of processing. Several experiments using a variety of paradigms test predictions about some subjective experiences of interest to consumer psychology, including pleasantness, interestingness, and the involvingness of tasks. The data display a complex pattern of dissociations across tasks and paradigms, all of which I argue can be explained as the products of people evaluating their current mental performance. The general principles of the SCAPE framework and the patterns of findings provide a new way of understanding effects of processing fluency, and suggest a number of future directions for research.

Briefly, the SCAPE framework suggests that memory has two primary functions, production and evaluation. The evaluation function is thought to be the direct source of subjective experience: in interpreting the quality of their performance and attributing it to some plausible source in the past, the situation, the stimulus or their own current state, people experience feelings of knowing, remembering, error and so on. Most of our previous investigations of the evaluation function have focused on the occurrence of feelings of familiarity, in studies of the recognition process. However, the assumptions about inference and attribution underlying the SCAPE account derive from early studies of the development of attitudes, decision-making and social judgment, by investigators such as Festinger (1957), Heider (1958), Schachter and Singer (1962), Chapman and Chapman (1967), Kelley (1967), Zajonc (1968), Bem (1972), Kahneman and Tversky (1973), Fischhoff (1975), Mandler (1975), Cantor and Mischel (1977) and Nisbett and Ross (1980). It therefore seems appropriate to investigate the implications of the SCAPE account for subjective responses in activities other than remembering. The experiments in this presentation form a beginning of that enterprise, exploring the basis of feelings such as interest, pleasantness, and task involvingness.

According to the SCAPE framework, people evaluating their own processing arrive at one of three fundamental conclusions: the perception of coherence, incongruity or discrepancy. These perceptions are thought to be the product of an interpretive process: they are not direct perceptions of the real relationships among aspects of processing. In fact, it could be argued that in reality, a processing event can only be either coherent or incongruous (well-formed or ill-formed): that the sense of strangeness that is fundamental to the perception of discrepancy is a purely psychological characteristic, not a property of the event itself.

To take a representative series of experiments, we conducted an investigation of the effects of encountering and evaluating events that are actually incongruous, by developing what we call the specific-incongruity paradigm. Participants read pairs of sentences such as “He went to the store and bought her the DIAMOND” and “They went to the dump to throw out the GARBAGE.” Some sentences were presented as seen here; the remaining sentences were made incongruous by interchanging their terminal words within pairs (e.g., “He went to the store and bought her the GARBAGE”). The overall design resulted in four test conditions (coherent/ specifically incongruous pairing X positive / negative word). For each sentence, participants were asked to read the stem and completion and then to rate either the pleasantness or interestingness of the terminal word on a seven point Likert scale. It was made clear to the subjects that the judgment was to be made exclusively about the terminal word (presented alone on the monitor), not the sentence as a whole.

Briefly, results showed that words following congruous stems were judged about 12% more pleasant than words following incongruous stems, $F(1,14)=16.44$, $MSe=.01$, $p<.001$. In contrast, words following incongruous stems were judged about 11% more interesting than words following congruous stems, $F(1,14)=6.26$, $MSe=.03$, $p<.025$. The former illusion is almost undoubtedly the result of the subjects experiencing coherence as pleasantness. A set of follow-up studies showed that the basis of the interestingness illusion is more complicated. These studies suggested that incongruity per se is not enough to cause the illusion: it is also necessary for that incongruity to be accompanied by a feeling of strange connectedness of the stem and termination. The illusion of interestingness seems to be caused by a perception of discrepancy rather than incongruity.

According to the SCAPE account, having arrived at a perception of coherence, discrepancy or incongruity, people attribute their self-evaluation to some source that makes sense, given those aspects of the stimuli that are salient to them given the task and context and their intuitive causal theories. We have observed that people perform such attributions in making judgments about their past (causing feelings of familiarity) and also judgments about the properties of the stimuli themselves (causing feelings of pleasantness and interestingness). Another series of experiments investigated whether people also make such attributions about their own current disposition, such as their perceived involvement with the task.

Other results suggest that people have a dominance hierarchy for evaluation and attribution, such that variations in the coherence of processing are attributed to global aspects of the stimulus over local aspects (e.g., to strangeness of the sentence over interestingness of the word) and to aspects of the stimulus over aspects of the person (e.g., to interestingness over alertness). However, to state that suggestion too strongly may be misleading. Under other circumstances (e.g., judging others' behavior) people often make an attribution to disposition over situation (the “fundamental attribution error”: Nisbett & Ross, 1980). It seems likely that the most generally true statement is that people generate inferences that “make sense of as much data as possible at the most functionally useful level” (Marcel, 1983, p. 238); but that, in so doing, they are open to systematic error in noticing important variation in their own performance and in the structure of the world, in evaluating the coherence of their performance and in attributing variation in their performance to internal and external sources of control.

SPECIAL SESSION SUMMARY
The Ubiquitous Influence of Expectations
Stacy Wood, University of South Carolina
Uzma Khan, Yale University

SESSION OVERVIEW

Life is largely a matter of expectation.
—Horace (65 BC–8 BC)

Perhaps it is a common phenomenon experienced at conferences to watch a presentation, ostensibly unrelated to your work, and to be amazed at the connections you can draw to your own work at a deeper theoretical level. The collection of papers brought together for this session captures that feeling. Consider the following questions: Is a business traveler, who is choosing between a tasty but unhealthy breakfast and a healthy but less tasty plain fat-free yogurt, more likely to choose the tasty less healthy breakfast if she views this decision as one of a series that she expects to make over the next three days? Do consumers' expectations of their own ability to use a new product affect their evaluations of such products? And, does consuming a drink expected to improve physical performance but purchased on sale (vs. at regular price) results in poorer perceived performance in fitness-related activities? While each of these questions (studied in the three papers) investigates a different substantive domain, the theoretical thread that sews them together is the impact of expectations.

Consumers' choices, evaluations, and behaviors are often materially influenced by their expectations of what *should* be, both now and in the future. For example, when people buy multiple items simultaneously for consumption over several periods they choose more variety than if they buy one item before each consumption, presumably because they expect satiation in their tastes. Expectations are ubiquitous in consumer research, but often in a supporting, rather than leading, role. In this session we bring expectations to the forefront. The three papers in this session investigate the influence of expectations using domains of self-control, new product adoption, and placebo effects. The collective findings demonstrate that biases result when expectations are flawed due to motivated cognition, inaccurate internal representations or potentially misleading external manipulations.

Most basically, *Merriam-Webster* defines the verb "expect" as "looking forward." Thus, it is a clear component of evaluations and decisions made over time. A more specific definition, though, describes an expectation as something considered "probable, certain, reasonable, or due." This connotes the realm of forecasting and prediction—making judgment on what should or is likely to happen. It is not surprising then that expectations will be used as bases of evaluations for states and outcomes that are dynamic or process-oriented. In this session, we cover three domains where the power of expectations is well-illustrated. In the work by Khan and Dhar, individuals' decisions to indulge are facilitated when framed as part of a decision series in which later virtuous choices are expected. As Khan and Dhar demonstrate, such expectations are not always validated. In the work by Moreau and Wood, expectations about ease of learning or usage drive the emotional reaction to new products. Thus, evaluations of new products can be substantially influenced by "teaching" demonstrations that alter consumers' expectations. Shiv, Carmon, and Ariely provide a powerful demonstration of impact of expectation by applying the placebo effect in a marketing domain. They show how subtle changes to the expected

efficacy of a product (e.g., price discounting) can have strong effects on its perceived efficacy after use.

The issues covered by this session are pertinent to understanding the dynamics of consumer decision making. Taken together, the three papers attempt to uncover the processes by which expectations of future reactions can systematically impact judgment and choice.

"Effect of Future Expected Decisions on Current Choices"

Uzma Khan, Yale University
Ravi Dhar, Yale University

Imagine a business traveler who is choosing between two breakfast offerings—a very tasty but unhealthy breakfast (a relative vice) and a very healthy but less tasty plain fat-free yogurt (a relative virtue). Is this person more likely to choose the tasty, less healthy breakfast if she views this decision as one of a series that she will be making over the next three days? Although consumers in the real world make choices that are interrelated, most choice research has focused on isolated decisions without considering choices that are made before or after the current choice. Recent research suggests that prior choices can have a systematic effect on preference and choices. We add to this emerging literature on choices made in sequence by showing a systematic effect of seeing a choice as being part of a sequence of future expected choices. Specifically, we demonstrate that in a choice between a relative vice and a virtue, people who see the choice as part of a sequence of similar future choices are more likely to choose a vice than respondents who see the same choice as a single decision.

We propose that viewing the first choice as part of sequence of future choices increases the choice for a vice option by allowing people to optimistically expect that they will pursue virtuous options in the future. This belief in one's ability to choose the more virtuous option follows from research on optimistic bias and planning fallacy. We show that viewing a choice as part of a sequence leads people to overestimate the likelihood that they will choose the more virtuous option later, hence providing them with a (guilt-reducing) justification to opt for a vice now.

Two studies are conducted to demonstrate that the proportion of respondents choosing a vice is higher when the initial choice is presented as part of a sequence of future choices. Two additional studies are conducted to test for the underlying mechanism.

In the first study, subjects selected a video from options that included both highbrow (e.g., *Schindler's List*) and lowbrow (e.g., *I Love Trouble*) movies. In a pretest, the former were rated as more virtuous than the latter. Subjects were assigned to either control condition (single choice) or a sequence choice condition. Those in the sequence condition were told that a survey would be conducted over two weeks, and they will choose a free movie rental each week for participating in the survey. After completing an unrelated survey, participants in both conditions chose a movie for the current weekend from a list that contained both highbrow and lowbrow movies. Prior to making this choice, participants in the sequence condition were asked to indicate the movie they wanted to receive next weekend. They were told that choice for the first week was final but the second week's choice could be changed next week. Consistent with our prediction, we find that significantly more

people chose a lowbrow movie in the sequence condition than in the control condition. Consistent with an optimism bias, more respondents in the sequence condition indicated that they will choose a highbrow than a lowbrow movie next weekend.

In the second study, as a compensation for survey-participation, subjects selected between highbrow (e.g., *The Economist*) and lowbrow magazines (e.g., *Xtra*) in control or sequence condition. Highbrow magazines were pretested to be more virtuous than lowbrow magazines. Sequence condition participants were told that the survey would be conducted over two weeks and each week they would choose a free magazine. After completing an unrelated survey, subjects in both conditions chose the magazine they wanted for the current week. Moreover, participants in the sequence condition were asked to predict the magazine that they wanted to receive next week before indicating their choice for the current week (second week's choice was indicated as alterable). A week later, without any prior notice, the control subjects were approached again and were given the same choice of magazines for completing another survey. We find that in the first period more people chose the lowbrow magazine in the sequence condition than in the control. Next we compared the prediction of the participants in the sequence condition with the actual second period choices of the control participants. Participants in the sequence condition were significantly more likely to predict choosing the highbrow magazine in comparison to the proportion of control participants who actually chose a highbrow magazine in the second choice. This is consistent with our theory that viewing a choice as part of a sequence of future choices can lead people to overestimate the likelihood that they will choose the more virtuous option later.

To rule out the possibility that subjects in the sequence condition were actually alternating between the two options, study 3 examined the first and second period choices of participants in the sequence condition. The study involved a choice between a plain fat-free yogurt (virtue) and a large cookie (vice) in lieu of survey-participation. All instructions were same as study 2, except that instead of predicting their choice for the next period, subjects in the sequence condition actually made a second choice after one week. Control participants also made the same choice again next week. However, unlike subjects in the sequence condition who knew about the second choice, control subjects were unaware of the future choice while making their initial decision. As in the previous studies, we find that more people chose a cookie for the first choice in the sequence than in the control condition. Second period choices were consistent with a motivated cognition explanation rather than a notion that people alternate vices of the first period with virtues in the second period. Specifically, the choice proportion of a cookie in the second period was not lower in the sequence condition than in the control.

Study 4 further investigates motivated cognition as the process underlying our effects and is being currently run. Control participants will choose between a yogurt and a cookie without being told about any future choices. Participants in sequence condition will make the same choice after predicting which of the two snacks they want in the next period. In two additional conditions, participants will choose between a yogurt and a cookie for the current period after being told of a specific snack they will receive in the next period. In one of these two conditions they will be told that they will get a low-fat yogurt in the next period, while in the other condition they will be informed that they will receive a cookie. We predict that the effect of motivated cognition on current choice will be moderated when people know that they will receive a cookie in the next period. That is, when there is no opportunity to predict a virtuous choice in the future, people will not feel justified choosing a vice in the current period.

In conclusion, we discuss broader theoretical implications of our results and suggest how our proposed effect is relevant for choices other than decisions concerning vices and virtues.

“The Influence of Usage Expectations on Consumers’ Emotional and Cognitive Responses to New Products”

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With the exception of the recent work by Fournier and Mick on satisfaction and technological paradoxes, little if any research has examined the influence of consumers’ expectations of and actual experiences in *using* an innovative product. In cases of continuous innovations (e.g., a new brand of orange juice), this distinction is largely moot. However, in other cases where the product requires adaptation and learning (e.g. Palm Pilots), it is not. In this research, we assert that understanding an individual’s expectations regarding his/her ability to use a product, combined with his/her actual experiences over time is crucial to understanding the dynamic reactions of consumers to the new product post-purchase. As a consumer’s experience with a product evolves over time, the expectations used to make satisfaction judgments are likely to evolve and change as well.

Consumers do form expectations about a product’s attributes and benefits, but with technology products, they are also likely to form expectations about their own ability to achieve those benefits. In the context of an initial use of a new product, consumers who are familiar with a similar set of products are likely to expect the new target product to be easier to use than those who have no prior relevant experience. Consumers who lack such prior experience are likely to rely more upon other relevant inputs, such as communications from marketers and observations of other consumers, in constructing their usage expectations. Thus, one communication tactic that marketers may employ is the use of a product demonstration to provide consumers with a vicarious product experience.

A straightforward prediction might be that consumers who are given a product demonstration will construct expectations similar to those who have direct product experience. However, research has shown that the inexperienced may not be able to imagine what they do not know, and thus, may be more positive if no demonstration is provided. When a demonstration is provided for a product which will require learning (and with which the consumer has no direct experience), the product demonstration may *increase* both the specificity and negativity of the inexperienced consumers’ expectations. Effectively, the demonstration may make salient the technological intricacies required to master the new product, increasing the trepidation in inexperienced consumers’ usage expectations. Experienced consumers, however, are likely to be less influenced by such external information and will rely primarily on their own experience to shape expectations of their initial use of a new product.

Study 1: The PalmPilot Study

The study was a 2 (product demonstration: provided vs. not provided) X 2 (Palm experience: no vs. yes) between-subjects design. Participants were 175 undergraduate students at a large mid-western university. Upon arriving at the experimental location, all participants were told that they would be participating in a study about how people react to new products. They were then told that the product under consideration in their experiment was a new PDA, the Palm Zire, and that it didn’t matter whether or not they had ever used a PDA before.

At this point, participants in the “demonstration” condition were told that the experimenter would provide them with a brief demonstration relevant for the two tasks. In the demonstration, the

experimenter held up the Zire, showed the participants where the stylus was located, and indicated how to tap the main menu buttons to find the appropriate tasks and briefly demonstrated how and where to draw the letters on the screen of the Zire. She then indicated that they should open the experimental packet and proceed through on their own. Participants in the “no demonstration” condition were simply given those same instructions immediately after they received their packets.

All participants then read through the introductory pages which provided more detail about the Palm Zire, the type of tasks it can undertake, and an example description of how to enter an appointment. The participants completed the first set of dependent measures, then received a Zire. Participants were given step-by-step instructions and asked to complete their first task of entering an appointment. Each participant showed their work to the experimenter and, if it was correct, instructed to proceed to the next set of dependent measures. If the work was not correct, the participant was asked to attempt to correct it. Once the second battery of dependent measures was complete, the participant proceeded to their second task, entering an address. The same procedure was followed for this task as well. Once the participants had finished the final set of dependent measures, they were thanked and debriefed.

Results. Specifically, we predicted that inexperienced consumers who did not receive a demonstration would be more negatively surprised than their inexperienced counterparts who did receive one. To test this hypothesis, we used the measure of expectation disconfirmation described above as the dependent variable, in which higher numbers indicate a more negative surprise and lower numbers, a more positive surprise. As predicted, inexperienced participants who did not receive the demonstration experienced the most negative disconfirmation of expectations, finding the Zire significantly more difficult to use than their counterparts who did receive the demonstration ($F(1, 172)=21.2, p<.0001$; $M_{no\ demo}: 3.5$ vs. $M_{demo}: -1.8$). As predicted, the demonstration did not significantly influence disconfirmation for those with prior experience ($F(1, 172)=.69, p>.10$; $M_{demo}: 2.3$ vs. $M_{no\ demo}: 1.1$). We also predicted that the influence of our two independent factors, prior experience and product demonstration, on usage expectations will diminish over time. To test this hypothesis, we used a repeated measures ANOVA which included usage expectations at each point in time as our repeated measure plus our two independent factors. The predicted three-way interaction between time, prior experience, and demonstration was significant ($F(2, 334)=10.26, p<.01$). Finally, an examination of the drivers of the changes in emotions from a) pre-usage to after the first trial and b) from the 1st to the 2nd trial shows the dramatic influence of disconfirmation in the movement of emotions over the course of usage.

Study 2: The PageOut Study

A second quasi-experimental study was conducted to examine these effects within the context of real product usage. The new product, however, represented a continuous innovation and results support the proposition that emotions experienced in the process of product use significantly impact product evaluation, but, without learning issues, usage expectations are not drivers of consumption emotion. Results from both studies would be discussed in a conference presentation of this research.

“Placebo Effects in Marketing Contexts: Influence of Sales Promotions on the Efficacy of Health Supplements”

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Placebo effects are a common demonstration of the power of expectations. For example, data submitted to the FDA for approval of six most widely prescribed antidepressants approved between 1987 and 1999 show that approximately 80% of the response to medication was found to be duplicated in placebo control groups. Support for the existence of placebo effects has also been obtained by identifying neurobiological mediators to such effects. For example, research using Positron Emission Tomography documented evidence for a substantial increase of dopamine in the striatum in response to placebos.

To the best of our knowledge, such placebo effects have not been documented in the marketing domain. Thus, a core issue we address in this research is; Will placebo effects occur with common tactics used by marketers? And, if they do, what are the underlying psychological mechanisms giving rise to these effects? As a starting point at answering these questions, we examine a common tactic used by marketers to improve sales, namely offering products on sale. For example, it is not uncommon to find fitness drinks and energy supplements being offered to consumers at a discount. A core question we ask in this research is; Can such discounts negatively affect the perceived as well as the actual performance of these supplements?

To provide an answer to the above core question, we recruited thirty-eight active members of a fitness center. Participants were told that they would engage in their usual workout routine, as part of the study, and would consume Twinlab Ultra Fuel (a brand all participants were familiar with) before and during their workout. To control for perceptions of quality, participants were also told that the fitness drink was from the latest batch manufactured by Twinlab. Finally, some participants were told that the fitness drink had been purchased by us at the regular price of \$2.89; other participants were told that the drink had been purchased by us at a sale price of \$0.89 and that the regular price was \$2.89. After participants had engaged in their usual workout routine, they were asked to rate the intensity of their workout on a -3 (much less than usual) to +3 (much more than usual) scale (the mid-point was anchored by about as usual). They were also asked to rate how tired and fatigued they were on two separate 1 (very) to 7 (not at all) scales. The results were in support of a placebo effect related to the price factor. Specifically, the intensity of participants' workouts was significantly higher in the full-price condition ($M=0.58$) than in the sale-price condition ($M=-0.33$; $F(1,37)=7.48, p<.01$). Further, participants in the sale-price condition reported feeling more tired and fatigued ($M=4.50$) than those in the full-price condition ($M=3.65$; $F(1,37)=3.54, p<.07$).

In order to delve into the underlying psychological processes related to effects found in our preliminary study, we carried out two additional experiments. These experiments differed from the preliminary study in several respects. First, participants in these experiments consumed SoBe (an energy drink like Red Bull that is popular among college students), some at regular price (\$1.89) others at a sale price (\$0.89; participants in the sale-price conditions were told that the regular price was \$1.89). Second, participants paid for the drink instead of merely being told that the drink was on full versus sale price. Finally, the critical dependent variable in these experiments was actual performance in a subsequent task rather than merely perceptions of performance. The basic task was similar across the two experiments. Participants in the treatment

conditions first signed a form authorizing us to charge their U-Bill account the price of the drink. They then consumed the drink and then watched a video clip that lasted for 10 minutes. They were then asked to solve 20 jumble-word puzzles in 30 minutes. They were told that they could give up attempting any puzzle and move on to the next, but if they did so, they would not be able to return to the puzzle that they skipped.

Experiment 2 used a 2 (price) by 2 (elaboration) between-subject design. One hundred and twenty five students participated in the experiment. The elaboration factor was manipulated by having some participants rate, immediately prior to the puzzle task, how effective SoBe is at improving one's concentration and mental performance (7-point scale items); other subjects did not respond to the scale items. As can be seen in figure 1, an ANOVA on our critical dependent variable, namely the number of puzzles solved, revealed a significant price by elaboration interaction ($F(1,121)=5.06, p<.03$), apart from a significant main-effect of price ($F(1,121)=34.01, p<.0001$). Under conditions of no elaboration, the number of puzzles solved was significantly higher in the full-price condition ($M=9.5$) than that in the sale-price condition ($M=7.68; F(1,121)=6.07, p<.02$). Compared to conditions of no elaboration, when elaboration was high, the number of puzzles solved was no different when the drink was at regular price ($M=9.91; p=n.s.$), but significantly lower when the drink was on sale ($M=5.79$ under conditions of high elaboration versus 7.68 under conditions of no elaboration; $F(1,121)=7.14, p<.01$).

Experiment 3 used a 2 (price) by 2 (price-salience) between-subjects design with an added control condition. One hundred and ninety four students participated in the experiment. The price-salience factor was manipulated by asking some participants, "Given the price of SoBe, please rate how effective SoBe is at improving one's concentration and mental performance; other participants were not asked this question. (Note that the price-salience manipulation is identical to the elaboration manipulation in experiment 2, except that we drew participants' attention in the high salience conditions to the price of SoBe without mentioning the price. Our hypothesis was that drawing participants' attention to the price will nullify the placebo effect through a correction process). As can be seen in figure 2, an ANOVA on our critical dependent variable, namely the number of puzzles solved, revealed a significant price by price-salience interaction ($F(1,193)=5.09, p<.03$), apart from a marginally significant main-effect of price ($F(1,193)=3.13, p<.07$). Under conditions of low price-salience, the number of puzzles solved was significantly higher in the full-price condition ($M=8.35$) than that in the sale-price condition ($M=6.79; F(1,193)=7.80, p<.006$). Compared to conditions of low price-salience, when price-salience was high, the number of puzzles solved was no different when the drink was at regular price ($M=8.03; p=n.s.$), but significantly higher when the drink was on sale ($M=8.21$ under conditions of high price-salience versus 6.79 under conditions of low price-salience; $F(1,193)=6.91, p<.01$).

The results from the preliminary experiment and from the two main experiments enable us to arrive at the following. First, we demonstrate a reliable placebo effect related to price discounts in the contexts of "health-drinks." Second, when individuals elaborate prior to engaging in the main task, their expectations about the efficacy of the drink are enhanced resulting in stronger placebo effects. Third, when the link between price and efficacy is made salient, the placebo effects gets attenuated, suggesting that the placebo effect involves non-conscious processes.

How Vulnerable are Consumers to Persuasion Attempts?

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EXTENDED ABSTRACT

Consumers are often confronted with mixed marketing signals. To some extent, marketing communications may reflect sincere and diagnostic information to help the consumer make optimal choices. On the other hand, these communications may also reflect ulterior motives that are based on making profit, manipulation of choices, or sometimes even mere deception. For the consumer then, making the right purchase decision is not an easy job. Consumer welfare would require that consumers are able to discount to the extent that persuasion attempts are driven by mere ulterior motives.

Surprisingly little consumer research has investigated when and how consumers will discount for manipulative marketing influences. The present study shows that—although people are able to discount manipulative persuasion attempts—even small reductions in processing resources result in decreased criticism and skepticism, and a higher inclination to follow the advice of the salesperson. Contrary to what can be expected from the persuasion literature, we also observed this decreased scepticism in situations where the ulterior motive was extremely salient.

In 4 experiments we asked participants to choose from and to evaluate two new products while we subjected them to either a blatant persuasion attempt or to a sincere advice. At the same time, background music was played that either elicited high or low levels of arousal (assumed to influence participants' cognitive resources). In our sincere advice conditions (i.e. ulterior motive not salient) we expected people to be more inclined to follow the advice of the salesperson, whereas in the blatant persuasion attempt conditions (i.e. ulterior motive salient) we expected people to discount this advice. The results of our studies are consistent with this expectation, but only when the background music elicited low levels of arousal. When the background music elicited high levels of arousal, both people in the sincere advice as well as those in the blatant persuasion attempt condition were more likely to follow the advice of the salesperson. These effects were replicated even when the ulterior motive was made extremely salient (experiments 3 and 4). The results of experiment 4 moreover show that highly arousing music is capable of significantly decreasing consumers' scepticism. Our results show that even a subtle manipulation such as arousing background music can lead to a higher inclination to follow the advice of the salesperson, decreased consumer scepticism and a decreased application of persuasion knowledge, even when the ulterior motive is highly salient and deceptive. This suggests that consumers are highly vulnerable to misleading persuasion attempts, and that the ability of consumers to cope with these deceptive attempts is often overstated in the persuasion knowledge literature.

Transference: the Effect of Relationship History on Consumers' Relationships with Other Firms

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ABSTRACT

Trust with a focal service firm before a service failure and recovery, and commitment afterwards, are affected by previous serious service failures with *other* firms, a result not previously mentioned in the relationship literature. Customers can generalize their lack of trust, and this affects commitment. The results of a scenario-based experiment are discussed here, and explanations are provided using the social-cognitive concept of transference.

INTRODUCTION

Despite its best efforts to recover well from a service failure, a firm may still have lost the trust and commitment of customers. One reason this may occur is due to the customer's previous relationship with other service providers, and the intensity of service failures by the previous firms. As a result of negative past relationships, customers may carry their distrust into current marketing relationships, which then colors their perception of that relationship. The purpose of this paper is to introduce one explanation of why service failure may not fully restore relationship quality after a service failure has occurred. We introduce and measure the effect of previous serious service failure with an unrelated service provider. We will show that such previous service failures have a strong and significant impact on trust and commitment on the relationship with a subsequent firm both before and after a service failure with that firm. We explain this phenomenon using the social-cognitive concept of transference, which to our knowledge has not previously appeared in the marketing literature. Additionally we will test the effects of transference using the relational components of trust and commitment.

SERVICE FAILURE AND RECOVERY

Service failure and recovery is a complex phenomenon that reflects characteristics of the consumer, characteristics of the relationship, and the quality of service recovery (Bolfing 1989). Additionally, research has shown that the quality of the relationship between a service provider and consumer can actually magnify the negative effects of a service failure (Hess, Ganesan, and Klein 2003). However a good service recovery can potentially benefit the relationship between the customer and the service provider (Spreng, Harrell, and Mackoy 1995). The benefits derived from a good service recovery do not necessarily hold up if there are multiple service failures by the target firm (Maxham and Netemeyer 2002).

TRANSFERENCE

The social-cognitive paradigm has conceptualized transference as patterns of interpersonal relating, learned in prior relationships that resurface later in future social relationships (Chen and Andersen 1999). At the heart of transference is the assumption that the effects of past relationships (positive and negative) carry over into future relationships (Berk and Andersen 2000). Essentially the significant other becomes an exemplar that is used to compare further relationships (Andersen et al. 1995). But an exemplar used by an individual can complicate that person's perceptions of and reactions to future relationships (Andersen and Glassman 1996).

Transference should not be confused with expectations, conceptualized as consumer-defined probabilities of the occurrence of

positive and negative events if the consumer engages in some behavior (Oliver 1981). Although expectations influence initial perceptions of events, transference is hypothesized to affect the actual dynamics of a relationship. For example, a person may treat a partner in a current relationship as if that partner was the "other" significant other (Andersen and Baum 1994).

Previous research has already shown that customers' perception of service quality is a blend of prior expectations and current transactions (Boulding et al. 1993). But transference is a helpful tool to help expand marketing knowledge regarding the effect of past marketing relationships on future marketing relationships, especially when a customer perceives similar characteristics between two different service providers. For example, a service failure by a previous firm may amplify customers' reactions to a service failure in a firm that has similar characteristics, thus making it more difficult for the firm to recover from that failure.

TRUST

Trust is a "willingness to rely on an exchange partner in whom one has confidence" (Moorman, Zaltman, and Deshpande 1992). Doney and Cannon (1997), in a business-to-business context, point out that trusting partners are willing to make themselves vulnerable in order to acquire the benefits of a smoothly-functioning business relationship. The same authors also make a useful distinction between trusting that a partner will deliver on promises ("performance trust") and trusting that the partner will behave in the best interests of the customer ("benevolence trust").

There has been much written on the positive consequences of trust in customer relationships. For example, trust is an essential ingredient for successful relationships (Garbarino and Johnson 1999) and is related to satisfaction (Kennedy, Ferrell, and Thorne LeClair 2001). Research has also shown that trust is a major predictor of commitment, the critical variable in relationship longevity (Morgan and Hunt, 1994).

In the beginning of a relationship, trust typically starts at a low level (Bejou and Palmer 1998). Serious service failure results in strongly negative affective responses by the customer towards that firm (Smith and Bolton 2002). As a result of the negative emotions felt towards the firm, customer trust towards that firm will also decrease (Bejou and Palmer 1998). By incorporating the concept of transference, we can then argue that serious service failures with previous important service firms may lower the initial trust of a focal firm even more than normal when a customer enters a new marketing relationship.

H1: Customers who have experienced a service failure with a past important service provider will exhibit less trust when entering a relationship with the current service provider than customers who have not experienced a service failure with a past service provider.

Upon leaving a negative marketing relationship, customers may feel more satisfied with the service provider they switched to than those customers who switched even though they were satisfied with the previous provider (Ganesh, Arnold, and Reynolds 2000). As long as the current relationship stays positive, there is no reason

to believe that this assertion is not true. But a service failure can act as a trigger that sets off negative emotions that were associated with the previous dissatisfying relationship. Once this trigger effect occurs, people may transfer their past negative feelings onto the current relationship (Berk and Andersen 2000, in a personal relationship context). So in a marketing context, the customer may transfer the negative feelings associated with the past firm onto the current firm and begin to find similarities between the two firms. When this occurs, the customer may become even more distrusting of the current firm, than customers who did not have a similar dissatisfying experience with another firm.

Additionally, Maxham and Netemeyer (2002) showed that multiple service failures with the same firm means that recovery efforts by the firm will be less effective in restoring the relationship. Extending this line of thinking, transference argues that service failures with previous important service firms will have a similar effect, thus making it more difficult for the focal firm to please the customer, even when that firm recovers well from a failure.

- H2: After a service failure with the focal firm, customers who experienced a service failure with a previous important service provider will trust the focal service provider less than customers who have not experienced such a previous service failure.

COMMITMENT

Commitment is "the intention to behave in a manner supportive of relationship longevity" (Fournier 1998). Committed customers exert more effort to maintain a relationship, are more resistant to persuasion by competitors, and in general can form the core of a good customer base (Morgan and Hunt 1994).

It is already established in the literature that trust is an antecedent to commitment (Garbarino and Johnson 1999; Morgan and Hunt 1994). Thus, if trust is lower because of the transference effect due to a service failure with a previous important service firm, commitment should be lower, in general, as well, after a service failure with the focal firm.

- H3: Commitment to the focal firm after a service failure and recovery will be lower for those individuals who have suffered a previous serious service failure with another firm, than it will for customers who have not suffered such a previous service failure.

The impact of service recovery on a relationship is strong, especially if the customer has experienced a good relationship with that firm. So one would expect positive feelings to emerge after a service recovery. As mentioned earlier, however, the transference effect argues that people with past bad experiences might associate the current firm's failure with the past firm's failure, and thus remain less committed, even after a good recovery. In other words, the attempts by the focal firm to recover after a service failure may be sabotaged by the customer's association of the failure of the focal firm with the previous failure of another firm.

- H4: There is an interaction effect between good recovery and past service failure condition with respect to commitment. That is, customers without a past serious service failure will respond more positively to a good recovery than will those with a previous serious service failure with another firm.

METHODOLOGY

Experimental method

The methodology for this study was experimental, using presentations of scenarios regarding service failure and recovery, and measurement of responses. The scenario experimental method was used in order to manipulate the effects of exit barrier and service recovery on a serious service failure. There were four failure-and-recovery scenarios regarding a local telephone service provider, which we call the focal company. These scenarios are available from the authors on request, as space limitations prevent their presentation here. Each scenario described one of the combinations of two levels of the quality of the failure recovery (poor, good) and the nature of the competitive situation (which resulted in either high structural exit barriers or low structural exit barriers).

First, each scenario described simply the competitive situation, either the low exit barrier condition in which there were alternative providers of local telephone service, or the high exit barrier condition in which there were none, not even cellular service. Then, the subjects were asked to rate their trust of the service provider with whom they had contracted. The exit barrier manipulation provided some variation in initial level of trust, since customers in the high exit barrier (monopoly) condition recognized their vulnerability and trusted their provider less. Subsequently, a serious, long-term failure in service was described, followed by either a good recovery or a poor recovery once the failure was realized. The good service recovery scenarios included three of the four attributes of Smith et al. (1999): compensation, apology, and recovery initiation, while the poor recovery scenarios did not (the fourth attribute, response speed, was the same in both conditions). The subject was then asked to rate his or her trust of the service provider, commitment to remain in the relationship with the service provider, and other questions relating to relationship management.

Due to the strong emotional reactions found in the in-depth interviews conducted before this experiment (but not reported in this study), we had reason to believe that there would be major differences between people who had a negative experience in the past with a large service organization and those who did not have a negative experience in the past with a large service organization. To test this assumption, the very last question on asked the respondents whether or not they ever had a frustrating service failure with a critical service provider. The results from this question supported our assumption, thus hinting at the idea of transference.

Sample

The sample consisted of 320 adults recruited by four adult community groups who completed the questionnaire for fundraising purposes. Six additional subjects were recruited individually. Out of 326 questionnaires, 312 were useable. The four scenarios (high exit barrier plus good recovery, low exit barrier plus good recovery, high exit barrier plus poor recovery, and low exit barrier plus poor recovery) were randomized across the subjects in each group.

Measurements

Trust before the service failure and recovery and trust after the service failure used the same scale, a seven-item Likert scale (see Table 1). The items were developed following the spirit of Doney and Cannon's (1997) and Ganesan's (1994) items that measured benevolence trust, although those authors were measuring it in a business-to-business context, so substantial modifications were required. Commitment used a seven-item Likert scale as well (see Table 1). The multi-item Likert scales were developed and refined through pre-testing, item analysis, multiple method validation, and

TABLE 1
Questionnaire Items

TRUST (6-point Likert scale)

This local telephone company has my best interests at heart.
 I feel that this is a company that is likely to take advantage of its customers. (reversed)
 Overall, this firm is trustworthy.
 I would expect representatives of this phone company to be completely honest with me about any future problems with my service.
 This company is the type to be straightforward with its customers.
 I would expect representatives of the company to hide the truth from me about problems in the future. (reversed)
 I think that this telephone company typically would not take advantage of its customers.

COMMITMENT (Likert scale)

If asked about this telephone company, I would give it a good rating.
 Whether or not an alternative is available, I still wouldn't want to change telephone companies.
 Even if close friends recommended dropping the service offered by this local telephone company, I would not change my preference for this company.
 I would like to maintain a relationship with this firm for a very long time.
 If given the chance, I would drop this telephone service. (reversed)
 If I had the chance to switch, I would still remain faithful to this company.
 If somebody talked bad about this company I would stand up for it.

PRIOR SERVICE FAILURE

In the past have you had a very frustrating problem with a company in which you felt like switching was not an option for you?
 ô Yes
 ô No

assessment of convergent and discriminant validity, none of which will be covered in detail here due to space limitations. However, the Cronbach's alpha for trust and commitment were .88 and .93 respectively, and both measures showed very good convergent and discriminant validity. The measure of past service failure was a single yes/no item, shown in Table 1.

Analysis

Data analysis was accomplished through univariate ANOVA. Since trust was a repeated measure (pre-failure & recovery and post-failure & recovery) it was analyzed using a three-between, one-within design (prior service failure with another company x exit barrier size x quality of recovery x pre/post failure). The sample size was controlled so that the sample sizes in each cell of the 2 x 2 part of the design defined by exit barrier size and quality of recovery were very close to equal. The "prior service failure with another company" condition was uncontrolled, but the cell sizes for the resulting 2 x 2 x 2 were not too disparate (see Table 2).

RESULTS

ANOVA results for trust are presented in Table 3. Since this is a repeated measures design, there are two parts to the table. ANOVA results for commitment are presented in table 4.

As one can see from Table 3, trust is partially a function of the subject's having a past frustrating failure with another critical service company. People who have endured such a failure start out with lower trust of an unrelated focal company than people who

have not endured such a failure (H1). This effect carries through the service failure and recovery with the focal company (H2), as is seen by the lack of interaction between past service failure and the other conditions. High exit barriers lower trust, in general. A service failure, even if recovered well, lowers trust. Poor recovery lowers trust dramatically, and good recovery can keep trust from falling so far. But, there is no interaction between prior service failure condition and any other independent variable with respect to trust. This means that, throughout all those other effects, people who have suffered a serious prior service failure with an unrelated firm have about a half a scale point lower trust than those who haven't. The result is consistent, significant, and robust to variations in other conditions in this experiment.

Commitment shows a similar pattern (with one exception). People who have experienced a prior service failure with an unrelated critical firm tend to be less committed by about half a scale point than people who have not suffered such a failure (H3). The only interaction with prior service failure with respect to commitment is with quality of recovery (H4). The Figure displays this interaction.

This interaction, though not especially strong, is illuminating. If people have not had a prior serious service failure with a critical firm, they respond with much more commitment to a good recovery—an increase of 0.7 scale points from poor recovery to good recovery. However, if they have had a prior such service failure with an unrelated company, they hardly respond at all—a difference of only 0.1 scale point. The prior service failure seems to have the

TABLE 2
Sample Sizes and Means

2a. Sample Sizes and Means by All Three Conditions

Condition	n	Trust Before	Trust After	Commitment
Prior service failure Low exit barrier Poor recovery	32	4.50	3.18	2.28
Good recovery	33	4.35	4.21	3.48
High exit barrier Poor recovery	28	4.39	3.27	2.47
Good recovery	37	3.73	4.02	3.29
No prior svc failure Low exit barrier Poor recovery	42	4.99	3.65	2.28
Good recovery	42	5.06	4.89	4.21
High exit barrier Poor recovery	51	4.57	3.47	2.72
Good recovery	47	4.55	4.76	3.96

2b. Sample Sizes and Means for Prior Service Failure

Prior service failure with an unrelated company	130	4.24	3.67	2.88
No such prior service failure	182	4.80	4.19	3.30

2c. Sample Sizes and Means for Exit Barrier Condition

High exit barrier	153	4.73	3.88	3.06
Low exit barrier	159	4.30	3.99	3.11

2d. Sample Sizes and Means for Quality of Recovery Condition

Good recovery	163	4.49	4.47	3.74
Poor recovery	149	4.63	3.30	2.44

2e. Sample Size and Means for Trust Before and After Failure and Recovery

Trust	312	4.52	3.93
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effect of negating the best efforts of the focal firm in correcting its mistakes. People who have been frustrated by a serious service failure with some previous firm are more likely to want out of the relationship with the focal firm after it makes a mistake, regardless of how much and how quickly it responds with apologies and compensation.

DISCUSSION

Theoretical Implications

Understanding the effects on the customer of past service failures with previous firms on the customer's perception of and reaction to service failure by another firm adds a new dimension to

the study of marketing relationships. Also, this research shows the importance of understanding trust even before interactions take place between a customer and a firm. How much a customer trusts a service provider may predict how that customer will react to a service failure and recovery episode.

Previous research has extolled the benefits of service failure recovery on customers' commitment to a firm. Our research shows that a good recovery may not be enough. There is a systematic source of variance in trust and commitment over which the focal firm may have no control—the customer's previous history of serious service failures. When a customer enters a relationship in a "damaged" state, what is the theoretically best response of the firm? How would a firm detect this state? Do the relationships with such

TABLE 3
Analysis of Variance Results for Trust

Tests of Within-Subjects Effects

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
before/after failure and recovery	51.155	1	51.155	108.221	.000
before/after * barrier	3.642	1	3.642	7.705	.006
before/after * recovery	60.127	1	60.127	127.202	.000
before/after * past failure	.031	1	.031	.066	.797
before/after * barrier * recovery	.327	1	.327	.691	.406
before/after * barrier * past failure	.000	1	.000	.000	.995
before/after * recovery * past failure	.043	1	.043	.091	.764
before/after * barrier * recovery * past failure	.016	1	.016	.035	.853
Error(before/after)	143.698	304	.473		

Tests of Between-Subjects Effects

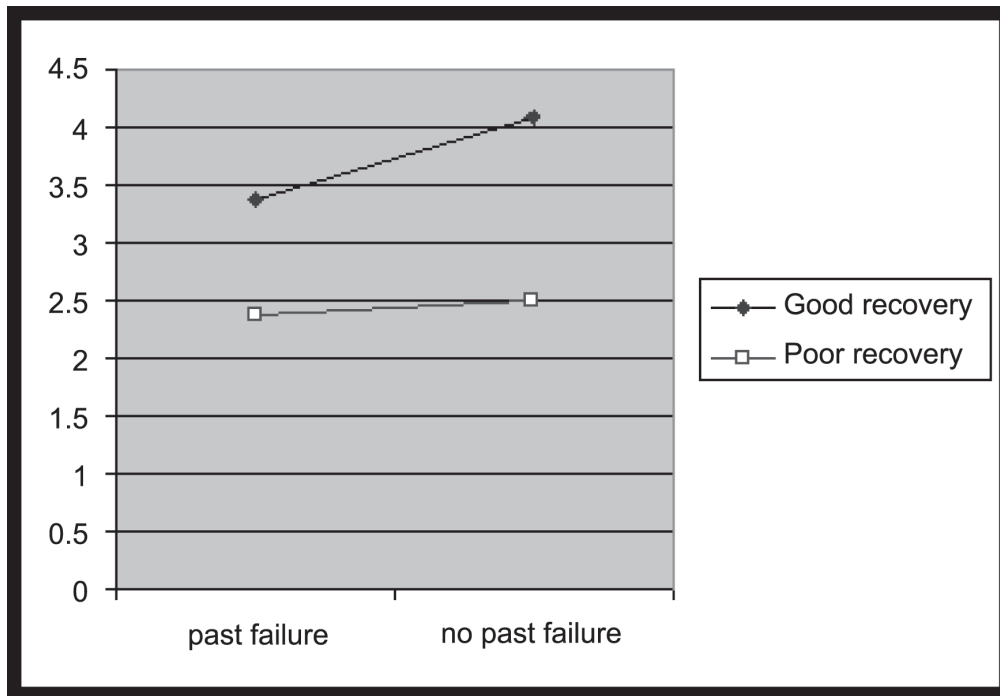
Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Intercept	10740.489	1	10740.489	5985.990	.000
barrier	10.069	1	10.069	5.612	.018
recovery	29.539	1	29.539	16.463	.000
past failure	43.001	1	43.001	23.966	.000
barrier * recovery	1.657	1	1.657	.924	.337
barrier * past failure	.424	1	.424	.237	.627
recovery * past failure	6.175	1	6.175	3.442	.065
barrier * recovery * past failure	1.316	1	1.316	.733	.392
Error	545.458	304	1.794		

TABLE 4
Analysis of Variance Results for Commitment

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Intercept	2868.276	1	2868.276	2156.393	.000
recovery	126.095	1	126.095	94.799	.000
barrier	.176	1	.176	.132	.716
past failure	12.964	1	12.964	9.747	.002
recovery * barrier	5.345	1	5.345	4.019	.046
recovery * past failure	6.192	1	6.192	4.655	.032
barrier * past failure	.174	1	.174	.130	.718
recovery * barrier * past failure	.438	1	.438	.329	.567
Error	404.359	304	1.330		
Total	3685.316	312			

FIGURE

Interaction between Prior Service Failure and Recovery Quality with respect to Commitment



customers, in theory and in practice, begin with 2 strikes against them? This research cannot answer such questions, but it is clear that such questions require and answer.

Managerial Implications

The findings in this research can have an impact on customer relationship management. We suggest that the first step a manager can take with a “damaged” customer is to insure that trust develops between the customer and his firm. A manager or service representative might make extra phone calls to assess if the service is working properly and send out additional promotional material to help build the trust of this kind of customer.

If a service failure occurs early in the relationship, this research shows that earning the commitment of a “damaged” customer might require a lot of extra work. A manager would need to assess how much resources can be assigned to this customer and if assigning these extra resources would be returned in additional lifetime value.

Limitations

This research was conducted using an experiment which might have internal validity but perhaps lacks some external validity. Especially with this type of research question, which examines the effect of past service failure on relationships, it would be an advantage to investigate actual relationships using a longitudinal method in order to unveil any other processes that were not available through this method.

Additionally, past service failure was assessed using a single item that asked customers if they had a problem with a firm in which switching was not a clear option for them. This particular question may have brought up some negative feelings in the customer, although this question was not asked until the end of the questionnaire.

Future Directions

This research shows that customers tend to distrust service providers in the beginning of a relationship if they had negative experiences with other firms. This research can be expanded by analyzing how customers eventually come to trust a firm, even when the customer’s past relationships with similar firms have been negative. In addition, research can investigate the effects on loyalty once a customer learns to trust a firm that was previously not trusted.

Research can also test in what conditions exit barriers might play a role and what type of barriers would be likely to enhance transference. Also, further research needs to be conducted into the nature of transference, such as: what are the antecedents of transference, and what are the different ways that transference can affect a marketing relationship. Since transference is usually started by some event (trigger effect), it would be important to understand what those trigger effects are and how can a company trigger the positive effects? Additionally, research needs to unveil positive transference between past marketing relationships and current marketing relationships.

This research only tested whether or not people who had bad experiences in the past responded more negatively with relationship variables than people who did not have bad experiences in the past. Consequently, the results hint at transference and leads to a call for a differentiation of transference. For example, what is transferred between relationships? Exemplar, emotion, or event memories?

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Crisis of Confidence: Re-narrating the Consumer-Professional Discourse¹

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ABSTRACT

The professional-consumer relationship in professional services has undergone unprecedented change. Relationships which were traditionally dominated by respect for professional status are in flux as increasingly educated consumers challenge the professional establishment. This paper considers the nature of the professional service consumer and the implications for professional service encounters. Based on qualitative interviews we identify four patterns of consumer-professional interaction, compliant, collaborative, confirmatory, and consumerist, which reflect the nature of the discourse between consumer and professional.

INTRODUCTION

Professional services have traditionally been characterised by an in-built power imbalance where the consumer engages with the professional from a position of dependency, and the professional determines what is in the consumer's best interest on the basis of his or her professional judgement (Parsons, 1975). The professional consumer relationship in this context has however, undergone unprecedented change in the last 20 years: relationships which were traditionally dominated by respect for professional status are in constant flux as increasingly post-modernist consumer cultures come into conflict with modernist professional establishments (Laing et al, 2002). Driven by the intersection of socio-economic and technological trends, this has resulted in an increase of high profile service failures. Ranging from the mis-selling of investment products to professional disregard for patient rights, such negligence has, at least in popular consciousness, been viewed as symbolic of the failure of the established professions to address the needs of contemporary consumers. In this paper we consider the nature of the professional service consumer and the implications of an informed and knowledgeable consumer on the nature of professional service encounters. We argue that as many consumers turn to the internet as a convenient and accessible source of information, as well as consumer mediated knowledge, they are increasing likely to challenge the traditional power structure in professional relationships and to perceive service providers as failing to meet their individual service requirements. The primary concern of academic research into service failure to date has been with the operational level management of service 'recovery', i.e. recovering the traditional position, rather than acknowledging the potential requirement for change in the underlying format of the professional-client relationship (see for example Smith et al, 1999; Colgate and Norris, 2001; Holloway and Beatty, 2003). In the context of the flux of contemporary professional service consumption, however, such an operational perspective does not address the underlying clash between professionals, protecting a status that has traditionally been based on the possession of specialist technical knowledge and superior access to information, and consumers empowered by

access to such knowledge and information. By focusing on the professional-client relationship as an evolving discourse, or set of discourses, this paper provides an alternative framework through which we can develop an understanding of the consumption of professional services.

DISCONTINUITIES IN THE PROFESSIONAL SERVICES ENVIRONMENT

In modernity certain categories of services, for example health, legal and financial services, were protected by the concept of professionalism. This was characterised by a number of key features. Firstly, an esoteric discourse generating the perception of homogeneity, secondly a rational scientific rhetoric of reliability, thirdly restricting entry to the profession through vocational education, fourthly a domineering approach to alternatives simulating a knowledge monopoly and lastly an asymmetry of information between the profession and its consumers that suppressed debate. In such circumstances the question of service failure, other than in terms of operational processual dimensions, rarely surfaced. However, in contemporary western societies, professional services have increasingly been exposed to the corrosive effects of a number of interconnected trends.

- *education and information*: reduction in the asymmetry between professionals and clients in terms of the level and diffusion of education (Ham and Alberni, 2002).
- *informed consumers*: increasing access to information of a highly specialised nature from within and in opposition to the dominant discourse (Hogg et al, 2003).
- *consumer culture*: consumer awareness of the proliferation of service alternatives (Laing et al, 2002)
- *questioning of science*: post-structural and social challenging of the claims of science and rationality (Lyotard, 1984; Foucault 2003; Elam and Bertilsson, 2003)
- *pervasive media*: publicising and exploiting professional disagreements leading to perceptions of heterogeneity (Petts et al, 2000).
- *risk society*: the individualisation of risk and ascription of major risks to human activity (Beck, 1992; Giddens, 1990).

Consequently, patterns of consumption, the basis of professional status, and the format of professional-client relationships are in constant flux as increasingly post-modernist consumer cultures come into conflict with modernist professional establishments (Laing et al, 2002). Thomson (2003) in exploring consumption of alternative health care services encapsulates this tension. "*The patient as consumer desires to produce his/her own medico-administrative identity through interaction with physicians, nurses and technologies. This has contributed to the diminution of medical authority as well as increased expectations (and incidences of dissatisfaction) regarding the quality of service. Yet these post-modern currents inevitably collide with the more intractable, modernist features of the medico-administrative system.*" (p103.) Associated with these trend many professional services have, in popular perception, become inexorably linked to specific socio-economic features of contemporary society. Conventional healthcare

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has become associated with the medico-pharmaceutical complex, financial services with the City or Wall Street, and legal services with the political establishment. As a consequence there is an association in the minds of consumers between professional service providers and malpractice, indeed of failures generally within the associated institutions. Having lost the independence associated with professional status through the corporatisation of such services (Vermaak and Weggeman, 1999) established professional service providers have increasingly suffered from negative associations.

SERVICE FAILURES AS SIMULATION AND DIVERGENCE

Adopting a post-structuralist perspective, practices such as the service encounter require to be viewed as inherently precarious. The continued mutual understanding of both consumer and professional that a service encounter *is* categorised as a 'professional-client consultation' does not rest on some essential and absolute structural quality relating to the encounter. Baudrillard (1988) sees the label profession as a simulacrum masking the absence of any 'real' characteristics that differentiates the professional discourse from competing 'non-professional' discourses. Rather the understanding of the nature of an encounter, in this case as a professional consultation, is dependent on evolving shared practice. As Holt (1997) contends "*patterns of understanding are reproduced only if they are inscribed in everyday actions, and actions remain patterned only to the extent that we retain the same understanding of what they mean*" (p343). Consequently as the key features which have conventionally marked the boundary between professional consultations and other service encounters such as information and knowledge, are eroded, there is a need for a reworking of the established professional discourse to take account of evolving practice.

At the heart of this is the divergence of the consumer and professional discourse, and the concomitant mutual effort required to pattern a new common narrative. Reflecting the socio-economic and technological changes in contemporary society, a diversity of consumer narratives have increasingly evolved semi-independently of the established professional discourse. Conventionally the consumer narrative drew primarily on the professional discourse for its construction and consequently was closely aligned with and indeed mirrored that discourse. However, drawing increasingly on independent sources of information, and critically independent consumer mediated means of knowledge construction, there is evidence that these consumer narratives are increasingly diverse and distinct from the professional discourse, both in respect of the service delivery process and the selection of service options. In turn the dynamic of interaction within the professional service encounter is fundamentally altered. Although professionals have reacted to these changes, these responses have been slow, limited and often only reluctantly conceded, reflecting the innate conservatism of professions (Abbott, 1991; Aldridge and Evetts, 2003). Such grudging responses to the interests of consumers may be viewed as having further undermined consumer confidence in professional values, specifically the notion that professionals' primary concern is with their clients (Friedson, 1986; Abernethy and Stoelwinder, 1995) and in turn the validity of the professional discourse. Within the emergent consumer-professional service interactions the evolving divergence of the professional discourse and consumer narratives and the associated proliferation of patterns of consumer-professional interaction can be represented as follows:

Reflecting the complex drivers behind the emergence of diverse alternative consumer narratives, from the research data four 'ideal-type' formats of consumer-professional interaction can be

postulated, ranging from conventional professional ascendancy through to emergent consumer ascendancy. These ideal-types are (a) compliant interaction, where the client acquiesces to the professional's superior knowledge and judgement; (b) collaborative interaction, where both parties expect, and are expected, to bring information to the encounter and judgement is negotiated; (c) confirmatory interaction, where the client has made a decision but wants a professional opinion to bolster (or blame) and; (d) consumerist interaction, where the consumer expects to choose their service provider (or whether to use a provider) and to make the service decision independently with the professional confined to an advisory role. Associated with these evolving consumer narratives, the dominant professional discourse has similarly changed with the professional discourse, the 'official' characterisation of the service encounter, having developed from a traditional largely paternalistic rhetoric to a revised collaboration ethos.

This does not imply that professionals uniformly and unquestioningly subscribe to this official understanding and articulation of their role. Rather, that while a range of perspectives is now more apparent among professionals, a revised but nevertheless dominant 'official' perspective is still discernable from professional associations. Critically the evolution of the professional discourse has lagged significantly behind the more rapid evolution of consumer narratives. The degree to which professional and consumer expectations diverge can be framed in terms of consumer 'under expectation' and 'over expectation'.

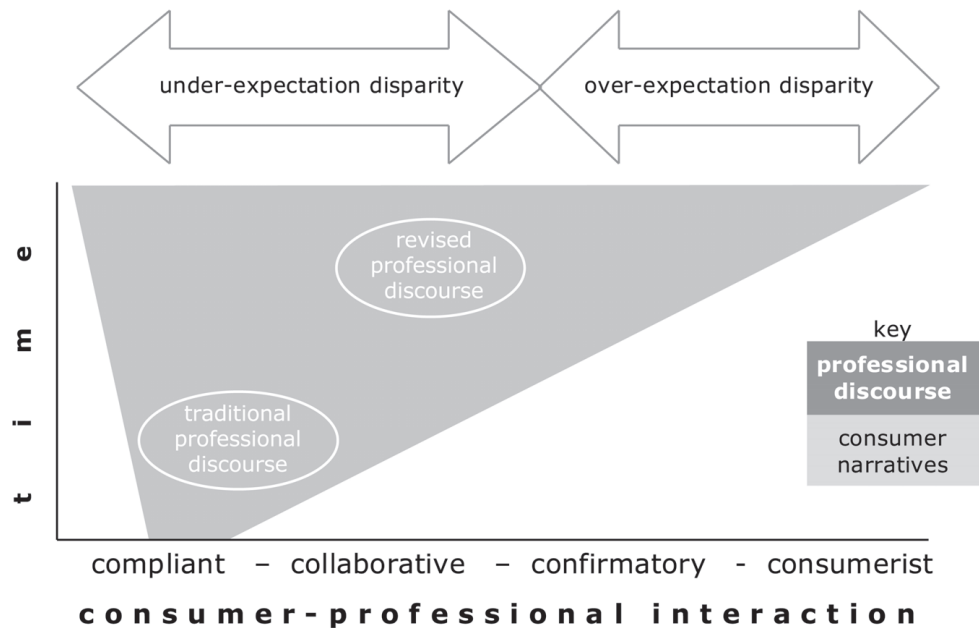
The resultant discourse-narrative gap sees increasing consumer (and professional) dissatisfaction with the interaction at the core of the service encounter and a concomitant perception of service failure, that is, crisis of confidence. On the one hand some consumers will want to take control of their consumption experience within an overall biography (Giddens, 1991) in a manner that conventional professionals find potentially unacceptable. This disparity can be characterised as 'over-expectation' on the part of the consumer, with the crisis of confidence resulting from the consumer narrative being in advance of the evolving professional discourse. On the other, professionals are aware of going beyond the wishes of more conventional consumers in what can be characterised as an 'under-expectation disparity' where the dominant or 'official' professional discourse is in advance of the consumer narrative, similarly resulting in a crisis of confidence. The potential development of a more compliant pattern of interaction is a recognition that in contemporary consumer cultures the parameters of the consumption experience are increasingly less constrained and exhibit unprecedented variation.

In this evolving situation both parties face fundamental challenges. For the consumer the challenge is to negotiate alternative patterns of service provision, ranging from either changing the basis of the narrative and hence encounter with existing conventional service providers or identifying alternative, that is non-conventional service providers. At the extreme this may involve reliance on other knowledgeable consumers, so called expert patients or semi-professional litigants (Moscrop, 2002; Oldham and McVeight, 2002) and emergent semi-formal service providers existing outside the conventional institutional frameworks impacting in turn on the boundaries of professionalism.

RESEARCH CONTEXT AND METHODOLOGY

This paper examines the evolving divergence between consumer narratives and the professional discourse in the context of three distinct professional service settings, namely primary healthcare, civil legal advice, and investment management. Specifically the paper explores the way in which professionals characterise consumers and view their role within the professional

FIGURE 1
Consumer and Professional Expectation Disparities



service encounter, and the nature of the consumer-professional relationship. The research reported in this paper aims to examine the impact of information access, generally but not exclusively via the internet, on professional-consumer relationships in contemporary society. Interviews were conducted with eight professionals from primary healthcare, investment management, and legal services ($n=24$). Relevant demographic data on the interviewees is outlined in Appendix I. The respondents were identified through the relevant professional associations as representative key opinion formers with an interest in the changing nature of the professional discourse, the impact of the emergence of an informed consumer culture on professional roles, and the nature of that profession in contemporary society. The interviews were structured through use of a standard interview protocol allowing comparison across interviews. Key questions were designed to “lead in a direction opposite to that in which [we expected] the answer to lie, thus avoiding the danger of misleadingly confirming [our] expectations” (Hammersley and Atkinson 1995). The interviews were audio-recorded and later transcribed verbatim.

The data were analyzed using QSR N6 qualitative data analysis software to facilitate the identification of recurring themes as well as contradictions across interviewees and sectors. Specifically all text units (except general salutations etc.) were categorised to avoid inadvertent or deliberate loss of information (Coffey and Atkinson 1996). Seven general categories: ‘professional as’; ‘consumer as’; ‘consultation as’; ‘environment as’; ‘profession as’; ‘officialdom as’; ‘ICT as’ facilitated the analysis. A further 130 categories and subcategories were developed progressively within these but these were generated from the data (Glaser and Strauss 1967). Exceptions or ‘negative findings’ (Coffey and Atkinson 1996) were either coded within the relevant category or constituted a sub-category. Most of these ‘grounded’ categories were generated during the initial analysis of the first interview from each sector.

The themes developed therefore arise from our categories. The theme presented here is our interpretation of the professionals’ representations of their consumers.

RESULTS

Drawing on the data from the professional interviews the specific nature of the four postulated categories of consumer narratives that is compliant interaction, collaborative interaction, confirmatory interaction and consumerist interaction is critically examined. In this the key features of consumer behaviour in each ideal type category, as well as the implications for professionals and the overall service delivery process are explored.

Compliant Interaction

The conventional format of the professional service encounter is characterised by the client acquiescing to the professional’s perceived expertise, with such acquiescence having been based the professional’s specialist training and access to technical information. There was an implicit expectation that the consumer would defer to the judgement of the professional. Such compliant patterns of consumption also reflected the prevalence of a marked social distinction between the professional and the majority of consumers. Although there is a trend away from such a paternalistic discourse among professionals, it is evident from the data that a proportion of the consuming population remain wedded to the compliant narrative reflecting ongoing trust in professional expertise. The following excerpts illustrate such patterns of interaction.

... when we start saying what we want to do, we want to do this, they say, “oh, well, just do what you think’s the best”, even if you try and say, well, offer them alternatives, they don’t particularly want to get involved in that sort of discussion.
[Medical 3]

... in fact friends of mine that complain about doctors and they'll say, "and I went to see my GP and all they could say is what do you think; I went to my doctor to be told." So that, anecdotally, there's a lot more annoyance about us asking them, 'what do you think'; 'what would you like'; 'what do you think is wrong?' [Medical 8]

These professional accounts of consumer behaviours also often function as a demonstration of the extent to which professionals have adjusted to the new cultural condition, that is adopted the emerging dominant 'official' discourse of a collaborative encounter. Yet they equally demonstrate that for a section of the consuming population there remains an attachment to the established compliant encounter, highlighting the existence of an under-expectation disparity within the encounter. Although most commonly associated with older consumers, the expectation that professionals act as the decision maker within the service encounter is not restricted to generations that were socialised to be compliant. Rather the continuation of such patterns of interaction highlight the potentially significant costs facing consumers in becoming active partners in the service encounter. Encompassing not only the time and opportunity costs associated with the acquisition and interpretation of information, the emotional investment, particularly for vulnerable consumers, constitute prohibitive costs which consumers may be unwilling to carry. Deferring to professional judgement offers the means of reducing these costs as well as offsetting the costs of personal responsibility for decision making. The following excerpts amply illustrate the central influence of consumer vulnerability in promoting the retention of such compliant narratives in the face of socio-economic, technological and political drivers promoting less compliant, more consumerist patterns of interaction.

You know, sometimes people are feeling so ill that they just want to be given something ... [Medical 4]

People who are vulnerable will often not have that capacity, I think for independent research, even if it means ... even if they do have a PC on their desk at home and they need the support. Um, the handholding, I suppose to be able to be taken through that as well. [Legal 4]

They're totally traumatised and concerned ... they've probably never seen a solicitor before so the whole thing of seeing a solicitor is pretty tough and the concept of trying to get to grips with the law is very ... so there's quite a large proportion who are just totally reliant and don't really look up anything. [Legal 5]

The emerging new 'official' professional discourse based on the development of collaborative relationships with clients reflects the impact of increased education and information, the questioning of science, and the emergence of a 'risk society' on contemporary western societies. Yet for certain consumers and certain consumption contexts, this collaborative discourse fails to address consumer requirements and expectations, leading to under-expectation disparity and mutual dissatisfaction with the format and outcome of the service encounter.

Collaborative Interaction

The emergence of the collaborative discourse as the dominant professional view in contemporary society is reflected in professional accounts of changes in professional training, where the conventional focus on developing technical expertise is increasingly complemented by the development of expertise in interacting

with clients. Central to this is the ability of professionals to communicate, to engage in a dialogue of equals. A relatively young medical practitioner spoke of an ongoing culture change that had brought the development of communication and facilitation skills to the forefront of professional training.

[T]here's been a big culture shift towards communication and involving patients, patients participating much more in decision making, um, giving patients choice, listening, reflecting ... all these sorts of things, our communication skills are valued very highly in... certainly in general practice it's a major component of membership examination nowadays, all the Royal Colleges are sort of considering communication skills, whereas I would say even 10 years ago that wasn't the case. [Medical 1]

The central feature of the collaborative interaction is the pooling of information, knowledge and values, with both parties expecting to bring their respective perspectives and 'expertise' to the encounter. The encounter is characterised by being dialogue rich with service outcomes being negotiated between the parties. From this perspective, the informed consumer is an asset rather than a threat to the professional. Thus the consumer's possession of a base level of knowledge obviates the necessity of the professional starting the encounter from first principles. This facilitates a more sophisticated dialogue and process of negotiation, and in turn the tailoring of the service outcome to the requirements of the client. The following excerpts illustrate the nature and format of the collaborative interaction.

Um, it can be nice if they've got some information to start with, but I think... I think what matters most is a thing that they can understand the information that I've been able to give them....And, you know... and feeling that they've taken a sort of... you know, that we've collaborated on the decision. [Medical 6]

Yeah because then you can have more of a two way discussion about things and yeah, that would be great actually, as opposed to me telling them what the law is etcetera, etcetera. It would be great if they had a bit more idea because you could really sort of explore what options they've got and it can cut down on the time as well. [Legal 3]

[Patients are] more prepared to expound their own health values ... and making sure that we take that into the decision. ... new patient this morning, with high blood pressure and I'm saying you've got to bump your tablets up and she actually said to me, "you must know, doctor that I'm actually into homeopathy and... something else, you know, and I'll go up this time but, you need to bear this in mind". [Medical 2]

Such upbeat portrayal of the collaborative encounter, however, masks varying degrees of tension between the consumer and professional during the process of negotiation. This is particularly central in service settings, such as divorce and coronary heart disease, where the service outcome is uncertain and where a range of potential service options exist. Central to this tension is the issue of the weighting given to consumer versus professional information and to consumer versus professional judgement. Though collaborative, such encounters may be highly contested and represent the front-line in the post-modern clash between the veracity of alternative bodies of knowledge and bases of expertise. The veracity of the information and knowledge brought to such negotiated encounters

is a fundamental issue in defining the respective consumer and professional roles, and the boundaries of these roles.

I may cast doubt on what [information] a patient brings to me but what I can bring to that patient also needs to be checked out, I know that. [Medical 2]

They'll come with a pre-conceived idea, I think it's a wrong judgement they've come to, it may be very difficult to persuade them otherwise. If I was sufficiently convinced they were going the wrong way and they were looking at the wrong things, then I would really try to pull the stops to, show them that although they had done the research, their research was flawed in particular areas, in what they were doing. [Financial 5]

If they come in and say, yes, I know about this and I know about that and I will check it out, but actually you know, [laughs] to make sure that actually their understanding of the grounds of divorce or whatever, is the same as mine. [Legal 4]

A recurring theme was the perceived lack of both contextual and underpinning technical knowledge (e.g. in respect of basic physiology or financial market structures) among consumers. This was associated with an identified tendency for consumers to seize on specific elements of specialist technical information that suited their particular requirements, taking this information out of context and without reference to their broader circumstances. The failure to adequately contextualise this information, was viewed as raising the risk of inappropriate decision making where the consumer expected the dominant role in the decision making process. For professionals a central element of their role, and indeed of their professionalism in the context of collaborative encounters, was to provide this contextual information and technical knowledge. There was, however, an acknowledgement that in certain circumstances (e.g. chronic diseases) where consumers had lengthy exposure to relevant service, not only might they possess a technical knowledge base comparable to that of the professional, but they frequently had more extensive information on service options than the professional. The balance of authority in the collaborative encounter with such patients was reversed with the professional effectively learning from the consumer.

And I mean I will certainly take advice from someone who's an expert patient, um, about treatment because, I mean, they know more of it than I do, um, very often. [...] The information that is held now by some patients, is tremendous and they will be able to manage their disease with us much better than if they didn't have that information. [Medical 4]

Confirmatory Interaction

Although the data indicates an increasing expectation on the part of consumers for active participation in the professional service encounter through contributing information, knowledge and personal values, there is equally evidence that there are limits to the extent to which consumers ultimately wish to exert their authority and act independently of the professional. That is, although consumers may have made service consumption decisions based on independently acquired information and knowledge prior to meeting with a professional, professional input is sought as the final step in the decision making process. Such input is not sought in order to review or overturn the decisions made by the consumer, but rather to confirm and verify those decisions, to secure professional approval. The role of the professional within the confirmatory narrative is thus to confirm the consumer's decision and bolster their

resolve in following a particular course of action. Associated with this is the perceived desire on the part of some such consumers to abdicate personal responsibility, and for the professional to act as a scapegoat in the event of the consumers' decision not delivering the expected outcome. Such abdication of personal responsibility might be a reaction to the 'risk society' (Beck, 1992). The desire for professionals to provide confirmation and solace concerning the outcomes are evident from the following excerpts.

He really wanted to know, was he going to be incontinent after the operation ... and was he going to get his sexual abilities back? And then the questions the ... the statistics about sexual ability [on provider website] looked pretty dodgy to me, really, because you have to ask how many men in the prostate range actually had a decent sexual ability beforehand. [Medical 2]

They want your affirmation that what they've done is correct. And that's part of the motivation for them coming to see you. "Been on the internet, sorted this out, and I think this is what I want. Would you agree?" [Financial 3]

... the ones who come in knowledgably, um, and they sometimes just come in for one meeting, having read it all, just wanting confirmation of what ... whether they're on the right track ... so they've read it all up and they're convinced. [Legal 5]

Although representing a further extension of consumer authority, service encounters characterised by confirmatory interaction are qualitatively different from collaborative interaction based encounters. Of limited duration, the consumer-professional dialogue is highly circumscribed, being confined to the confirmatory agenda of the consumer. As such confirmatory interaction based encounters effectively reverse the conventional format of the professionally dominated paternalistic encounter where dialogue was constrained but the professional determined the course of the encounter. For both consumers and professionals, this reversal can create a mismatch in expectations between the consumer and the professional, leading to a situation of over-expectation disparity on the part of the consumer.

Consumerist Interaction

The ultimate outcome of the erosion of informational asymmetries characteristic of professional services, together with the growth of consumer mediated knowledge through online communities (Hogg et al, 2004), has been the emergence of explicitly consumerist narratives among professional service consumers. In such narratives the professional is reduced to acting purely as an advisor with the consumer both evaluating the advice and making decisions independently of the professional. Implicit within these consumerist narratives is the freedom of the consumer to select between the advice offered by alternative, indeed competing, suppliers without reference to a professional gatekeeper. For example, the advice of a physician may be considered alongside the advice of an osteopath or reiki therapist, with the weight attached to advice from a particular 'professional' being shaped by the values of the consumer. Central to such consumerist interaction is the erosion of the established authority of the professional as a result of the questioning of conventional basis of knowledge (Foucault, 2003). A plurality of professional and quasi-professional discourses consequently compete for legitimacy among consumers, with consumers exercising the independence to choose between these alternative offerings. Consumerist patterns of interaction are most evident in areas of contested knowledge and expertise, and

where there is disagreement as to the merits of alternative service options, as is illustrated in the following excerpts.

I had a patient dying of that who, whose husband, um, brought a lot of things in about leading-edge research into motor neuron [disease] in an American university and discussed about the, the relevance of that to his wife's particular situation, and then I had to go and try and explore where that was in the list of what was accepted as medical knowledge and it wasn't very far up it, shall we say, at that stage. It certainly wasn't within what the NHS would reckon as therapeutic at this stage. [Medical 4]

At the end of the day they're the ones that tell me how they want to deal with it and how they want ... to put their case. I can advise them on the best way to do it and what I think, for example a divorce, what I think they're likely to ... achieve, but at the end of the day they make the decisions. Whether it's based on my advice or not it's a matter for them ... it's not me who decides, it's them. [Legal 3]

Well, you've given them the information and if they want to go away and spend money on somebody rubbing their feet or whatever... staring at their eyes intently, well, that's entirely up to them. [Medical 3]

Although access to information and the possession of relevant technical knowledge is central to the articulation of such consumerist narratives, the issue of time, and implicitly consumer interest, are equally critical influences on the embracing of a consumerist pattern of interaction. According to professional accounts, the essence of professional expertise is the ability, born of familiarity with the field, to rapidly assimilate complex technical information and utilise such information to make decisions. For the consumer lacking such familiarity, the time implications of adopting a consumerist pattern of interaction necessitate a deep personal commitment to the service requirement, as the following excerpt illustrates.

I've had one client in the last couple of years who has wanted to exercise total control over his investment decisions. ... He wanted some advice on investing lump sums which we did. Then he said, okay, I'll do the investment decisions ... and the company I recommended to him allowed him to make investment decisions, because of the myriad funds they had at their disposal, at least 100 and he could move between all of these funds, in different geographical sectors, as well as different types of funds, so that could keep him busy into the wee small hours of the morning. [Financial 3]

For professionals the emergence of the consumerist narrative poses fundamental challenges in terms of their role in the delivery of professional services, the nature of professionalism, and indeed the place of professionalism in contemporary society. Equally, however, the consumerist narrative poses significant challenges to consumers in terms of the building of the necessary knowledge base, acquisition of information and the evaluation of that information. Central to this are the time implications of embracing the role conventionally undertaken by professionals, and the risks associated with taking personal responsibility for decisions. Despite the existence of such inherent constraints, for those consumers embracing a consumerist narrative, the reluctance of professionals to cede authority and power to consumers beyond the newly dominant collaborative discourse is central to the divergence between con-

sumer and professional expectations, resulting in a situation of over-expectation disparity on the part of the consumer.

CONCLUSION

The dominant theme to emerge from the data is of consumer variation. Specifically the idea that the conventional 'mass' narrative has fragmented, has dis-aggregated, into a multiplicity of sub-narratives existing along a spectrum from compliant to consumerist. The conundrum facing consumers is that although the professional discourse within the established professions has evolved, albeit slowly, in line with the overall shift towards a consumer oriented ethos where authority lies with the consumer, the professional discourse has remained unified. The inevitable consequence has been a proliferation of crises of confidence, both under-expectation and over-expectation disparity, across the spectrum of consumer narratives as they abut a unified professional discourse based on collaborative interaction. The challenge for professionals in responding to such crises of confidence is to manage the tension between the need to adapt in response to multiplying consumer narratives while retaining the coherence of the profession, and critically some basis of professional authority.

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APPENDIX
Professional Interview Profiles

	Descriptor	Sex	Exp	FTE	Client base description
M1	The new generation GP	f	2	4	predominantly comfortable and employed
M2	The innovative collaborator	m	23	6	predominantly affluent
M3	Expert guide	m	23	3	semi rural, with little deprivation
M4	Working within continuity and change	m	27	6.5	divided between a settled farming population, commuters, and a largely oil related suburban population
M5	Doctor to the always informed patient	f	25	4	suburban owner occupiers
M6	Doctor in an uncertain world	f	11	1	affluent community, not rich, but pretty comfortable
M7	Professional teacher	m	22	2+1	predominantly deprived population
M8	Allayer of patient fears	f	15	*	predominantly deprived population with mix of ethnicities
F1	Entrepreneurial adviser	m	?	25	affluent media and business people
F2	Available and able adviser	m	12	10	predominantly retired people with from small to multi-million investments
F3	The long experienced adviser	m	30	1** (170)	millionaires to fairly low income earners
F4	Trusted adviser	m	17	1	small company pensions and retired pensions and investment clients
F5	Narrating the mythical intransigent client	m	22	1	generally investments for the older professionals and self employed
F6	Networked lifestyle adviser on and offline	m	20	2	predominantly web savvy professionals
F7	Servicing the financially uneducated consumer	m	22	5	predominantly silver surfers and senior management
F8	Adviser (only) to the client in increasing complexity	m	13?	?	predominantly at the end of their working life with assets
L1	Advisor to the wily but ultimately reliant client	f	27	2	mostly working class men
L2	The urbane specialist	m	36	large	mixed but more husbands than wives
L3	Guide among the underprivileged	f	11	23	a whole range but majority is legal aid
L4	Professional in the public service ethos	f	15	25	from the affluent to the vulnerable
L5	Traditionalist in a changing world	m	25	6	across the strata of society but losing the lower social section
L6	Celebrity solicitor	f	24	11	private client divorce
L7	Manager of the recalcitrant client	f	10	31	majority of work is divorce and children protection issues
L8	Empowering guide	m	10	4	all types of folks with all kinds of problems

* Peripatetic with responsibilities in a number of practices

** Sole trader in a large syndicate

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Consumer Perception of Salesperson Influence Strategies: An Examination of the Influence of Consumer Goals

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EXTENDED ABSTRACT

The present research proposes that consumers' consumption-related goals that are associated with their stage in the decision making process interact with the influence strategies used by salespeople resulting in differences in how specific influence strategies are perceived. The idea that consumers have goals upon entering a sales encounter assumes that consumers are not passive bystanders during sales encounters but that they are active motivated participants. The present research adopts this motivational perspective of consumers and proposes that the goals consumers have for entering sales encounters affect their perception of various influence strategies commonly used by salespeople.

In the context of a sales interaction, if we view the consumer as the primary perceiver of influence and the salesperson as the primary agent of influence, then the consumer's goals upon entering the sales encounter are likely to affect how the influence strategies that are used by the salesperson are perceived. The primary research question arising from the preceding proposition is—do consumers' perceptions of certain commonly used influence strategies differ based on the nature of the consumer's goals for the sales interaction?

Two experiments are conducted to test hypotheses related to consumers' perceptions of influence strategies. The first study examines perceptions of influence strategies and hypothesizes that consumers in the early stages of the decision making process will perceive the use of certain influence strategies as sales-oriented, whereas consumers in the final stage of the decision making process will not perceive these same strategies sales-oriented but will in fact perceive them as customer-oriented.

Figures 1 and 2 indicate the degree to which certain influence strategies were found to be either sales-oriented or customer-oriented depending on the consumer's stage in the decision making process. Both early stage consumers (ESC) and final stage consumers found strategies designed to develop trust as customer-oriented as hypothesized.

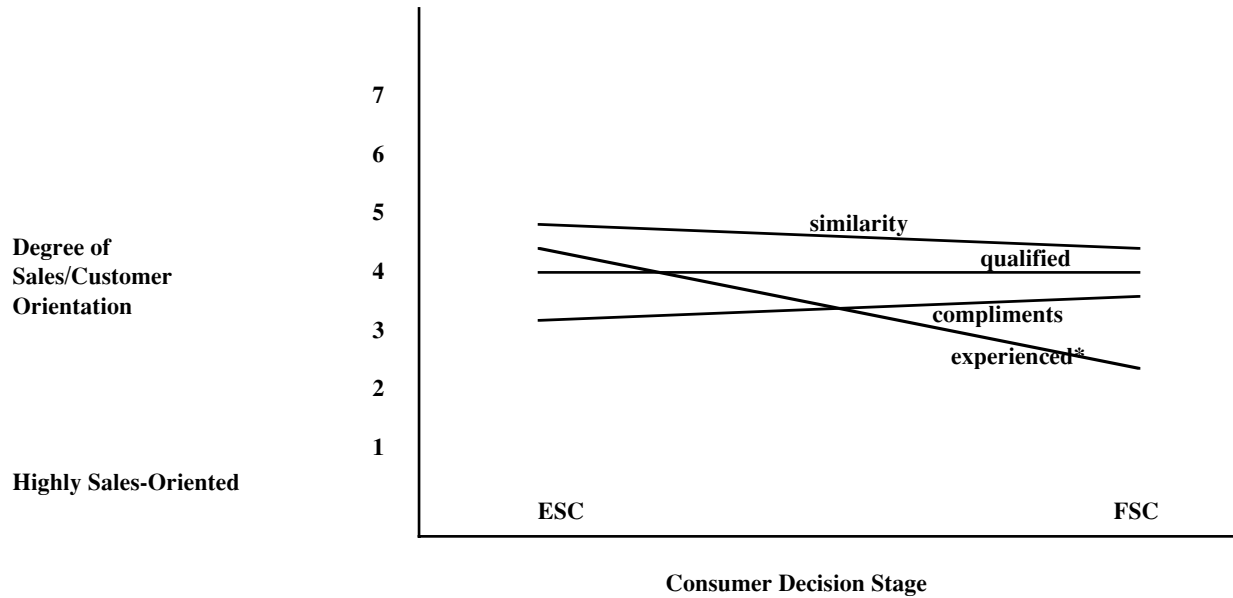
ESC found strategies designed to force action or bolster a decision as significantly more sales-oriented than FSC as hypothesized.

Study 2 examined purchase intentions based on the use of specific influence strategies. As hypothesized, subjects were more likely to purchase from a salesperson who they perceived to be customer-oriented, however, perceptions of customer-orientation were dependent on the interaction of stage of the decision making process and specific influence strategies.

The overall findings from both studies indicate that consumers do perceive influence strategies differently depending on their reasons for entering the sales encounter. ESC enter sales encounters to gather information and assess their needs, therefore they perceived influence strategies that were designed to force them to take action as very sales-oriented. On the other hand, FSC enter sales encounters ready to make a purchase and as such perceived strategies designed to force them to make a purchase as more in line with their goals for the interactions and as such perceived these strategies to be somewhat customer-oriented.

FIGURE 1
Interaction of Liking and Expertise Strategies and Decision-Making Stage

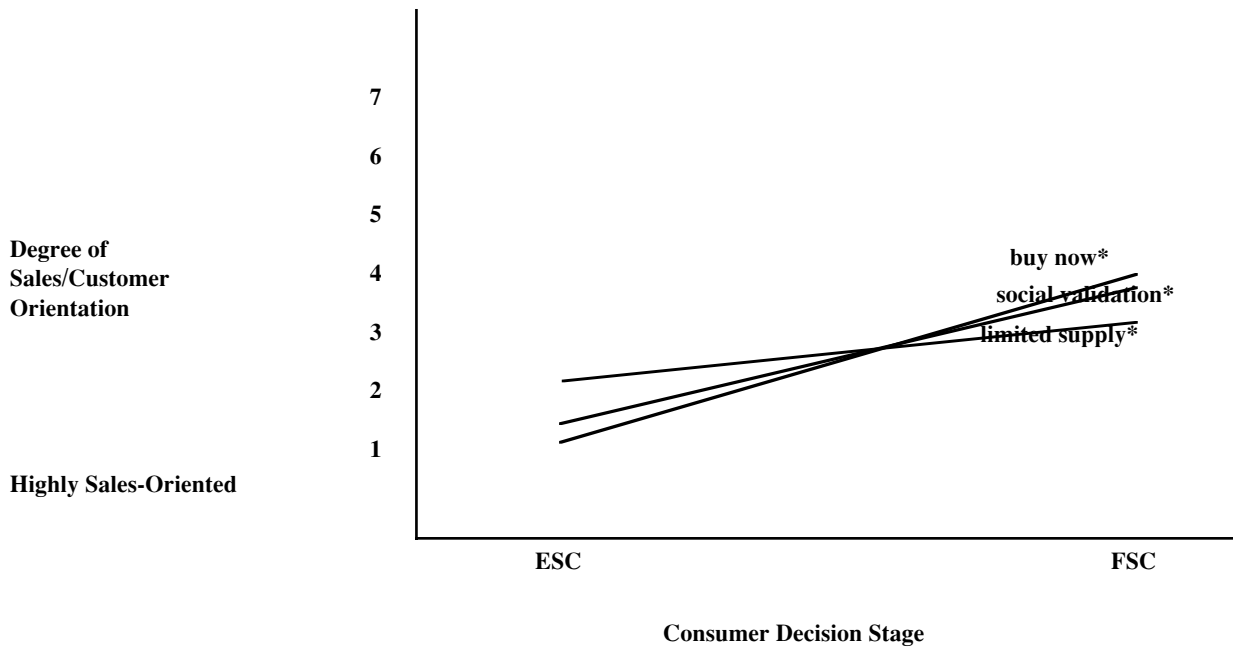
Highly Customer-Oriented



*significant slope

FIGURE 2
Interaction of Scarcity and Social Validation Strategies and Decision-Making Stage

Highly Customer-Oriented



*significant slope

When and Why Temporal Distance Matters: The Role of Elaboration and Confidence

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EXTENDED ABSTRACT

The Construal Level Theory posits that temporal distance systematically changes the way people construe future events, thereby influencing their evaluations and decisions regarding those events (Liberman and Trope 1998; Trope and Liberman 2000; Liberman et al. 2002). Specifically, the theory postulates that people use more high-level construals to represent distant future events whereas they depend more on low-level construals to represent near future events. High-level construals include more abstract, schematic, and goal-relevant representation of events, whereas low-level construals include more concrete, non-schematic, incidental, and goal-irrelevant representation of events. As such, in goal-directed activities, the Construal Level Theory hypothesizes that goal-relevant features are more influential for distant future events than goal-irrelevant features and that goal irrelevant features are more influential for near future events than goal-relevant features. The Construal Level Theory, however, is silent regarding the boundary conditions under which its explanation works. In this paper, we investigate the question of when the effects predicted by the theory occur. We also intend to investigate psychological process that underlies the effects of temporal distance.

First, we address the question of when temporal distance influences evaluation, comparing two alternative hypotheses: non-thoughtful hypothesis and thoughtful hypothesis. By introducing the construct of elaboration as a moderator, we test which of the two competing hypotheses emerge. The non-thoughtful hypothesis suggests that the findings predicted by the Construal Level Theory should hold under conditions of low rather than high elaboration and the thoughtful hypothesis suggests that the findings predicted by the Construal Level Theory should hold under conditions of high rather than low elaboration.

We conduct the first experiment to test these hypotheses. This experiment is a replication of Trope and Liberman (2000, Study 2), except that we introduce elaboration as another independent variable. In this study, we examine the effect of temporal distance on the preference of work-study options. Participants evaluate work-study options that they may take in the near or distant future. One option offers an amusing job and boring training, whereas the other offers boring job and amusing training. A job is presumed to be high-level construal and training is to be low-level construal. Trope and Liberman (2000) found that the preference for the former is evaluated more favorably in the distant future than in the near future, whereas the latter is evaluated more favorably in the near future than in the distant future. We test how the effect of temporal distance emerges differentially under conditions of high vs. low elaboration. We measure the degree of elaboration on the Need for Cognition scale (e.g., Cacioppo et al. 1996).

As predicted by the thoughtful hypothesis, a three-way interaction of Time X Option X Motivation emerges as significant. Follow-up analyses show that, under conditions of high elaboration, two-way interaction of Time X Option (i.e., the replication of the Construal Level Theory) is significant, indicating that the preference for the amusing job over the boring job is more pronounced in the distant future, compared to the near future. This result is compatible with the explanation of the Construal Level Theory. In contrast, under low motivation condition, the two-way interaction of Time X Option is not significant.

We conduct the second experiment to test the hypothesis that confidence mediates the effect of temporal distance only under conditions of high elaboration. We examine evaluation of a new digital camera in this experiment. Participants are asked to imagine that they are searching for either an easy-to-use digital camera (ease-of-use goal) or a digital camera that enables to produce high-quality pictures (picture quality goal). They are also asked to imagine that they are about to buy a camera soon but will start using the camera right next week (near future) or several months from now (distant future). Then exposure accuracy, lens quality, and resolution are presented as positive attributes in the scenario, whereas battery life, interface convenience, and uploading convenience are presented as negative attributes. Thus, all the positive (negative) attributes are high-level (low-level) construals under ease-of-use goal and all the positive (negative) attributes are low-level (high-level) construal under picture quality goals.

The results of this experiment replicate the moderating effect of elaboration: we find a significant two-way interaction of Goal X Time only under conditions of high elaboration. More importantly, the results show that confidence participants place in their evaluation mediates the effect of temporal distance. Under conditions of high elaboration, temporal distance increases the level of confidence, thus resulting in more extreme evaluations.

This study both provides a first moderator (elaboration) to the Construal Level Theory, and suggests psychological process that underlies the effects predicted by the theory under conditions of high elaboration. This research offers important managerial implications and also raises theoretical questions for further study.

Perceived Causality as a Cue to Temporal Distance

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EXTENDED ABSTRACT

How long has it been since your last visit to the dentist? How long ago did you purchase your CD player? How much time has elapsed between the birth of your first child and the purchase of your new car? Elapsed time questions are frequently asked in consumer and policy surveys and are the basis for important decisions. The literature on survey research suggests that specific temporal information (e.g. date or duration) is rarely available or used as the basis for time-related judgments (Tourangeau, Rips and Rasinski 2000). Rather, when asked to provide temporal judgments, people usually engage in reconstructive inference processes. Such processes entail the use of cues such as landmark events, personal life contexts, knowledge about generic events, background assumptions about boundaries on event horizons and ease of recall. In this research, we propose that people use the strength of a causal relationship between two events as a temporal heuristic to infer elapsed time between these events.

It has been shown that time plays a dominant role in phenomenal impressions of physical causality. Michotte (1946/1963) showed participants displays in which a moving object, like a billiard ball, approached a stationary object which then moved away after apparent contact with the first moving object. He manipulated factors such as the relative speed of the two objects, the presence of a physical gap between them, and the timing of movement transfer from the first to the second object to produce a strong impression of "launching" causality between the two objects' movements (see also Anderson & Sheu, 1995; Schlottmann & Anderson, 1993; and Scholl & Tremoulet, 2000).

Thus, temporal relationships are important cues to causality; but do people rely on causality to infer temporal distance? We reasoned that since people see causation and time as correlated, they may use either one to infer the other, just as they use other correlated cues (e.g. the use of time duration to infer spatial distance, or vice versa, when considering a planned trip; Kang, Herr and Page 2003). Therefore, two events judged as causally related such as, "Sputnik is the first human-made satellite to circle the earth" and "Neil Armstrong is the first man to walk on the moon," will be judged to be closer together in time, than "Sputnik" and the "Woodstock Music Festival", two events perceived as causally unrelated.

We tested this prediction in two experiments in which participants were presented with pairs of historical events. In the first experiment, participants were asked to estimate the time elapsed (in years) between the occurrences of two events presented in a pair. To manipulate perceived causation, pairs of events that were judged as causally related were selected from the domains of business, science and politics. For each causal pair, a matching pair (control pair) was constructed by selecting events of the same domain that were not causally related but had the same elapsed time between them. As a manipulation check, participants were also asked to indicate on a scale of 1 to 100, the strength of the relationship between the two events of a pair. Results indicate that pairs of events that were perceived as causally related were judged to have occurred closer together in time compared to pairs of events that were judged as causally unrelated, controlling for actual elapsed time. Furthermore, there was a reliable negative correlation between participants' elapsed time estimates and their ratings of causal strength. Event familiarity was not correlated with time estimates

and could not account for the differences in elapsed time estimates.

In the first experiment, perceived causation was varied by matching two different pairs of events. One possibility is that differences between the pairs of events other than perceived causation could account for the effect on time estimates. In the second experiment, to address this concern, perceived causation was manipulated independent of item content. It was manipulated by providing participants with expert information as to whether a certain pair of events was or was not causally related. The results of this experiment were supportive of our predictions. Informing participants that events were causally related shortened time estimates while informing other participants that the same events were causally unrelated lengthened time estimates.

We conclude with a discussion of the relevance of these findings to survey research and with suggestions for future research.

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Mental Simulation and Preference Stability over Time

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EXTENDED ABSTRACT

Prior research on intertemporal choice has demonstrated that people's preferences can be impacted by the temporal distance. Specifically, Trope and Liberman (2003) shows that when we make a choice for the future, we tend to think much more about how desirable a certain option is. However, when making a decision with near future consequences, we often put much more weight on whether a certain option is feasible. As a result of this shift in considerations, people have inconsistent preference over time.

Suppose that counter to the natural consideration pattern, people are encouraged to think about the step-by-step feasibility aspects of the options when they make a choice for the distant future or think about the desirability aspects of the options when they think about the immediate future, could this type of mental elaboration help stabilize people's intertemporal preference? The mental simulation literature shows mixed findings regarding the effect of process- and outcome-focused simulation in terms of goal attainment (Taylor et al. 1998; Taylor & Pham, 1999). In the current research, we seek to examine the temporal mechanism underlying different effects of process versus outcome simulation, and explore under what condition each type of mental simulation would be more effective in stabilizing intertemporal preferences.

Level of Mental Representation

Construal Level Theory (CLT) proposes that temporal distance changes people's responses to future events by altering their mental representations of those events. For events in the distant future, the events are more likely to be represented in terms of abstract and central features (high-level construals) which pertain to the desirability consideration of an event. However, for events in the near future, the events are more likely to be represented in terms of concrete and peripheral features (low-level construals) which concern the feasibility consideration of an event. CLT predicts that temporal distance increases the desirability related mental representation at the high level whereas temporal immediacy increases the feasibility related mental representation at the low level (Liberman & Trope, 1998; Trope & Liberman, 2003). As a result, people prefer higher desirability option for the distant future and higher feasibility option for the near future which leads to preference inconsistency over time.

Process- vs. Outcome-Focused Mental Simulation

Recent research in mental simulation distinguishes between process simulation which encourages people to imagine the step-by-step process of reaching a certain goal, and outcome simulation which encourages people to think about the desirable outcome of fulfilling the goal. Major studies show that by practicing process simulation instead of outcome simulation, people's performance will be superior (Taylor et al., 1998; Pham & Taylor, 1999). In the consumer domain, Escalas and Luce (2003; 2004) show that process-focused advertisements increase behavioral intentions. However, some other studies find that outcome simulation benefits goal-directed activity more than process simulation (Taylor & Pham, 1999).

We believe that levels of mental representation proposed by the CLT could help explain these contradictory findings: A closer look at the mental simulation literature reveals that studies showing a beneficial role of process simulation are based on activities in

relatively distant future. According to CLT, in the distant future situations, people's default mental representation of the event is desirability aspect at the high level. While outcome simulation is redundant, process simulation activates the low-level feasibility consideration which is naturally ignored. On the contrary, studies indicating the positive role of outcome simulation are based on activities in the immediate future. According to CLT, in the near future situations, people's default mental representation of the event is feasibility aspect at the low level. While process simulation is redundant, outcome simulation activates the high-level desirability consideration which is naturally ignored. Thus, with process simulation for the distant future event or outcome simulation for the near future event, people have both the desirability and feasibility in their mind and their performance is enhanced.

Hypotheses

Applying this temporal based mental mechanism in preference over time, we hypothesize:

- H1:* Process simulation should have a limited impact on the relative choice between options for decisions in the near future. However, process simulation should increase preference for the higher feasibility option for decisions in the distant future, which is close to the natural near future preference
- H2:* Outcome simulation should increase preference for the higher desirability option for decisions in the near future, which is close to the natural distant future preference. However, outcome simulation should have a limited impact on the relative choice between options for decisions in the distant future.

Results and Implications

We conducted two studies (assignment choice and desk choice) to test the hypotheses. As predicted, in both studies, we found that process simulation for the near future did not significantly change participants' relative preference, but it increased people's preference towards the higher feasibility option for the distant future event to the extent that it was not different from participants' default preference for the near future. On the contrary, outcome simulation significantly increased people's preference towards the higher desirability option for the near future to the extent that it was not different from people's natural preference for the distant future. And outcome simulation did not significantly change people's preference for the distant future decision.

As a conclusion, our research indicates that preference inconsistency could be overcome by changing levels of mental representation. At the same time, our research sheds light on the theory of mental simulation and explains their contradictory findings by distinguishing different levels of mental representation in terms of different time distance.

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Spatial Positioning: The Value of Center-Stage

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EXTENDED ABSTRACT

Does placing a product in a central, peripheral, or extreme-end position systematically affect consumers' attitudes toward the brand? Surprisingly, this issue has not been investigated by consumer psychologists despite the importance of shelf placement in a consumers' brand choice decision, a manufacturer's distribution decision, and a retailer's shelf space pricing decision. Other than isolated studies in psychology with inconsistent position effects (e.g., Taylor and Fiske 1975, Study 1 versus Study 2), the effect of visual placement on attitudes and preferences does not appear to have been systematically researched by psychologists. While psychological "positioning" is a well-known concept to marketers, oddly, the literal, spatial analogy on which it is based, is under-researched (except for Hotelling type models of store location with a distance cost to consumers, see Eppli and Benjamin 1994 for a review). This paper introduces the important and novel concept of "spatial positioning," in a literal sense, with psychological overtones to marketing.

The introduction of the "spatial positioning" concept leads to a set of interesting theoretical questions: If there is an advantage to position, what positions have this advantage over others? While some literature in survey methodology (Schuman and Presser 1996) and impression formation (Asch 1946) predict a primacy or recency effect implying that products at either end of an array would be more likely to be chosen, the literature on visual perception would suggest that the item mid-way between the start and the middle of the array would receive most attention (e.g., Ducrot and Pynte 2002). On the other hand, the literature on spatial perceptions based on the asymmetric hemispheric view of the brain suggests that the left- or right-hand position preference is contingent on whether the stimulus is verbal or visual (Janiszewski 1990). Finally, the social psychology literature on salience and vividness predicts that items in the center would be most salient, most likely to be recalled, and liked the best (e.g., McArthur and Post 1977).

This paper examines if, why and when the position of a product in an array confers an advantage. We propose that the position in an array is informative in and of itself. Across a variety of contexts and domains, there are certain "spatial" rules that appear to govern the ordering of people, items, and things in an array. There are learned associations that the "best" option is frequently in the middle (e.g., in a medal display the gold medal is in the middle; in a beauty contest, the winner is in the middle; in a conference, the most important speaker is in the middle). People may, therefore, subconsciously believe that the option presented in the middle is the most popular or best option. In a product display context, we propose that consumers use a "Center-is-Better" rule of thumb, as they believe that the order of items is itself informative. The use of this simple learned rule leads to higher evaluations for products in the center of an array as compared to those at the ends of the array, even if such products are not better recalled. Consistent with our proposed model, Mason (1982) found that 5-symbol arrays yielded a U-shaped reaction time function with the poorest performance for symbols at the beginning or the end of the array.

Understanding the reason why there is a position advantage is not only theoretically interesting, but also has managerial implications. For example, if a position advantage were due to higher attention, then attention getting packaging may be used to substitute or complement a poor shelf space position. On the other hand, if it

were due to higher recall of a brand in a particular position then this would imply that mnemonic devices may be called for to increase the top of mind recall of a brand. If it were due to perceptual process due to the asymmetric construction of the brain hemispheres, then there is little managers can do to reverse this effect—they can only leverage it through placing visual/ verbal material in the most appropriate position. If it were due to improved attitudes towards the brand, but these attitudes were not mediated by attention, but rather reflected an overall schema or belief such as "Center is Better," this would imply that managers should be willing to pay a premium to have their brands occupying the premium position in a layout. Retailers would be able to use this information to bargain with manufacturers for shelf-space benefits. Finally, if position effects are due to an automatic, unintended behavioral response (e.g., of picking up the first item, last item, or central item from a display), this would imply that any sales spike enjoyed by a brand might be short-lived to the extent it enjoyed a premium position.

Four laboratory experiments with frequently purchased packaged goods show that *i*) consumers believe and use the "center is better" heuristic (Study 1: Stylized Choices); *ii*) there is a center-stage advantage: a product in a central position is preferred (Study 2: Pretzels) and chosen (Study 3: Chewing-gum) over one at either end of an array; *iii*) the effect is moderated by familiarity, such that the effects are stronger for higher (versus lower) purchase frequency (Study 4: Cookies). Across studies, we found no evidence that the recall of the brands was contingent on the order in which they were presented. The effects on attitudes and intentions are interpreted in terms of consumers using a heuristic: "Center is Better" whereby they believe that by virtue of being in the central positions a product is better than others that are in extreme positions. Such a heuristic, that the "order is itself informative," is more likely to be used when consumers do not sequentially process the items in the array. This happens in situations where there is high product familiarity, which may be indicative of lower involvement in the decision-making process.

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Do Means-End Chains Exist? Experimental Tests of their Hierarchicity, Automatic Spreading Activation, Directionality, and Self-Relevance

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EXTENDED ABSTRACT

Despite its popularity in consumer research, means-end chain theory suffers from problems of unconfirmed validity: the nomological status of its central construct, the means-end chain, is still unknown. The aim of the research reported here was threefold: (a) to reformulate means-end chain theory in a coherent theoretical framework, (b) to derive falsifiable predictions from the framework, and (c) to test these predictions by established experimental methods.

Theoretically, means-end chains can be cast as associative networks with a three-layered structure. Four postulates can be formulated that impose testable restrictions on the layered network structure: hierarchicity, automatic spreading activation, bidirectionality, and self-relevance. The predictions were tested in altogether six experiments.

The basic methodology was the same in all experiments. Two sessions were held with each participant. In a pilot session, each participant completed four different laddering tasks. Each task consisted of four different consumer products varying on three different attributes. After the pilot session, the word material that participants had generated in the laddering task was entered into a database. Individualized stimulus sets were then generated from the database for use in the second session. To avoid carry-over effects, the second session was arranged after a long delay. Each participant completed a sequential priming experiment in which single-presentation lexical decision tasks were used.

Experiment 1 (N=90) was designed to test the hierarchicity and self-relevance postulates. Hierarchicity was tested by examining whether response facilitation effects were higher when primes and targets were directly associated nodes in a means-end chain (attributes and consequences, or consequences and values) than when primes and targets were indirectly associated through a mediator (attributes and values, mediated by consequences). Self-relevance was tested by examining whether response facilitation effects were stronger when primes and targets were taken from a person's own means-end chain (as measured by the laddering method) than when taken from another person's means-end chain or from a standardized word list. In this experiment, only bottom-up priming of means-end chains was investigated.

Experiment 2 (N=91) was designed to test the bidirectionality postulate. Bidirectionality was tested by examining whether the results obtained in Experiment 1, where bottom-up priming of means-end chains had been used (attribute, consequence, value), would remain stable when the direction of priming was turned around to top-down priming (value, consequence, attribute).

Experiment 3 (N=30) was designed to ensure that Experiments 1 and 2 were internally valid. In both experiments, the word material representing means-end chains had been elicited by means of a laddering task where different foods had served as product examples. Hence, the generated material shared a common associative context. To test the alternative explanation that a generalized activation of this common associative context might have been responsible for the priming effects observed in Experiments 1 and 2, and not specific activation of particular means-end chains, Experiment 3 replicated the previous experiment, but used only stimulus materials from a food context, i.e. also in the standardized

word-list conditions against which all priming effects were benchmarked.

Experiment 4 (N=120) was designed to test the automaticity postulate. Automaticity was tested by examining whether the hierarchicity and self-relevance effects observed in Experiments 1 could be replicated under conditions designed to suppress controlled information processing. In line with standard procedures, short inter-stimulus intervals and a high proportion of fillers and non-words in the word material were used for this.

Experiment 5 (N=65) was designed as a second test of the automaticity postulate. The postulate was tested by examining whether the bidirectionality effect observed in Experiment 2 could be replicated under conditions designed to suppress controlled information processing. Again, short inter-stimulus intervals and a high proportion of fillers and non-words were used to induce automatic information processing.

Experiment 6 (N=30) was designed, in analogy to Experiment 3, to ensure that Experiments 4 and 5 were internally valid. To test the alternative explanation that generalized activation of a common associative context might have been responsible for the priming effects, Experiment 6 replicated the automaticity conditions of the previous experiment, but used only stimulus material from a food context, i.e. also in the standardized word-list conditions against which all priming effects were benchmarked.

Overall, only few of the predictions were met. Hierarchicity, the assumption that means-end chains have a three-layered chain structure (as opposed to a non-hierarchic, single-layered network structure), could only be established in one out of six experiments. Automaticity, the assumption that spread of activation through a means-end chain would still occur when controlled information processing was suppressed, could indeed be established in three out of three experiments that induced automatic information processing.

Results for bidirectionality, the assumption that bottom-up priming effects would be mirrored by top-down priming effects, were favorable. Self-relevance, the assumption that spreading-activation effects would be stronger for means-end chains generated by participants themselves than for means-end chains generated by other participants (strong self-relevance) or materials taken from a standardized word list (weak self-relevance), could partially be established. Evidence for strong self-relevance was found in two out of six experiments, whereas evidence for weak self-relevance was found in four out of six experiments.

The results raise new questions concerning the theoretical foundations of means-end chains. It can be concluded that means-end chains, as conventionally measured by the laddering method, are firmly anchored in people's memory, but not as firmly as originally hypothesized. The hierarchicity assumption appears to be particularly problematic. It appears that the association structure is non-hierarchic, displaying properties of a single-layered network with high associative redundancy. Three areas were identified where additional theoretical work is needed: how means-end-chains enter more complex cognitive structure, the cognitive processes leading to the elicitation of means-end chains in laddering interviews, and the spreading activation processes explaining the retrieval and use of means-end information.

Exploring the Concept and Measurement of General Risk Aversion

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ABSTRACT

In this paper we explore the concept and measurement of a general—as opposed to domain-specific—risk aversion construct. We review the literature on risk aversion and perceived risk, focusing on issues of concept meaning and measurement, and discuss problems with current measures of risk aversion for research application. An exploratory empirical investigation is reported in which we (1), develop a scale to measure general risk aversion and (2), explore its relationships with intentions to engage in various behaviors vis a vis other similar measures used in the past. The paper concludes with a discussion of the implications of our findings and suggestions for future research.

INTRODUCTION

Individuals differ with respect to the amount of risk they are willing to incur in a given situation. As an individual difference variable, this basic predisposition or attitude toward risk has been called “risk aversion” (cf. Qualls and Puto 1989); it is a key concept not just in marketing but in economics and finance (Xiao, et al. 2001), and researchers have maintained a long interest in how it affects various behaviors. These behaviors include, for example, brand choice (e.g., Tellis and Gaeth 1990), information search (e.g., Moorthy, Ratchford, and Talukdar 1997), preference for gambles (e.g., Kahneman and Tversky 1979), decision framing of organizational buyers (Qualls and Puto 1989), executive decision making (e.g., MacCrimmon and Wehrung 1984; MacCrimmon and Wehrung 1990), financial portfolio management (e.g., Schooley and Worden 1996; Xiao, et al. 2001), purchase of insurance (e.g., Williams 1966), and even the distance from which people choose to toss a ring onto a pole (McClelland 1961), among others.

Despite the amount of interest and research attention devoted to risk aversion, there are several issues to confront regarding its conceptualization and measurement. First, there remains the question of whether or not a general risk aversion exists: are people generally averse to all types of risk, regardless of domain? The literature on perceived risk (e.g., Bauer 1960; Jacoby and Kaplan 1972) suggests that this question is open to speculation. As others have noted (e.g., Kogan and Wallach 1967b), confirmation that a general risk aversion construct exists—one that dispositionally affects behaviors across a variety of situations—would be an important finding. Second, if there is such a construct as a general risk aversion, it would be in the research community’s best interest to be able to measure it with some consistency. Because different studies use different methods to categorize people on the basis of risk aversion, it is difficult to compare findings between studies. Further, the methods used often may not be reliable or valid, leading to obvious difficulties (e.g., Type II errors, “file drawer” studies).

In this paper we attempt to address the above issues by exploring the concept and measurement of a general risk aversion. The paper is organized as follows. First we review the literatures on risk aversion and perceived risk to develop a rationale for such a construct, focusing primarily on issues of measurement. Next we develop a scale for measuring general risk aversion and in a later exploratory study, investigate its predictiveness across a variety of behaviors compared to other currently-used risk aversion measures. Finally, we discuss the implications of our findings for consumer research and suggest directions for future research.

LITERATURE REVIEW

Risk Aversion

The concept of risk aversion evolved from discussions of risky choice by early decision theorists, mostly working with economic applications (cf. Kahneman and Tversky 1979). According to expected utility theory, an individual’s preferences for gambles involving a continuous attribute X (e.g., dollar payoffs) can be modeled by a utility function, $u(x)$, which reveals the individual to be risk averse if $u(x)$ is strictly concave, risk seeking if $u(x)$ is strictly convex, and risk neutral if $u(x)$ is linear (Fischer, et al. 1986; Miller 1975). A person who is risk averse prefers a riskless outcome (x) to any risky outcome with expected value (x). Risk aversion has been defined as a decision maker’s “preference for a guaranteed outcome over a probabilistic one having an equal expected value” (Qualls and Puto 1989, p. 180). Thus, it has been conceived as an individual difference or predisposition, an attitude toward taking risks that is relatively invariant across situations (cf. Qualls and Puto 1989). Typically, consumers’ level of risk aversion (i.e., attitude toward risk) has been measured in one of three ways. In the first method, subjects’ risk aversion is inferred from their responses to various choice dilemmas (e.g., Ghosh and Ray 1997; Kogan and Wallach 1964). The second way is to infer subjects’ risk aversion from their choice outcomes on lotteries or gambles (e.g., Ghosh and Ray 1997; Qualls and Puto 1989). The third way is to use a self-report scale that measures risk aversion specific to the domain in question, e.g., buying a new car (Moorthy, Ratchford, and Talukdar 1997)¹. There are problems with each of these approaches, which we now discuss.

Problems With Current Measurement Approaches

Choice Dilemmas. The first method, which relies on inferring attitudes toward risk based on choices in dilemmas, is subject to a number of deficiencies that may limit its general application in consumer research. First, measures of this type do not explicitly address such important issues as construct validation (e.g., logical analysis, construct definition, internal structure analysis), nor issues of reliability such as internal consistency. Consider, for example, perhaps the most popular instrument in use for measuring risk aversion, the Choice Dilemma Questionnaire (CDQ, Kogan and Wallach 1964).² The CDQ uses a series of 12 scenarios in which a central figure is deciding between two courses of action, and subjects are instructed to imagine themselves giving this central figure advice on how to proceed. Responses are obtained for the level of probability needed before the more attractive (yet probabilistic) alternative would be recommended, and these responses are summed to form an overall score.

¹Although not for purposes of measuring the construct, some research has inferred consumer’s risk aversion from use of price cue in choice under varying information conditions (e.g., Tellis and Gaeth 1990).

²An alternative to the CDQ is the 16-page “Risk In-Basket” questionnaire developed by MacCrimmon and Wehrung (1984) for studying executive decision making. Its scenarios are tailored to the type of respondents (e.g., patent violation lawsuit, joint venture, union dispute), thus are not suited for broad consumer research use.

Among social psychologists studying the “risky shift” phenomenon the CDQ became the most widely used instrument for measuring risk aversion (see Kogan and Wallach 1967a; Wallach and Mabl 1970; Willems and Clark, III 1969). It is still in use, but for other purposes, such as studying decisions made under varying levels of risk and ambiguity (e.g., Ghosh and Ray 1997). Regarding issues of construct definition and unidimensionality, the original authors of the instrument have stated that their conceptualization of the construct (and hence, their choice of operationalization, the CDQ) is “deterrence of failure” (Wallach and Kogan 1961). Conceivably thus, they argue—and evidence shows—that the CDQ index obtained is sensitive to the perceived magnitude of losses incurred in each situation (size of failure), in addition to any general attitude toward risk arising from uncertainty. The instrument measures two sources of variance for the single construct, which violates the unidimensionality criteria. When the CDQ is used, researchers do not report evidence of its validity and reliability, but simply refer to the original authors’ works (e.g., Kogan and Wallach 1964). Several later studies have shown the CDQ to be prone to misinterpretation by subjects (Willems and Clark, III 1969), multidimensional (Clark, III and Willems 1969), and unreliable in its entirety for many studies (cf. Wallach and Mabl 1970), yet it remains in use.

Further, the scenarios may require tailoring to each group being studied. Two examples will suffice to illustrate these points and are listed in the Appendix (see the Appendix). In the first (A-1), the original asks subjects to advise “Mr. D,” the captain of the college football team, on which play to call that will decide the outcome of the game; in the second (A-2), the original asks subjects to advise “Mr. F” about which university to attend for a PhD program. There are several problems with these scenarios. First, subjects with knowledge of college football may be confused by the parameters of the first dilemma: it is not the team captain, but the coach (or perhaps quarterback) who would call the play; and modern NCAA rules allow for overtime in the case of a tie. Second, note the confusing language and sentence construction of each scenario (e.g., the use of option “X” and option “Y,” the periphrastic sentences). In our empirical study we attempted to correct these deficiencies by revising the scenarios so they appear more modern and more clear (see B-1 and B-2 in the Appendix); nonetheless, the problems outlined above still apply (and see results, below). Finally, the CDQ is very lengthy (12 dilemmas, each an entire paragraph), requiring much time and cognitive effort on the part of respondents, possibly resulting in fatigue.

Gambles. Despite the ease with which they lend themselves to experimental investigation (Kogan and Wallach 1967b) and their ability to provide standardized comparisons across subjects (MacCrimmon and Wehrung 1984), there are several problems with using batteries of lotteries or gambles to ascertain risk aversion. Besides being criticized as unrealistic, thus potentially failing to elicit typical decision behaviors (MacCrimmon and Wehrung 1984), lotteries may measure an aversion to risk that may be specific only to a particular domain. The gambles used typically implicate gains or losses of money (e.g., Kahneman and Tversky 1979) or life (e.g., Elliott and Archibald 1989). These domains arguably are related to the facets of financial or physical risk (cf. Jacoby and Kaplan 1972; Kaplan, Szybillo, and Jacoby 1974). It is unclear whether such measures relate more generally to situations or choice contexts involving other facets of risk, such as social risk. Furthermore, using such instruments to determine risk aversion may be problematical for certain research applications or when using certain groups as subjects. Using batteries of gambles, while considerably shorter than the choice dilemmas, may be unreliable (hence, invalid) for some subjects who lack the ability or motivation to calculate expected values of the probabilistic choices. For ex-

ample, it may be that subjects lower in need for cognition (Cacioppo and Petty 1982; see also Cacioppo, et al. 1996) opt for the choices which do not require mental calculus (i.e., the “sure” bets in items C-2 and C-3 in the Appendix). Further, whether or not subjects opt to “buy” a gamble may reflect the influence of other unintended factors, such as their current financial situation. While this may make some more or less risk averse, it may only be in the specific domain of finances, and not a general risk aversion.

Finally, and perhaps most problematical, risk taking behavior has been shown to violate the notions of expected utility theory (e.g., Kogan and Wallach 1967b) and vary according to context effects (e.g., Fischer, et al. 1986; Payne, Laughhunn, and Crum 1980, 1984). Kogan and Wallach (1967b, p. 116-117) report a large number of studies which show that subjects often do not choose the options that offer the highest expected utility or expected value.³ Further, people have been shown to be risk averse when gambles are framed as gains or “speculative risk situations,” but risk seeking when gambles are framed as losses or “pure risk situations” (Williams 1966), the phenomenon which Kahneman and Tversky (1979) dubbed “the reflection effect.” Moreover, the level of outcomes (e.g., \$1 payoff vs. \$5,000 payoff for the same probability) may affect an individual’s preference for a gamble, depending upon the person’s internal reference point or target return governing such decisions (Payne, Laughhunn, and Crum 1980, 1984). Therefore, it is unclear exactly what level of risk aversion is being measured in negatively framed versus positively framed items in a battery of gambles. This may explain why a measure comprised of 24 “simple lotteries” failed to reliably discriminate subjects into categories of risk aversion in a recent study (Ghosh and Ray 1997). Using a measure consisting of seven gambles, Qualls and Puto (1989) classified people as “globally” risk averse (risk seeking) if they chose sure (probabilistic) outcomes regardless of the loss/gain frame, and as “context dependent” if they chose sure outcomes for gains and risky outcomes for losses. While this potentially may mitigate the classification problem, it does not entirely clarify the levels of risk aversion, especially for the latter category. Given the asymmetric preference for risk in the loss and in the gain frames it is logical to inquire how many of the seven items were loss (gain) framed.

Self-Report Measures. Besides research that has used choice-based measures of risk aversion, other research has operationalized risk aversion using scales that relate the risk involved to specific decision situations. For example, in a study examining consumer information search for automobiles, Moorthy, Ratchford, and Talukdar (1997) measured agreement on a seven-point scale to four items, such as “When I buy a car, it is not a big deal if I buy the wrong model by mistake” (p. 273). Cronbach’s alphas for the scale were 0.79 and 0.74 for the two groups of buyers used in the study (“in-process” or “already-purchased”). Although this study purportedly measured “risk aversion,” the authors themselves note that they are measuring consumers’ attitudes toward “the risks of making a wrong brand or dealer choice” (p. 273). However, as discussed below, the concept of perceived risk involves both the perceived uncertainty of outcomes and the perceived importance of negative consequences. These authors measured consumers’ attitudes toward the importance dimension for a specific situation but they did not measure attitudes toward uncertainty, an important and argu-

³Kogan and Wallach (1967) aptly note that insurance companies and casinos stay in business for precisely this fact. Why these violations occur is beyond the scope of this particular inquiry, but arguably it may be caused in part by ability and motivation deficits.

ably more general component of perceived risk and, similarly, general risk aversion. Thus, the measure may be limited to use in this specific research context or in others similarly circumscribed. In sum, there is much research implicating the notion of risk aversion as an influence on a variety of behaviors, which demonstrates the importance of accurately assessing the construct. Prior research has produced a variety of operationalizations of risk aversion, but each of the means described is limited. These limitations may be heightened when attempting to examine a general—as opposed to domain-specific—risk aversion. We now discuss this issue in light of the perceived risk literature.

Perceived Risk. By definition, risk aversion implicates the notion of perceived risk (Bauer 1960), yet the concept of risk aversion has not been considered explicitly in terms of extant perceived risk research. Perceived risk has received much research attention in consumer behavior since Bauer's (1960) introduction. Overall perceived risk is comprised of two components, the perceived uncertainty of outcomes, and the perceived importance of negative consequences associated with the outcomes of a choice (Bauer 1960; Ross 1975). It may be that individuals vary with respect to both components; however, it would seem more likely that a general attitude toward risk would reveal itself in the first dimension, that is, attitude toward uncertainty. Moreover, the level of consequences may differ by situation, rendering it difficult to capture a predisposition for that dimension. Conceiving risk aversion as attitude toward uncertainty is in line with definitions of risk aversion in the literature (see above, also Kogan and Wallach 1967b, p.162).

Studies have divided risk into sub-components, or facets (Brooker 1984; Jacoby and Kaplan 1972; Kaplan, Szybillo, and Jacoby 1974). Five facets (performance, financial, physical, social, and psychological risk) explained a large amount of variance (an average of 74%) in overall perceived risk measures for 12 product categories (Jacoby and Kaplan 1972). Further, different facets (e.g., performance and social risk) have different implications for consumer behavior, such as the sources consulted in acquiring information (Lutz and Reilly 1974). It is conceivable that different facets of risk may vary independently of one another, and therefore, a general risk aversion may not exert influence on situations that are dominated by say, either high social risk or high functional risk. Later in the paper we explore this issue empirically.

In sum, as a personality trait, a "general risk aversion" construct has not been adequately addressed, nor sufficiently measured. Thus, it is unclear whether an overall attitude toward risk exists (cf. Qualls and Puto 1989) and if it does, how it can be measured in a meaningful way. The next section details an exploratory empirical investigation aimed at shedding a preliminary light on these issues.

EMPIRICAL STUDIES

In order to investigate the concept and measurement of a general risk aversion, we conducted a series of exploratory studies. The first step was to generate a scale for measuring general risk aversion that displayed adequate psychometric properties. Afterwards, we applied the scale in the context of several other measures, including a selection of choice dilemmas and gambles, related measures such as innovativeness (Raju 1980) and risk aversion in product use (Price and Ridgway 1983), and examined the interrelationships among them and their predictiveness against several criterion behaviors. We will begin with a discussion of scale development.

Scale Development Study. Based on the above literature review, a conceptual definition of general risk aversion was gener-

ated. We define general risk aversion as *an individual's degree of negative attitude toward risk arising from outcome uncertainty*. This is in line with former treatments of the risk aversion concept (e.g., Qualls and Puto 1989), and the more general uncertainty component of perceived risk. The construct is separately defined from the magnitude of consequences, a multiplier of risk perceptions (Bauer 1960) which change from situation to situation. This definition also recognizes the negative valence of the concept: it is *aversion* to risk, or desire to avoid the threat potential arising from risk, which is the most appropriate way of conceiving the term (Slovic 1999). The next step was to develop a pool of items based on this definition, constructed to reflect agreement or disagreement on seven-point Likert-type scales. Twelve items were generated and judged for face validity and consistency with the conceptual definition by three marketing faculty members. This resulted in the rewording and replacement of several items judged to be inadequate, leaving a total of nine items.

As a first step, these items were administered to a convenience sample of 64 undergraduate business students. The statistical package SPSS was used to conduct an exploratory factor analysis (principal components extraction) and internal consistency reliability analysis, in order to select indicators for the scale (Pedhazur and Pedhazur-Schmelkin 1993). At first, three factors emerged, apparently because of three problematical items which had high cross-loadings between factors. We removed these items and again performed the analysis. This time principal components extracted two factors, with the first explaining 41.3 percent of the variance and the second explaining an additional 19.1 percent. As an initial criteria, all six items loaded above .4 on the first factor, whereas only two items loaded above .4 on the second factor (e.g., Saxe and Weitz 1982). Moreover, the eigenvalue for the second factor was 1.14—very close to the minimum cutoff. These factors suggest that the scale primarily was measuring one factor, and because this was a first attempt at measuring the construct, it was decided to retain all six items and administer the scale to a new sample for further analysis. Coefficient alpha for the six-item general risk aversion (GRA) scale was .72, above the acceptable value suggested by Nunnally (1978). The scale appears in the Appendix.

We next included the GRA scale in a questionnaire with several other measures of risk aversion, measures of behavioral intentions for several "risky" activities, perceived risk and purchase intentions for six product situations (for use in a later study), and measures of personality characteristics and demographics. The measures of risk aversion included a subset of three items from the CDQ (Kogan and Wallach 1964), four typical gambles used in prior work (Elliott and Archibald 1989), a measure of shopping innovativeness (Raju 1980), and a measure of risk aversion in product use (Price and Ridgway 1983). The items from the CDQ and gambles were chosen a priori to reflect the inconsistencies with these measures while maintaining a sufficiently short instrument. The final questionnaire was split into two parts and administered with a short break in between the two, in order to reduce respondent fatigue. Order of the two parts was counterbalanced in two forms randomly assigned to examine a potential order effect (there was none). Cronbach's alpha for the new sample of 92 students (49 men, 43 women, 78% junior level) was .71, lower than the original .72, but still acceptable (Nunnally 1978).

The general risk aversion scale was again submitted to several factor analyses, both the GRA scale alone and in the presence of other measures. For the six GRA items, the exploratory factor analysis (principal components, $n=91$) extracted only one factor, based on eigenvalues greater than one, upon which the items loaded (factor loadings ranged from .46 to .76). The single factor explained

41.7 percent of the total variance of the scale items. With the goal of obtaining evidence that the GRA scale displays discriminant validity (i.e., whether the scale measured something distinct from other constructs being similarly measured), we ran numerous factor analyses on the scale in the presence of three other construct measures: “attention to social comparison information” (ATSCI, Bearden and Rose 1990), “innovativeness” (Raju 1980), “risk aversion in product use” (RAPU, Price and Ridgway 1983). For each run we used exploratory factor analysis in SPSS, with a principal components extraction. The results obtained revealed factor structures that did not conform to our expectations (i.e., two factors when two scales were tested, three when three were tested).⁴ This may have been attributable to a small sample size being used to test too many items. We discuss the potential limitations later, but for now summarize the present discussion by saying the factor analysis results were quantitatively inconclusive for determining the GRA scale’s discriminant validity, but that it displayed adequate convergent validity and unidimensionality.

Exploratory Study. After finding that the GRA scale displayed adequate unidimensionality and reliability, simple correlation analysis was used to examine several relationships. There were two primary goals to this study. The first goal was to examine the reliability and unidimensionality of the risk aversion measures used in past research, and compare it to those for the new GRA scale. The second goal was to establish evidence of the nomological validity of the general risk aversion construct, and our measure of it, by examining its relationships among other related constructs and criterion behaviors on its own, and in comparison to other risk aversion measures.

We began by examining the inter-item bivariate correlations among three CDQ items and among four choice dilemma items (the items listed in the Appendix, plus one more CDQ item related to job opportunities). These appear in Table 1. Based on the literature review, we did not expect the CDQ items to exhibit strong correlations; nor, however, did we expect them to be entirely uncorrelated. It was somewhat surprising to find that none of the correlations between CDQ items were statistically significant. Note also that the correlations themselves are not far from zero (see Table 1). Cronbach’s alpha for the three item scale was .14 ($n=91$); deleting the first item raised it to .26 for the two-item scale. Our literature review suggested that the correlations between the gambles would vary in magnitude depending on the size of the expected outcome. Further, the sign of the correlations would likely depend on whether the outcome was framed as a loss or as a gain. The correlations among the four gambles appear in Table 1. Here, note that some of the items are significantly correlated, but others are not (see Table 1). Also, some are positively correlated and some are negatively correlated, depending on the frame (loss or gain), as expected. Coefficient alpha for the four-item gambles scale was .25 ($n=92$); deleting item 3—the only loss-framed gamble—resulted in an increase of alpha to .44 for the three-item scale.

The next step in our study was to examine the inter-relationships among measures of general risk aversion (summed scales of three CDQ items, four gambles, GRA scale) and related constructs, such as innovativeness (Raju 1980) and a specific risk aversion, namely risk aversion in product use (RAPU, Price and Ridgway 1983). We expected general risk aversion to be positively related to the more specific RAPU, and negatively related to innovativeness.

Table 2 shows the results of a bivariate correlation analysis between measures of these constructs and the GRA, CDQ scale, and Gambles scales (see Table 2). The correlation between the GRA scale and the RAPU scale is in the right direction and significant ($r=.31, p=.002, n=92$); that between the GRA scale and innovativeness was in the right direction, but insignificant ($r=-.16, p=.12, n=91$). On the other hand, none of the other risk aversion measures was significantly correlated with any other construct measures, including the GRA scale.

Next, we decided to investigate the ability of our scale to correlate with the likelihood of engaging in several behaviors that varied with respect to the amount and type of risk that characterized them. We expected the GRA scale to correlate with behaviors that were relatively higher-risk, and bear no relationship with behaviors that were relatively lower-risk. Using similar means as past work (e.g., Jacoby and Kaplan 1972; Kaplan, Szybillo, and Jacoby 1974) the levels of overall perceived risk associated with ten different behaviors were obtained in pre-tests. We used a q-sort methodology ($n=30$) to allow subjects flexibility in making judgments. Means and standard deviations for the levels of perceived risk are listed next to each behavior in Table 3 (behaviors are listed in order of decreasing perceived risk). Table 3 shows the bivariate correlations between the GRA scale, the three-item CDQ scale, the four-item Gambles scale, and the ten behaviors. Note that intentions to engage in the three highest-risk behaviors (skydiving, rock climbing, gambling) are strongly and significantly correlated with the GRA scale, while the three lowest (jogging, bicycling, singing karaoke) are not correlated (see Table 3). Further, the GRA scale predicted across a variety of behaviors that varied with respect to the type of risk facet one would normally associate with it (e.g., giving a speech is high in social risk, gambling in financial risk, rock climbing in physical risk). The correlation for skiing was only marginally significant ($p=.065$), while that for “exceeding the speed limit by fifteen or more m.p.h.”—which was rated as relatively high risk—was not significantly correlated ($p=.93$). Perhaps this behavior reflects a stronger influence of other variables, such as behavioral norms related to abiding law. Further, note that the CD scale was not significantly correlated with any behavioral intentions, while the Gambles scale was marginally correlated with likelihood of engaging in skydiving (See Table 3). Interestingly, the RAPU scale was negatively correlated with several risky behaviors and one non-risky behavior (bicycling), and positively correlated with skiing, a mid-level risk activity.

No correlations were found between the choice-based risk aversion measures and related constructs or, between them and any criterion behaviors. This fact may indicate no relationship between the underlying constructs measured, or it may have been due to the low reliability of those measures compared to the relatively higher reliability of the GRA measure. To explore this issue we conducted a similar bivariate correlation analysis, but in this one we deleted items that lowered the item-total correlations for the scales. This boosted the level of Cronbach’s alpha for each one (from .14 to .26 for the CDQ scale, from .25 to .44 for the Gambles scale). Further, we handicapped the GRA scale by selecting three of its items that together had the lowest possible Cronbach’s alpha (items 2, 4, 6, $\alpha=.50$). The bivariate correlations appear in Table 4. It is evident from the correlations the results do not change for any of the scales. Except for a marginal improvement in predicting likelihood to engage in skiing for the three-item Gambles scale, neither of the two “improved” scales predicts any better. On the other hand, the three-item GRA scale still was correlated with five of the original six behaviors, but fared better for skiing and worse for skydiving than it did in the original analysis.

⁴We present only qualitative assessment of these factor analyses; however, quantitative analyses (e.g., factor matrices, scree plots, item loadings) are available upon request from the authors.

TABLE 1
Inter-Item Bivariate Correlations

	1	2	3	4	5	6	7
1. CDQ1	...						
2. CDQ2	.04	...					
3. CDQ3	-.04	.15	...				
4. GAM1				...			
5. GAM2				.16	...		
6. GAM3				-.02	-.05	...	
7. GAM4				.21 ^a	.25 ^a	-.08	...

^ap<.05

TABLE 2
Correlations Between Risk Aversion Measures and Related Constructs

	1	2	3	4	5
1. Choice Dilemmas	...				
2. Gambles	-.04	...			
3. General Risk Aversion	.01	.03	...		
4. Innovativeness	-.05	-.15	-.16	...	
5. Risk Aversion in Product Usage	.14	-.05	.31 ^b	-.30 ^b	...

^bp<.01

TABLE 3
Correlations Between Risk Aversion Measures and Behaviors

	Skydiving	Rock Climbing	Gambling	Exceeding Speed Limit	Skin Diving in the Ocean	Skiing	Giving a Speech	Singing Karaoke	Bicycling	Jogging
Perceived Risk	7.20 (1.65)	6.63 (1.61)	5.20 (1.79)	4.57 (1.72)	4.57 (1.94)	4.47 (1.57)	2.87 (1.87)	2.45 (1.86)	2.20 (1.27)	1.63 (.85)
Choice Dilemmas	-.02	-.14	-.21 ^a	-.06	-.11	-.10	-.04	.02	-.08	.11
Gambles	-.19	.05	-.11	.03	.03	.26 ^a	.01	-.01	-.13	-.10
General Risk Aversion	-.24 ^a	-.37 ^c	-.37 ^c	-.01	-.34 ^c	-.20	-.28 ^b	-.09	-.14	-.06
Innovativeness	.28 ^b	.24 ^a	.14	.08	.15	.13	.09	.02	.25 ^a	.26 ^a
Risk Aversion in Product Usage	-.27 ^b	-.34 ^c	-.30 ^b	-.07	-.21 ^a	.34 ^b	-.04	.06	-.32 ^b	.04

Note—Numbers in parentheses are standard deviations of the perceived risk scores.

^ap<.05

^bp<.01

^cp<.001

TABLE 4
Comparisons Among Altered Risk Aversion Measures

	1	2	3	Skydiving	Rock Climbing	Gambling	Exceeding Speed Limit	Skin Diving in the Ocean	Skiing	Giving a Speech	Singing Karaoke	Bicycling	Jogging
1. GRA2	...			-.17	-.36 ^c	-.34 ^c	-.04	-.35 ^c	-.23 ^a	-.27 ^b	-.08	-.11	-.07
2. CDQ2	.09	...		.08	-.16	-.19	.07	-.01	-.09	-.06	.03	-.05	.09
3. GAMBL2	-.07	-.02	...	-.19	.05	-.08	.05	.02	.33 ^b	-.03	.08	-.10	-.04

^ap<.05
^bp<.01
^cp<.001

DISCUSSION

Limitations. One limitation of this study is that it may suffer from “self-generated validity” (Feldman and Lynch 1988), the possibility that subjects used inputs from items appearing earlier in the questionnaires in constructing their responses to later items. It may have been that subjects attempted to maintain consistency between their responses to scale items and in the criterion behaviors. We attempted to guard against this threat by counterbalancing two questionnaire forms across subjects. Additionally, all of the relationships share common method variance, which may increase the size of observed effects. Another limitation is that the relatively low number of subjects in the main study may have caused the exploratory factor analysis results to be unstable, necessitating that they be interpreted with some caution. When our general risk aversion scale was administered by itself, the results clearly indicated a unidimensional factor. When included with other scales, the results did not clearly show the expected underlying dimensions; thus, we cannot say with any certainty that our scale displays discriminant validity. However, as we noted above, this may have had much to do with the other scales containing several underlying dimensions.

Of course the measurement of abstract concepts using self-report questionnaires can be (and has been) debated, where questions are raised about subjects’ capability of providing researchers with valid insights into esoteric constructs. Clearly, however, instruments that purport to measure any construct should be shown to be reliable and construct valid, if one is to have confidence in their use. Our results indicate that there was high correspondence between subjects’ self-reports obtained using a psychometrically adequate general risk aversion scale, and their reported likelihood of engaging in several risky behaviors. Conversely, there was no evidence that measures of risk aversion like those used in past research bore any relationships with behavioral intentions, and often were unrelated (or worse, negatively related) to other items found within the same scales.

Implications. This study provides limited, but encouraging evidence that it is possible to measure general risk aversion using a simple, self-report scale. The scale displays adequate psychometric properties and correlates well with certain risky activities. It is substantially shorter and simpler than the current methods that use choice dilemmas or batteries of gambles to infer risk aversion. Finally, the GRA scale’s ability to correlate well with risk-related constructs and behaviors compared to other measures of risk aversion may allow its use in a wider variety of contexts than current methods of assessing risk aversion. This is one small exploratory study, however; the results encourage future research on the refine-

ment and measurement of general risk aversion, in addition to application studies.

Future Research. In this study we explored the relationship between general risk aversion and several criterion behaviors (e.g., rock climbing, gambling). The GRA scale performed adequately, but it would benefit from further refinement and validation on a larger sample, on different populations and across different activities. For example, it would be interesting to investigate whether GRA can predict brand choice for products that differ with respect to the risk facet that dominates them (e.g., Jacoby and Kaplan 1972); likewise if it is able to predict the amount of information search (e.g., Moorthy, Ratchford, and Talukdar 1997) or information source consulted (e.g., Lutz and Reilly 1974). It would also be interesting to examine the predictiveness of different risk aversion measures for various behaviors after other personality and situational characteristics are taken into account, for example the person’s current financial situation or their susceptibility to interpersonal influence (e.g., Bearden and Rose 1990). Another use may be found in cross-cultural studies where a common means of assessing risk aversion is desired that is less context dependent and prone to problems of cultural dependence.

Furthermore, measures related to general risk aversion exist (e.g., “tolerance for ambiguity”, “functional risk aversion”) but so far no measures of the general construct have appeared in the literature. One possible candidate is the “risk taking” sub-scale of the Jackson Personality Inventory (JPI, Jackson 1976). The JPI is proprietary (cost figures are available from Sigma Assessment Systems, Inc.), and as of the time of this writing, we had not received the scale materials for use, so we do not report on its psychometric properties. We do note, however, that the scale contains 20 items dichotomously measured (“true/false”) and contains an admixture of specific behavior-related items (e.g., “I would enjoy bluffing my way into an exclusive club or private party”) and assessments of overall attitudes toward risk (e.g., “I enjoy taking risks”). Given the findings of this study related to measuring a general risk aversion construct, the JPI risk taking sub-scale may suffer from problems related to its unidimensionality.⁵ Some past research has suggested

⁵Interestingly, our scale, developed independent of viewing the JPI, contains one item that is an almost verbatim match to one found on the JPI (“I avoid situations that have uncertain outcomes”). More interestingly, though, is that one of the items we were forced to drop from the GRA scale because of its poor factor analysis results appears almost verbatim in the JPI scale (“I enjoy gambling”).

that the risk aversion and tolerance for ambiguity constructs may be related, in that highly ambiguous situations may increase risk perceptions (Ghosh and Ray 1997; Kahn and Sarin 1988; see also Einhorn and Hogarth 1985). Ghosh and Ray (1997) had difficulty operationally separating the two and suggested that future research should address whether risk and ambiguity are part of the same construct. We echo this sentiment.

Conclusion. In the past, researchers have inferred consumers' attitudes toward risk from their choices made on different gambles (e.g., Kahneman and Tversky 1979; Qualls and Puto 1989), in different decision contexts (e.g., Ghosh and Ray 1997; Kogan and Wallach 1964; MacCrimmon and Wehrung 1984), or the brands they choose (e.g., Tellis and Gaeth 1990). Others have measured risk aversion using scales that relate it to a specific decision situation, such as making a wrong choice of car model (e.g., Moorthy, Ratchford, and Talukdar 1997). However, as discussed, each of these methods may not reliably measure general risk aversion. In this paper we provided tentative empirical evidence against using such means and made an initial attempt to provide a more standardized, psychometrically valid measure of general risk aversion. However, issues regarding the concept and measurement of general risk aversion certainly warrant further investigation.

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APPENDIX

A. Selected original items from CDQ (Kogan and Wallach 1964):

1. Mr. D is the captain of College X's football team. College X is playing its traditional rival, College Y, in the final game of the season. The game is in its final seconds, and Mr. D's team, College X, is behind in the score. College X has time to run one more play. Mr. D, the captain, must decide whether it would be best to settle for a tie score with a play which would be almost certain to work or, on the other hand, should he try a more complicated and risky play which could bring victory if it succeeded, but defeat if not.

Imagine that you are advising Mr. D. Listed below are several probabilities or odds that the risky play will work. Please check the lowest probability that you would consider acceptable for the risky play to be attempted.

- Place a check here if you think Mr. D should not attempt the risky play no matter what the probabilities.
- The chances are 9 in 10 that the risky play will work.
- The chances are 7 in 10 that the risky play will work.
- The chances are 5 in 10 that the risky play will work.
- The chances are 3 in 10 that the risky play will work.
- The chances are 1 in 10 that the risky play will work.

2. Mr. F is currently a college senior who is very eager to pursue graduate study in chemistry to the Doctor of Philosophy degree. He has been accepted by both University X and University Y. University X has a world-wide reputation for excellence in chemistry. While a degree from University X would signify outstanding training in this field, the standards are so very rigorous that only a fraction of the degree candidates actually receive the degree. University Y, on the other hand, has much less of reputation in chemistry, but almost everyone admitted is awarded the Doctor of Philosophy degree, though the degree has much less prestige than the corresponding degree from University X.

Imagine that you and several colleagues are advising Mr. F. Listed below are several probabilities or odds that Mr. F would be awarded a degree at University X, the one with the greater prestige. Please check the lowest probability that you would find acceptable to make it worthwhile for Mr. F to enroll in University X rather than University Y.

- Place a check here if you think Mr. F should not enroll in University X, no matter what the probabilities.
- The chances are 9 in 10 that Mr. F would receive a degree from University X.
- ...

B. Updated items from the CDQ (from Elliott and Archibald 1989)

1. Coach Douglas is the head coach of State College's football team. State College is playing its biggest rival in the final game of the season. The game is in its final seconds, and Coach Douglas's team, State College, has just scored a touchdown. Now, State College is behind in the score by 1 point. Coach Douglas must choose between two alternatives. On the one hand he can choose to kick an extra point (which is almost certain to work), and settle for a tie. On the other hand, he can try for the two-point conversion—a more complicated and risky play which could bring victory if it succeeds, but defeat if does not.

Imagine that you are advising Coach Douglas. Listed below are several probabilities or odds that the risky play (two-point conversion) will work.

2. Amy is currently a college senior who wants to pursue graduate study in chemistry for a Ph.D. She has been accepted by two universities. University X has a world-wide reputation for excellence in chemistry. While a degree from University X would be very highly regarded, the program is so demanding that only a fraction of the students end up graduating. University Y, on the other hand, has a much lower reputation in chemistry. The degree has much less prestige than one from University X, but almost everyone admitted is awarded a PhD degree.

Imagine that you and several colleagues are advising Amy. Listed below are several probabilities or odds that Amy would be awarded a degree at University X, the one with the greater prestige.

C. Typical gambles used to infer risk aversion:

1. You are offered a chance to buy the following gamble for 50 cents:
 - 50% chance of winning \$1 and 50% chance of winning nothing.
 - Please indicate whether or not you will buy the gamble. **1=Yes 2=No**
2. You have a choice between the following two options:
 1. A sure gain of \$750.
 2. 40% chance to gain \$2000 and 60% chance to gain nothing.
 Please indicate which option you will choose.

**APPENDIX
(Continued)**

3. You have a choice between the following two options:
1. A sure loss of \$1500.
 2. 80% chance to lose \$2000 and 20% chance to lose nothing.
- Please indicate which option you will choose.
4. You are offered the chance to buy the following gamble for \$3000:
50% chance of winning \$6000 and 50% chance of winning nothing.
Please indicate whether or not you will buy the gamble. **1=Yes 2=No**

D. General Risk Aversion Scale (From 1= "Strongly Agree" to 7= "Strongly Disagree")

1. I do not feel comfortable about taking chances.
 2. I prefer situations that have foreseeable outcomes.
 3. Before I make a decision, I like to be absolutely sure how things will turn out.
 4. I avoid situations that have uncertain outcomes.
 5. I feel comfortable improvising in new situations.
 6. I feel nervous when I have to make decisions in uncertain situations.
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How Many Wings Does a Butterfly Have? Or Stimuli As An Elicitation Technique For In-Depth Interviews

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ABSTRACT

This research incorporates visual triggers into traditional procedures of in-depth interviewing in order to elicit respondents' perceptions of complex phenomena with a heavy scientific background, such as genetically modified food.¹ The primary objective of the study is to examine the effectiveness of the use of visual triggers as research tools for collecting data in the domain of the unknown and to identify the mechanism of elicitation technique. This mechanism is found to include different readings of the same pictures, agreement/disagreement, similar readings of different pictures, voicing conscious and unconscious thoughts, and seeing oneself in the picture.

SPEAKING THE LANGUAGE OF IMAGES

How does one make consumers talk about things of which they have limited knowledge and only a vague understanding? Invite an average consumer to be interviewed for a study on consumer perception of genetically modified food, and most probably the researcher will encounter a polite refusal or protests about the consumer's modest knowledge of the subject.

Speaking the language of the unknown becomes increasingly important in light of the new goods and services that rapid development in biotechnology is bringing to market (Day 2002). Already, the nations' first genetically engineered pet—a tiny zebrafish that glows in the dark thanks to a gene from a sea coral—has gone on sale (Pollack 2004); and genetic engineering supposedly can be found in over 70 percent of all processed foods in the U.S. This study proposes that it is the indirect interrogation of consumers about their perception of such new products that may reveal how they make sense of the unknown. Specifically, it is the visual language, the language of images associated with a novel phenomenon that can provide a researcher with some valuable insights into consumers' minds.

In this study, visual imagery is used as a tool to elicit subjects' perception of complex phenomena with a heavy scientific grounding, such as genetically engineered food. The research objective is to explore the effectiveness of the use of visual triggers as a method of collecting data and to identify the mechanism of elicitation technique. The presented study does not aim at testing the effectiveness of visual images in their influence on attitude formation.

The paper is structured to first provide a brief review of the use of visual tools as a research method in marketing discipline. The following two sections introduce the method used to examine the issue and report findings that include six mechanisms of elicitation technique. The last section concludes with discussion of the effectiveness of the employed methodology.

USE OF VISUAL TOOLS AS A RESEARCH METHOD

The use of visual tools as a research method is well documented in marketing literature. Heisley and Levy (1991) review the history of visual research in social science and its application in consumer behavior. Anthropologists Collier and Collier (1986)

analyze visuals used both for gathering data and as tools to enrich and extend interview methodologies. The authors claim that visuals such as photographs, drawings or collages can function as starting and reference points for discussions of the unknown or the familiar. Visuals are advocated for inviting open and unrestricted expression by respondents while maintaining a concrete reference point. It is claimed that they relax respondents who do not feel that they are at the center of attention when questions directly address visual content. Collier and Collier (1986) stress that though more provocative and intense photographs may result in potentially richer responses, even relatively simple pictures can yield valuable insights.

Collecting data from respondents with the help of visual tools has been creatively practiced in marketing research. Samples include a study of personal grooming rituals (Rook 1985) and a study about clothing (McCracken 1988a). In the first instance, respondents are asked to write stories based on two pictures of individuals grooming themselves presented by the researcher; in the second, subjects respond to a series of slides that picture people dressed in different ways. Visual stimuli are used here to provide either verbal or written reflection. In both cases, the illustrations are prepared and chosen by the researcher. This function though can be also delegated to the respondents, a technique practiced in the method introduced as the "Zaltman Metaphor Elicitation Technique" (Coulter and Zaltman 1994).

The technique, developed and proposed by Zaltman for investigating brand image associations, requires respondents to take photographs or collect pictures from print media or other sources that indicate what the brand means to them. Interviewing that occurs later is structured around discussing visual imagery collected by the respondents. In a similar vein, in another study respondents cut out "any material they wish" to construct a collage expressing the concept of desire and, at the request of researchers, follow up with written interpretations that are then analyzed by researchers (Belk, Ger and Askegaard 1997). Another sample is a method in which researchers prepare the visuals by taking photographs of the respondents engaged in certain activities and then ask the respondents to comment on the pictures (Heisley and Levy 1991). This method is termed "autodriving" because respondents become projective interpreters of their own actions. Subjects' reflections become data for the researcher's analysis.

DESIGN AND METHODS

In this study, visuals have been incorporated into the traditional procedures of in-depth interviewing (McCracken 1988b, Strauss and Corbin 1998). The purpose of the illustrations was to "trigger" the subjects, to elicit their ideas and provoke discussions on the topic of genetically engineered food. In that, the expectation was drawn on the argument that "what is found in the picture is conditioned by the cultural knowledge the viewer brings to the viewing" (Ball and Smith 1992, p.18).

The convenience sample included 32 participants representing various educational backgrounds, occupations, and age. They were invited formally to participate in a study "on food." The words "genetically engineered" were not mentioned during the recruitment process in order not to scare away those potential subjects who did not feel knowledgeable about the issue. This topic was also not revealed during the first part of interviews, which revolved around

¹Genetically modified food is scientifically defined as food containing genetically altered organisms.

the subject's perception of food. Only after 30-60 minutes were spent discussing food, was the subject asked to look over the illustrations prepared by the researcher and to choose those that the subject associated most closely with what s/he heard, felt, thought or knew about genetically modified food. A specific quota was not imposed, but if respondents asked for guidelines, it was suggested that they choose up to seven or eight illustrations from the collection they were shown. After that they were asked to explain their choices.

The study was designed under the assumption that the use of illustrations would help evoke meaningful responses even in cases where the subject happened to be unaware of the issue. It was expected that even the most uninformed people would be able to relate to some of the pictures, which would help them voice their conscious or unconscious thoughts.

Thirty illustrations used as visual triggers were chosen from 130 collected over two years by the author. The majority of them were drawings, photographs, and cartoons originally published in the popular mass media (newspapers, magazines and the Internet) as illustrations to articles on the topic of genetically modified food. The collection also included several photographs taken by the author at one public protest against genetic engineering.

The major criteria for selecting illustrations to be used as visual triggers was the author's intention to provide a diverse set and offer a balanced picture by presenting negative, positive, and neutral themes associated with genetic engineering. To predict what would be the "right" number of illustrations to offer the subjects so that the number is manageable and the respondents related to illustrations, six exploratory interviews were first conducted. Of original 42 illustrations used in the process, 30 were chosen at least once by the subjects and thus were selected for the further 30 interviews. Out of this collection of thirty illustrations, only four pictures did not receive any attention from the 32 respondents. The most popular picture was the black and white cartoon titled "Farm Factory: Food of the 21st Century" which was commented on by sixteen subjects (illustration #7, *The Orange County Register*). It depicts a reaper holding a box with four open compartments displaying "scientific food" and "diseases" as food of the 21st century. Three illustrations were chosen thirteen times each. One was a colorful drawing of the huge corn cob attacking people in the field (illustration #4, *Business Week*), the other a colorful cartoon titled "Frankenfood Farms" and depicting a grocery store window with two types of food, "farm fresh" and "fresh from the lab" (illustration #1, *The Washington Times*).

VISUAL TRIGGERS: MECHANISM OF ELICITATION TECHNIQUE

Different Readings of the Same Pictures

When seven respondents refer to the colorful picture of a butterfly (illustration #16, *The Wall Street Journal*) as the one that makes them think of genetic engineering, they fill the illustration with opposing—positive or negative—meanings. In positive reflections, the picture is described as nice and appealing, liking for the butterfly is admitted directly, and genetic engineering is perceived favorably:

Butterfly probably pollinating something which ... itself may create some sort of diversity within the species, who knows? ... Just a nice picture and I like the butterfly. (Sue, 54²)

We have a butterfly sitting on something here and it's an appealing picture, insects play a part in crops. I'm not quite sure, I'm not a biologist, you know, cross pollinating things, carry a plant to another plant, and if it's good enough for a butterfly, he doesn't seem to be complaining... I don't know if it's genetically engineered corn or whatever it is that he is on. Hmm... If it's good enough for the butterfly, it's good enough for me. Animals and insects are usually, not always but generally picky about what they eat, so, the butterfly likes it. (Mike, 55)

The positive emotional framing here is rooted in linking the pollinating butterfly with diversity provided by nature. Diversity, in turn, secures goodness, which is mentioned by the subjects several times and stands out as a symbol of peace of mind. In addition, this perspective equates the butterfly with a human being ("if it's good enough for the butterfly, it's good enough for me"), and indicates a lot of trust in its "pickiness." Consequently, humans are seen as being as much a part of nature as the butterfly—the theme that is also present in the opposite perspective that otherwise stresses the disturbing nature of the same illustration:

It's like from that butterfly that got into all this trouble. I don't recall the whole story, but from TV... That's why I picked that, it reminded me of what I had seen and how maybe if you think you are doing something good, but this is just If it's killing this butterfly, what's it doing to us? We don't know. (Bryan, 39)

It's a picture of this butterfly with three wings. It's genetically altered and I think it's something like mutation or something like that. Normally, it just has two. So I think of that as being something that is a freak of nature. (Chris, 22)

The only commonality that the above perspective shares with the preceding one is expressed in relating to the butterfly as a creature of the same nature as human beings ("if [genetically engineered plant] is killing this butterfly, what's it doing to us?") Otherwise, it is not peace of mind but worry that is signified in the words "trouble," "killing," and "freak of nature." This worry forces the subject to see abnormality where it does not exist: he sees the butterfly having three wings while in fact it has two in the picture. The wings obtain symbolic meaning as their number indicates either normalcy or abnormality and places the butterfly on the "norm" or on the "mutation" side of nature. It is the preexisting negative attitude toward genetic engineering that explicitly reveals itself in this reflection and shapes the respondent's viewing by making him see three wings. The subject needs some "tangible" evidence to support his mindset and subconsciously finds that evidence in "spotting" non-existing details.

Another illustration that reveals different readings displays bright and eye-catching fruit and vegetables (illustration # 14, Internet). They are described by the respondents in a positive manner: "colorful," "perfect," "ideal," "plump," "sunny," "healthy," "fresh." However, subjects link these attractive physical properties with opposing concepts. In one instance, these physical characteristics are interpreted as a sign of genetic engineering ("real food doesn't look like that," "it's probably have been modified to be this way"), in another, the respondent believes that this food stuff is "probably not genetically modified" and "comes from smaller farms, most definitely":

This one is very colorful, it has deep colors, bold colors. Looks like the food is, you know, fresh, it's like in perfect condition,

²The numbers indicate the age of the respondents.

ideal condition. Looks, you know, looks healthy, looks fresh. So, it's probably have been modified to be this way. (Brett, 27)

This is all fresh, probably not genetically modified, ... it comes from smaller farms, most definitely. ... If it was more genetically modified, ... watermelon probably would be seedless, it might be a different shade, it might be an orange watermelon. ... So this is, I don't see this genetically modified, that's not something that is mass-produced for millions and millions of people, this is a smaller farm. (Jim, 40)

Thus, when respondents associate external perfection of fruit with freshness and healthiness, they tend to see this perfection as coming from nature and credit nature with providing both the external beauty and internal functionality of food items. But when perfection is viewed as not real and due to technological intervention, it is attributed to genetic engineering, and fruits and vegetables are perceived as artificially modified to look so perfect—a quality that is perceived with a degree of suspicion.

Agreement–Disagreement

Another form of reflecting differently to the same pictures is expressed in direct “agreement-disagreement” pattern meaning that respondents choose illustrations either because of their acceptance or nonacceptance of the content. At the most general level of agreement, the respondent identifies the major message that the illustration conveys and then explicitly supports it: “So she is kinda saying what choice do we have? I agree with that. I agree with what she is saying.” Another example is offered by the reaction to the popular illustration of a big corn attacking people in the fields which reveals two viewing (illustration #4, *Business Week*). While both perspectives articulate the symbolism of the produce threatening our society and interpret the size (“gigantic,” big”) as symbol of overpower and taking over human lives, the underlining conclusions go in opposing directions: one welcomes promises of science, the other opposes it:

Interesting picture of a gigantic piece of corn and the people seem to be fighting against it. They are afraid of the big corn. I don't know why they would be afraid of it. They should be happy. (Lou, 48)

There's a picture of an enlarged corn kind of causing terror to all these people. Just an example of what enhanced corn looks like to me; larger, more abnormal looking than the rest of everything else. It poses a very terrifying demeanor to these that are opposing it. So it could be very dangerous, too. (DeJay, 24)

If the first perspective links genetically engineered corn with people's happiness, the negative one dramatizes discomfort by referring to terror and danger. This difference is explained by the opposing attitudes of two respondents to the concept of genetic engineering. Thus, it is not the pictures themselves but what consumers bring to viewing them that dominates their reflection.

Disagreement with the content of the picture that the respondents believe is conveyed is one of the strong motivators that triggers the subjects to share insights with the researcher. These insights include “accusations” of untruthful visual representation (“it's not true because I think that genetically altered food could also look a lot better than normal food”) and of exaggerating the problem (“that looks like an advertisement that's against genetically modified food, but I think it's overstated. I don't think it's that bad”); and expressing surprise at the content of the picture. For example, the

colorful collage that has a huge DNA helix, and a scientist, a nurse, and a farmer performing their daily routines (illustration #19, *Harvard Business Review*) is interpreted by the subjects as hinting at the potential medical properties of food, a possibility of which they are doubtful:

I don't associate food with medical very much. So when I see this, it doesn't have a meaning. It has a picture of a hospital scene and a science scene and a farm scene. I'd never thought about those things in the same thought. (Lynn, 30)

This one was interesting. It kind of makes it look like it's a positive thing, genetically enhanced food, because there's someone growing some plants here or growing a crop. I don't know if this is DNA. I think it is DNA. I guess it's saving lives because here's also a picture of a hospital and a scientist who is looking at how to make the food better than natural. I don't know. I kind of don't agree with this one. ... I don't know if you would use genetically enhanced food to make you feel better. I think it would probably make you feel worse. (Patrick, 24)

Similar Readings of Different Illustrations

Similar readings of different pictures occur when the same reflections are evoked by various illustrations. For example, the issue of different levels of acceptance of genetically engineered food is raised in response to two drawings. The first depicts a bright DNA helix consisting of lobster, chicken, asparagus, banana, strawberries and other foods of unrelated categories (illustration #2, *Time*). The second illustration is a white and black drawing depicting a human hand peeling a banana to uncover a fish inside (illustration #25, *The Wall Street Journal*). The respondents reflect on the symbolic content of the illustrations by expressing their personal “line of acceptance” about where and how far genetic borders can be crossed:

This one I liked. It has lobster. Oh, but it has meat in it. But, yes, I can see that. The lobster has... wow! I can see this happening. Not necessarily crossing fruit and animals, you know, I can't see plant life crossing with animal DNA. But I can see animal DNA within the same family like lobster and shrimp crossing to create something. ... I can see beans with asparagus or beans with zucchini or something. Plants within plant. Animals within animals and different sea food. Believe it or not, I cannot see the crossing of say chicken DNA with other chicken DNA to create another chicken. I cannot see that. (Kathy, 37)

This one I chose just because when I looked at it, it illustrated the combining of genes from species that appear to have absolutely nothing in common. It goes back to that line of acceptance. Maybe I'm willing to accept the transplant of a gene from one species of corn to another, but when you start to get into other species, that's... you just wonder if this is really a good idea. So this was just very simple, a black and white picture that illustrated that. (Alice, 45)

The major conclusion makes it very clear that the idea of genetic engineering can be accepted when it does not imply crossing sacred borders. These borders seem to be established not only by nature but also by the subjects. Respondents offer very specific “recipes” of what can and what cannot be created, while demonstrating that their line of acceptance is contradictory. Thus, the first respondent accepts crossing within animals but does not allow this rule to apply to chicken. This leads to conclusion that the line of acceptance is not so much rationally as emotionally justified.

Voicing Unconscious Thoughts

Subjects, who see themselves as scientifically unaware of the issue, exhibit the most emotionally framed reflections while mostly talking about their feelings. The respondent who admits that she knows little about the topic and never heard the word “frankenfood” (which is how the consumer world labeled genetically engineered food after the fictional hero of Mary Shelly’s gothic novel *Frankenstein*) has difficulty explaining why she chose two pictures (illustrations #5, *Reason*; and illustration #6, *Business Week*):

It looks like a state trooper or an officer of the law of some sort that is lassoing that corn. It says to me that . . . I don’t know what it says to me. I didn’t like it. I don’t know why I picked this . . . Farm Factory . . . they used to be wonderful places to live. This is a sad thing to me because . . . the poor corn has got barb wire all over it. It can’t be free. I don’t understand . . . I don’t know, I didn’t like it. So I’m picking the genetically engineered things that I don’t like. I’m a Kansas girl. I don’t like corn being treated that way. (Kenna, 45)

What is implicit in this reflection, though, is a well-articulated feeling of discomfort which subject communicates through the choice of the pictures and the words used to describe them. “Poor” versus “wonderful,” “now” versus “used to be,” “free” versus being “lassoing,” “farm” versus “a trooper”—all these descriptors give strong meanings to two opposing symbols—that of comfort of being a girl on a Kansas farm, and that of discomfort behind innovations of modern days. The corn, metaphorically seen being lassoed and wired, is symbolically perceived as being abused by humans.

Emotional reactions to the illustrations also dominate when respondents relate to images by emphasizing the mutated appearance of the depicted food items. This is when they link appearance to their perception of naturalness and clearly define how genetically engineered food stands against this frame of reference. This appears to be the most straightforward way to convey discomfort and fill the category of genetically engineered food with the symbolic meaning of deviation from the norm:

This is picture number 25. It’s really gross because it has a fish inside . . . like what it would be a banana peel. It’s like not natural. When I think of genetically altered food, I think of something like weird like that. Something that’s not natural and altered, it kind of reminds me of that. Not that that’s what I would see, but that’s how I feel about it. (Chris, 22)

The picture, “Fresh from the lab,” food items, they don’t look natural. They have too many eyes and too many legs. “Fresh from the farm,” looks like an animal should look. A fish should not have legs. (Lou, 48, illustration #1)

In some cases, respondents start their comments on the pictures by admitting their inability to explain why they chose a certain picture, but they gradually develop a rationale linking the illustration with their subconscious thoughts. This demonstrates the expressive power of even the most “plain” pictures. A good example is an unsophisticated picture of a bright red tomato and brown soy beans on a white background (illustration #42, Internet). The respondent initially states that she does not know why she associates genetically engineered food with tomatoes, but soon comes to realize that it is not the tomatoes themselves but the perfection that their looks convey that she links with the concept of genetically engineered food:

When I think of genetic engineering it’s tomatoes. I don’t know why. I don’t know if that image got to me somehow from some news . . . But this is a picture of tomatoes and soy beans and it looks like this tomato is specifically enhanced. It looks very perfect. So when I’m thinking of genetic engineering, I’m thinking of perfection. (Aerica, 36)

Voicing Conscious Thoughts

As a concrete reference point, illustrations are a worthwhile means of expressing one’s position on the issue of genetically engineered food and in some cases even help generate a well-articulated philosophy in their attitude to food in general. Thus, when the respondent reflects on the picture of huge corn attacking people in the fields (illustration #4, *Business Week*), she notes, “I wouldn’t fight it, but I do have the negative connotation.” When another subject chooses a picture depicting a protestor holding a banner with “The Real Food Please” slogan (illustration #3, photo by the author), he also shares with the researcher that personally he would not join protestors. At the same time, the respondent makes it clear that he relates to the slogan for conveying his feelings on genetically altered food that, to him, does not belong to the category of natural food. The respondent’s understanding of genetic engineering includes “doing something” and “messing with something” which he views to be wrong:

It reminded me some of the things I’ve seen on TV because I think I recall people protesting. I’m not big on protesting, I mean, I wouldn’t do it myself, I don’t think. I mean, “The Real Food Please,” I can relate to that. That’s sort of my feeling on genetically altered food. It just seems like there’s something wrong if you have to do that to food, it’s not natural anymore. They’ve done something. You are messing with something that shouldn’t be messed with. (Bryan, 39)

The other subject uses the picture to express the symbolic meanings that he associates with his own garden. The illustration that evokes his nicely expressed narrative about appreciation for food and where it comes from, is a black and white cartoon that provides humorous instructions for planting seeds (illustration #21, Internet). These instructions include only three steps: sow seeds 300 feet apart; do not water, fertilize, thin or plow; and just sit back and reap. The respondent admits his liking for the cartoon, which he feels is clever. This cartoon prompts the respondent not only to reveal his own passion for a garden but to explain the philosophical bottom line that he sees behind it. Thus, he points out how “dangerous” it is to “view food as something that shows up in the supermarket under cellophane by magic.” Such an attitude, he believes, breeds a “very dangerous” perspective where people do not have to think about water use, chemicals, or processing. He argues that “it’s good to be close to the earth” because it is good to realize how the natural cycle works and how things such as soil and water, can be misused, which means a lot to him. A little garden therefore obtains a deep meaning and stands as a symbol of proximity to the earth and avoiding the dangers of being shortsighted.

A powerfully expressive character of the cartoon “Food of the 21st century” (illustration #7, *The Orange County Register*) is used by another respondent to articulate his view of genetic engineering as being fueled by pure corporate greed. In this cartoon, which is the most popular and is reflected upon by sixteen respondents, the grim reaper stands as a farm factory representative and holds a box with four open compartments. Three of the compartments display a different type of “scientific food” in the form of a chicken, a pig, and a cow, and one displays a crazy looking man over the label reading

“diseases.” While interpreting the cartoon, the respondent points out that he understands that the world population is getting bigger and there is a need to look for new and better ways to feed everybody. At the same time he reveals his skepticism over assurances that this is the only rationale for genetic engineering:

I thought this was an interesting one, “Food of the 21st Century,” because that what it feels like to me. Of course, the grim reaper has the dollar sign there and I think a lot of these large, corporate, farming industries, they see a big profit out of genetically engineering food. Well sure, the more you can produce, the more money you can make. I don’t think it’s a matter of them feeling sorry for all the people starving and wanting to feed them. I think it’s just a matter of them wanting to make money. (Mike, 49)

The respondent does not identify with “these large, corporate, farming industries” and does not believe in their “feeling sorry” for a starving population. He stresses the profit side of the technological innovation and centers his comments on the “dollar sign” which, contrary to the attention that it receives from the subject, is very small and even hard to notice. This, in turn, also demonstrates that the respondents see in the illustrations what they want to see based on their pre-existing beliefs and knowledge.

Seeing Oneself in the Picture

Connecting with the depicted characters on a personal level is one more motivational trigger that elicits meaningful responses from respondents. It happens when the subjects can directly identify with the characters and share their concerns. For example, the father of a ten-year-old boy chooses a photograph of a protestor holding a banner that states, “Our Kids Should Be GE Free!” (GE evidently meaning genetic engineering) and depicts a young boy (illustration #12, Internet). The respondent admits that as a father he relates to this illustration. His explanation of his reservations about the issue is centered on his child:

I have a 10-year old son and I guess I’m just sort of passing on my own little...I don’t know if it’s a fear or my own feelings. I think genetic engineering is a fairly recent thing I’m assuming. I would just want my child to not have to grow up eating something that ten years down the road they find out that this was bad for you. I can relate to the sentiment in that picture, having a child. (Bryan, 39)

Several respondents recognize themselves in the illustration that depicts the face of a terrified woman standing behind two types of cans of corn (illustration #30, *Business Week*). On the one side, there are cans of “regular” corn, on the other, the cans are genetically engineered, a fact which is conveyed by the DNA helix embracing a cob of corn on the can. The woman’s shopping cart is empty, and she is intentionally depicted disproportional, with a small body and oversized head with eyes looking horrified and lips open in scare. “I think this is the picture of me,” reflects one subject linking the illustration with the issue of labeling genetically engineered food:

I think this is the picture of me in the grocery store with this dilemma going, “Oh, is it genetically altered or not?” Even though these cans kind of indicate, I think reality is you don’t see the can with the DNA on it, you see the other cans and you don’t know what you are getting. So the dilemma is which can of corn you buy or which brand of corn do you buy. You don’t

know what to do. That’s where I think I am at this point. (Darlene, 39)

It is not the genetically engineered corn that bothers the respondent, but the fact that she does not know what she buys. In that sense, the woman in the picture is in a more favorable position, because she actually has a choice as the other subject correctly points out. That respondent also admits that she can identify with the character that she describes as being “a little distraught”: “This one, she is in a dilemma, ‘Do I buy the modified or the not?’ She looks a little distraught. I identify with her. I do, but here she knows which one is which. I don’t know. She has a choice. I don’t know if I have.” (Kenna, 45)

“Clueless”—this is how another respondent describes the characters of the illustration that uses the same objects but conveys a different meaning (illustration #29, *Business Week*). In that picture, only cans of corn with a DNA helix are displayed. The woman standing next to them is as disproportional as in the previous picture. This is, however, the only feature these two characters have in common. Contrary to “a little distraught” woman, the second one looks happy, her lips curve in a beautiful smile, and her eyes shine. She does not face any dilemma, just the opposite: she holds two cans of genetically engineered corn, and so does a man standing behind her. The man smiles and looks happy as well. The respondent finds the picture “hilarious”:

I think this is a hilarious picture. It’s got the genetically engineered on the cans and the people just look so clueless and they are just buying it and they are clueless and they don’t know what they are putting in them and they don’t care. I think that’s how most of the public is. I mean, you had asked me earlier, do I think I have [eaten genetically engineered food]? I’m sure I was just as clueless as these people because I’m buying something that who knows what? Because they don’t say on the can that it’s genetically engineered. It’s kind of pathetic actually. (Mike, 49)

Through this picture the subject describes his vision of “most of the public,” in which he also includes himself. Intentionally repeating the word “clueless” three times, he dramatizes a situation in which people are not aware of what they eating and in fact do not care. “I was just as clueless as these people,” he admits pointing to the carelessly smiling characters. He also identifies the problem as a lack of labeling of genetically engineered food while juxtaposing a clueless public with an uncaring “they.”

DISCUSSION

Thirty illustrations used as visual triggers for in-depth interviews proved to be an effective research tool that provided the author with valuable insights into consumer perception of a complex phenomenon. They helped respondents express their thoughts while reflecting on a topic with a heavy scientific background, such as genetically engineered food. Overall, the use of this elicitation technique 1) proved the ability of visual triggers to allow for the maximum degree of free association possible within structured interviewing (Collier and Collier 1986) and 2) supported the assumption that viewing pictures is conditioned by the cultural knowledge of the subject (Ball and Smith 1992).

As was the author’s assumption, there were several respondents who initially felt uneasy when the words “genetically engineered food” were pronounced, and they made it very clear that they did not know much about it. When, as a next step of interviewing,

they were asked to choose the illustrations that they linked with their perception of such food, a noted degree of relaxation on their part was expressed, and they were able to reflect on the pictures.

The illustrations performed several functions. Because of their diverse and light-hearted character, they sparked respondents' interest and aroused curiosity, eased the discussion, provided the subjects with a concrete reference point for verbalizing their perceptions, and evoked meaningful associations with genetically engineered food. The respondents definitely related to the illustrations when they commented: "This picture illustrates to me..." "It would probably be one of these pictures; it looks like perfect..." "I don't know why I chose this picture..." "I think this is a little extreme, and I think that's why I picked it because it's so extreme..." "It triggered that in my head..." "I can relate to that..." "It reminded me some of the things I've seen on TV..." "I have strong emotions for this one..." "I think this is a hilarious picture..." and "All of that came to mind as I looked at this one..."

The collection of illustrations used by the researcher, provoked discussions and elicited meaningful reflections by making respondents voice both their conscious and unconscious thoughts. The pictures triggered respondents to express their agreement or disagreement with the content of the pictures and evoked interpretations that reflected the subjects' existing beliefs and knowledge. By seeing themselves in some of the illustrations, respondents were able to identify more strongly with the discussed topic. In addition, because attention was focused on the illustrations, they did not feel tested on the knowledge of genetic engineering and could freely express their thoughts.

The argument that respondents are preconditioned in their reflection on illustrations by their existing knowledge and beliefs is particularly evident when the same pictures are "read" differently. For example, when the subjects bring polar perspectives into seeing something as simple as a butterfly (illustration #16, *The Wall Street Journal*), it only reinforces the theory that they culturally construct the meanings associated with these pictures. These cultural constructions are not uniform images imbedded in pictures, but multifaceted reflections that mirror the subject's state of mind.

In this context, it becomes clear that those opposing genetically modified food are very aware of the power of visuals and have been extensively using visual language. Thus, an analysis of the "weapons" used by protesting consumers makes them look surprisingly primitive. They include displaying visual threatening images in streets, on the Internet, and on every occasion in order to get press coverage. These images depict a skull, crossbones, and a "strawberry fish." Street protestors are costumed as mutant ears of corn, dressed up as a berry with fishy eyes or wear six-foot cardboard butterfly wings. They display a giant puppet representing a genetically modified chicken, a puppet of a tomato crossed with a fish, and a massive inflatable corn cob, complete with a fang-filled mouth and bloodshot eyes.

The researchers who advocate the use of visual tools as a research method argue that the power of graphic illustrations remains as strong as it was among early illiterate people because visuals are "easier and more engrossing sources of stimulation than books, journals, magazines, newspapers, and the other forms of the printed word" (Belk 1998). Given that human thoughts are image-based and visual stimuli is prominent in the brain, researchers stress the importance of visual channels of communication (Zaltman 1997, Zaltman and Coulter 1995, Heisley 2001).

The reported study attempted to extend the existing research that has utilized visual tools. While the previous research mostly focused on the discussion of familiar and comfortable issues such as personal grooming, one's dressing patterns, or family meals

(Rook 1985, McCracken 1988a, Heisley and Levy 1991), this study made an attempt to employ visual triggers while venturing into the area novel and largely unfamiliar to many subjects. This is the major contribution of this study that demonstrates the effectiveness of visual triggers as a research tool and an expressive language of the unknown. Its complex mechanism of elicitation is found to include different readings of the same pictures, agreement/disagreement, similar readings of different pictures, voicing conscious and unconscious thoughts, and seeing oneself in the picture.

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The SMAART Scale: Measure Development and Validation

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EXTENDED ABSTRACT

Consumers differ widely in their language abilities (or disabilities, see Wallendorf 2000), as they do in terms of most cognitive domains. While individual differences in comprehension exist in a variety of higher order abilities, we propose that basic language “reflexes” of the automatic kind account for and explain a substantial amount of these differences. A computer-based measure of automatic access to meaning (SMAART: Secondary Meaning Access via the Automatic Route Test) is developed by adapting a standard sentence verification procedure (McCloskey and Glucksberg 1979) and evaluating its psychometric properties.

The theme of the rather infrequent consumer research incursions into the impact of figurative communication on advertising effectiveness measures (see McQuarrie and Mick 1999; Toncar and Munch 2001; Roehm and Sternthal 2001) is that moderating variables addressing some sort of consumer proficiency are needed within any apt explanatory account on the topic. The present work proposes that a clear understanding of the cognitive mechanisms involved in metaphor comprehension and the availability of a straightforward measure able to capture them leaves both brands and consumers better off.

There are at least two distinct perspectives on what has been termed the incoherence view of the metaphor (Cacciari and Glucksberg 1994): one drawn from generative semantics, the other from pragmatics and speech act theory. Both views consider metaphors to be akin to a defective statement, either semantically or pragmatically. The present research argues that issues of implicit access to meaning lie at the core of metaphor comprehension processes. It is intuitively apparent that individual differences play an important role in consumers’ ability to understand metaphorical language. A formal demonstration of such claim was presented by Just and Carpenter (1992) when they proposed a particular theory of the way working memory capacity constrains comprehension. The larger capacity of some individuals allows them to cope better in cases of ambiguity, as it apparently permits them to access and maintain multiple interpretations. It is therefore proposed that automatic access to meaning occurs for those individuals that have the benefit of such high capacity, but not for others.

SMAART is a speed test we adapted from a standard categorization task in cognitive psychology (see McCloskey and Glucksberg 1979). This sentence verification procedure is designed to see if the availability of metaphorical meanings interferes with literal false decisions. The test involves three blocks: one for learning the key assignments (e.g. hitting the “Q” key for true and the “P” key for false sentences), one for practice sentences, and one for test sentences. In the procedure, subjects are requested to verify the literal truth of sentences of the type “Some X are Y.” During the test block, response latencies are measured for both random target sentences such as “Some cars are snails” (literally false but figuratively true) and random filler sentences such as “Some flowers are roses” (literally true) and “Some insects are roses” (literally false). The difference between latencies on metaphor and filler sentences is measured and used as a proxy for automatic comprehension. As described above, the SMAART assesses individuals’ ability to automatically access the figurative meaning of a polysemous sentence, as captured by their inability to consciously suppress it. An essential ingredient in the development of a measure consists of “at

least several hundred subjects to act as a normative pool for successive versions of the test” (Nunnally and Bernstein 1967, pp.325).

The choice of items originated in previous work by Glucksberg, Gildea, and Bookin (1982) and McElree and Nordlie (1999). The latter reference in particular provided a detailed list of 720 items (i.e. sentences) grouped into three categories: figurative, literal, and nonsense strings—mapping onto our literally false/figuratively true, literally true, and literally false sentences. A subset of 35 items was eventually agreed upon: 7 practice block items and 28 test block items (including 15 target and 13 filler sentences).

The present researchers developed and used a computer-adapted version of Daneman and Carpenter’s (1980) Reading Span Test that requires participants to remember for subsequent recall the last words of a series of 13 to 16-word sentences. Critical for the conceptual account behind the working memory explanation, the Reading Span Test and SMAART indeed correlated, providing convergent validity. The divergent validity requirement looked at the automatic aspect of the measured ability. Here, three alternative measures were looked at: the SAT Verbal score, the Polychronic Attitude Index (Kaufman, Lane, and Lindquist 1991), and the Styles of Processing Scale (Childers, Houston, and Heckler 1985). SMAART correlated with none.

Insights that emerged from this work include the acknowledgment that consumers often access the meaning of polysemous (i.e. metaphorical) marketing communications in the absence of conscious awareness, as well as the demonstration of a working memory capacity explanation for the existence of individual differences in metaphor comprehension. The associated predictive power of SMAART makes it a valuable tool for advertising developers that employ focus groups in ad copy testing or brand slogan choice.

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Ad and Brand Evaluations in a Competitive Processing Context—The Effects of Number of Attributes and Repetition Strategies

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ABSTRACT

This study proposes that the effectiveness of claim strategies and repetition strategies of the target ads will vary as a function of the presence of a competing ad. Findings demonstrated that, when the competitor's ad was not present in the context, participants generated more favorable responses to ad messages that featured a lower number of attribute claims than a higher number of attribute claims and to ad messages that repeated with one mode of variation than with two modes of variation. In clear contrast, when the competitor's ad was present in the context, participants, in general, generated more favorable responses to ad messages that featured a higher number of attribute claims than a lower number of attribute claims and to ad messages that repeated with two modes of variation than one mode of variation. The effects of one mode and two modes of repetition strategies have also been shown to be moderated by the number of attribute claims.

A product can be evaluated differently when competitors' ads are present in the ad-viewing context. For example, Chang (2002) demonstrated that an ad was evaluated less favorably when its attribute claims were shared with a competitor, as opposed to when the attribute claims were unique. Malaviya, Kisielius and Sternthal (1996) showed that, when a target ad was inserted into a context that was composed of competing ads, an attribute-focused message strategy was more effective than an image-focused message strategy. These findings suggest that, product judgments are relative, contingent upon contextual variations.

When exploring the effects of a cluttered ad context on ad perceivers' ad processing and product evaluations, it is important to take the limitation of ad perceivers' cognitive capacity into account. The central assumption of this study is that individuals are cognitive misers (Miller, 1956). Implicit in this assumption is the idea that consumers are more motivated to justify their evaluations only when there are competitors' ads in the context, as opposed to when there are no competitors' ads in the context. Due to the difference, when competitors' ads are not present in the context, individuals will favor simple ads to complex ads. In clear contrast, when competitors' ads are present in the context, individuals are more likely to seek justified bases on which to formulate their evaluations.

PROCESSING STRATEGIES IN A COMPETITIVE CONTEXT

A cluttered competitive ad-viewing context can constrain an ad perceiver's processing capacity. As past research has indicated, an individual's learning or recall of a target ad is impaired by his/her exposure to information about other ad stimuli (Percy & Rossiter, 1980). The limited processing capacity of ad perceivers may also explain Keller's (1991) findings that, as the number of ads present in the ad processing environment increases, recall of brand information declines. Similarly, past research indicated that the presence of competing ads caused problems in recalling information about the target brand whether the competing ads featured brands in the same product category (Burke & Srull, 1988) or in different product categories (Kumar, 2000). All these findings suggest that processing ads in a cluttered ad context is a capacity-demanding job. However, when there are competitors' ads present, consumers

need justified bases to formulate their evaluation of the target brand. Given the fact that a cluttered ad context demands more cognitive capacity than a non-cluttered ad context, this paper argues that a cluttered ad context will encourage ad perceivers to rely on salient heuristic cues to formulate judgments. Specifically, this study proposes that the number of attribute claims and the number of alteration strategy modes will work differently when the context varies.

PROCESSING STRATEGIES IN A NON-COMPETITIVE CONTEXT

In clear contrast, based on the assumption that individuals are cognitive misers and are reluctant to process complex information unless it is necessary, this study argues that, in the absence of a competitor's ad, consumers would prefer ad messages that demand less cognitive capacity. Indeed, a low-involving processing state can describe most of the ad viewing or ad reading situations in natural settings. Under such circumstances, an ad featuring simple product information should be sufficient for ad perceivers to form their judgments regarding the ad and the advertised brand. Indeed, when exploring the moderating influence of message complexity on ad repetition effects, Anand and Sternthal (1990) showed that, when ad perceivers had little opportunity to process ad messages, difficult messages led to more negative evaluations than do simple messages. Anand and Sternthal reasoned that, at initial exposure, uncertainty and conflict evoked by complex ad messages should be higher than that elicited by simple ad messages, resulting in more negative evaluations of complex ads than of simple ads. Therefore, processing simple ads will lead to the ads being evaluated more favorably than complex ads in a non-competitive context.

Number of Attribute Claims in a Competitive Context

The effects of the number of message arguments as heuristics cues has been well explored in the persuasion literature (e.g., Chen & Kao, 1998; Eagly & Warren, 1976; Petty & Cacioppo, 1984). Within the Elaboration Likelihood Model, the number of message arguments serves as an important cue when message processors are not motivated to engage in message elaboration or do not have the cognitive capacity to process information in detail (Petty & Cacioppo, 1983; 1984). That is, the decision rule, "the more arguments, the better," will influence message processors' evaluations of the persuasive messages under such conditions. For example, Petty and Cacioppo (1984) showed that when the issue was of low personal relevance, 6-argument messages generated more agreement than do 3-argument messages. Yet, under high relevance conditions, 6-argument messages did not enhance persuasion over 3-argument messages.

Product attribute claims in product advertising are similar to arguments in persuasion messages (Petty, Cacioppo & Schumann, 1983). Therefore, the number of product attributes in advertising may function as a heuristic cue when ad perceivers are reading ads in a cluttered context in which their ability to engage in effortful processing is constrained. In addition, Brown and Carpenter (2000) reasoned that consumers prefer to make judgments "on the basis of easily justified, cognitively available reasons" (p. 373). It is proposed in this paper that, in a competitive ad context, ad perceivers may be

eager to search for readily justified bases on which to formulate their ad and brand evaluations. When ads present higher numbers of product attributes than those of the competing brand, the sheer number of product attributes may serve as a salient basis for judgment.

On the other hand, in the absence of a competitor's ad, an ad including a long list of attribute claims may provide ad perceivers more information than they would like to process. These extra and unnecessary product attribute claims will increase ad perceivers' processing load and introduce uncertainty due to their complexity, leading to less favorable ad and brand evaluations. Therefore, under such conditions, ads promoting two product attributes will generate more favorable responses than will ads promoting four product attributes.

Hypothesis 1: When there are no competitors' ads present, ads featuring two product attributes will generate more favorable ad liking (H1a), ad believability ratings (H1b) and brand evaluations (H1c) than will ads featuring four product attributes. Yet, when competitors' ads are present, ads featuring four attributes will generate more favorable responses.

Repetition Variation Strategies in a Competitive Context

In a competitive ad context, ad repetition is an effective way to reduce clutter interference (Chang, 2003). Yet, repetition will introduce boredom and may lead to negative evaluations. A common practice is to repeat ads with different content or executions. It has been proposed that ad repetition with varying executions is an effective way to enhance recall of product information (Unnava & Burnkrant, 1991) and may counteract the negative effect of repetition on ad evaluations (Chang, 2003). MacKenzie (1986) has proposed that attribute repetition can be delivered through presenting different advertisements that feature the same attributes. That is, essential product information remains constant but the insubstantial features of the ad, such as color, graphics, fonts or layouts, are varied. This is termed cosmetic variation by Schumann, Petty and Clemons (1990). Schumann, Petty and Clemons (1990) have further distinguished substantive variation from cosmetic variation. Substantive variation refers to changing the message component (i.e., arguments, attributes) over repeated ad presentations while keeping the cosmetic components constant. Chang (2003) has identified the substantive/cosmetic variation strategy, which refers to ads featuring different product attributes with changing cosmetic characteristics.

For ads adopting the substantive/cosmetic variation strategy, both the visual and verbal components of the ads change with repetitions. For ads adopting the substantive variation strategy, only the verbal part of the ads changes with repetitions. Finally, for ads adopting the cosmetic variation, only the visual components of the ads alter with repetitions. In other words, substantive/cosmetic variation strategies involve variations concerning two modes, both visual and verbal, whereas cosmetic variation strategies and substantive variation strategies involve variation concerning only one mode, either visual or verbal.

Paivio (1971; 1986) proposes that processing verbal information and processing nonverbal information are independent actions. According to Paivio's (1971; 1986) dual coding model, two subsystems exist for information processing. One specializes in processing information concerning words or languages, which is referred to as the verbal system, and the other specializes in processing nonverbal objects, which is referred to as the imagery

system. Given the assumption that the two systems are independent, repetition strategies that vary in both verbal and nonverbal content will compete for cognitive resources.

In addition, a large body of literature has indicated that the brain's left and right hemispheres are responsible for processing verbal and visual inputs, respectively (Anderson, Garrison & Andersen, 1979). Specifically, the left hemisphere specializes in analytical and logical processing, whereas the right hemisphere focuses on holistic, gestalt-like processing. Das, Kirby and Jarman (1975; 1979) have also proposed that processing verbal and visual inputs involves different strategies. Processing verbal information relies on sequential organization and successive processing of linguistic materials, whereas processing visual information relies on synchronous organization and holistic processing.

Substantive/cosmetic variation strategies involve new inputs for the two independent systems and the two hemispheres, whereas substantively varied ad messages or cosmetically varied ad messages involve only new inputs for one of the systems. Therefore, it is proposed that processing substantively/cosmetically varied ad messages will be more complex and demand more cognitive capacity than processing either substantively varied ad messages or cosmetically varied ad messages. In line with the reasoning for developing hypothesis 1, it is argued that, in the presence of competitors' ads in the ad processing context, ad perceivers' cognitive capacity is constrained, and at the same time they are more motivated to justify their evaluations. As a result, they will rely on salient cues, such as the number of modes of alteration, as bases for developing their ad and brand judgments. Thus, repetition variation strategies that involve two modes of alteration will generate more favorable responses than will repetition variation strategies that involve only one mode of alteration. In contrast, when competing ads are not present, processing ad messages that demand higher cognitive effort does not seem desirable. Therefore, ad repetition variation strategies that involve only one mode of alteration will generate more favorable responses than will ad repetitions that involve two modes of alteration.

Hypothesis 2: When there are no competitors present, ads featuring one mode of alteration will generate more favorable ad liking (H2a), ad believability ratings (H2b) and brand evaluations (H2c) than will ads featuring two modes of alteration. Yet, when competitors are present, ads featuring two modes of alteration will generate more favorable responses.

The Interaction between Mode of Repetition and Number of Attributes

As argued earlier, uncertainty caused by message complexity will lead to negative attitudes. Thus, it is reasonable to propose that evaluations of ads that adopt repetition variation strategies involving two modes of alteration should be less favorable when the ads promote higher numbers of attribute claims rather than lower numbers of attribute claims. In the former situation, high uncertainty or confusion due to message complexity can introduce negative attitudes. In the latter situation, lower levels of uncertainty or confusion will result in more favorable attitudes.

In clear contrast, when participants are exposed to ads that vary with one mode, which requires less cognitive capacity to process, some people will believe that the more simple the ad, the more effective it is, whereas other people will think that the more attributes an ad emphasizes, the more effective it is. As a result, the effects cancel out each other. Therefore, the number of product

TABLE 1
Design of the experiment

Presence of Competitor	Featured attributes for competitor	Number of product attributes for the target ad	Featured attributes for the target ad	Type of repetition	Cell No.
With competitor	Set A	Four attributes	Set A & B.	Substantive	1
			Set A & B	Substantive/cosmetic repetition	2
			Set A & B	Cosmetic repetition	3
		Two attributes	Set A	Substantive	4
			Set B		5
			Set A	Substantive/cosmetic repetition	6
			Set B		7
			Set A	Cosmetic repetition	8
			Set B		9
	Set B	Four attributes	Set A & B.	Substantive	10
			Set A & B	Substantive/cosmetic repetition	11
			Set A & B	Cosmetic repetition	12
		Two attributes	Set A	Substantive	13
			Set B		14
			Set A	Substantive/cosmetic repetition	15
			Set B		16
			Set A	Cosmetic repetition	17
			Set B		18
No competitor	N. A.	Four attributes	Set A & B.	Substantive	19
			Set A & B	Substantive/cosmetic repetition	20
			Set A & B	Cosmetic repetition	21
		Two attributes	Set A	Substantive	22
			Set B		23
			Set A	Substantive/cosmetic repetition	24
			Set B		25
			Set A	Cosmetic repetition	26
			Set B		27

Note. Competitor ad always features two product attributes, either set A, featuring comfortable fit and lightweight, or set B, featuring lightweight and breathability. When the target ad promotes four attributes, the four attributes include comfortable fit, lightweight, durability and breathability. When the target ad promotes two attributes, they can either be set A or set B.

attributes may not affect their evaluations of either the ad or the product.

Hypothesis 3: When ads feature two-mode repetition strategies, ads featuring two product attributes will generate more favorable ad liking (H3a), ad believability ratings (H3b) and brand evaluations (H3c) than will ads featuring four product attributes. Yet, when ads feature one-mode repetition strategies, ads featuring two attributes will not generate different responses.

METHODOLOGY

Design

This was a three-factor experimental design (see Table 1). The three factors were: number of attribute claims featured in the target ad (two levels: two attribute claims versus four attribute claims), the presence of the competitor's ad (two levels: present versus absent),

and number of variation modes (two levels: repetition with verbal and visual variation, repetition with verbal or visual variation).

Selection of Products and Brands

Sneakers were selected as the product category in this experiment. Sperry, a brand that was not marketed in the area where the experiment was conducted, was selected to be the target brand. The competing brand was Nike, which was ranked top in market share in the area where the experiment was conducted.

Participants

This study recruited 345 participants from undergraduate classes at a university in a metropolitan area. Only students who did not major in advertising, marketing or psychology were allowed to participate. Forty-nine percent of the participants were male.

Stimuli

Stimuli ads were created by professionals working at Ogilvy & Mather Ad Agency. To reduce confounding effects from using visuals that may generate different favorability ratings under differ-

ent conditions, visuals were pretested before ad copy was inserted. ANOVA results indicated that the three visuals used in the experiment were rated equally in terms of liking, $F(1, 19)=2.03, p=.15$, good, $F(1, 19)=1.05, p=.36$, interesting, $F(1, 19)=.04, p=.96$, attention drawing, $F(1, 19)=.98, p=.38$, attractive, $F(1, 19)=.44, p=.65$, and suitable for advertising sneakers, $F(1, 19)=1.19, p=.32$. To improve external validity, the stimuli ads were inserted between two genuine filler ads.

Procedures

Participants first read brief instructions about the procedures. Then, depending on which condition they were assigned to, they were either asked to read a packet of five ads (one stimuli ad for Nike, two stimuli ads for Sperry and two filler ads) or a packet of four ads (no ads for Nike, two stimuli ads for Sperry and two filler ads) that were bound together as they would appear in magazines. For these two conditions, one filler ad was inserted in the first position and the other filler ad was inserted in the last position in the packet. After reading the ads, the moderators collected the stimuli packets and distributed questionnaires for participants to complete.

Independent Variables

Presence of the Competitor's Ad

As described in the procedure, when participants were assigned to the condition in which no competitor's ad was involved, they only read four ads, two Sperry ads and two filler ads. When they were assigned to the condition in which the competitor's ad was shown, they read five ads, including one for Nike.

Number of Attribute Claims

A pretest ($N=20$) asked participants, in an open-ended question, the attributes they would take into consideration when they purchased a pair of sneakers. Their responses were coded and ranked. The four attributes ranked at the top were selected to be featured in the target ads. They were: comfortable fit, durability, lightweight and breathability. The condition that featured two product attributes only contained comfortable fit and lightweight or durability and breathability. The two sets of attributes did not generate different effects on any of the dependent measures (all $ps>.32$). Therefore, they were collapsed in the later analyses. The condition that featured four product attributes included all four.

The Presence of the Competitor's Ad (two levels: present versus absent)

The ad for Nike, which was the leading brand, featured two attribute claims, either comfortable fit and lightweight or lightweight and breathability. The effects of the two sets of attributes were not significant on any of the dependent measures for evaluating Nike or Sperry (all $ps>.32$) and the responses to the two sets were collapsed in the later analyses.

Number of Repetition Modes

As discussed in the literature review section, there are three types of repetition strategies: repetition with substantive/cosmetic variation, repetition with cosmetic variation and repetition with substantive variation. For each repetition strategy condition, the Sperry ad either featured two product attributes or four product attributes.

For the repetition with substantive/cosmetic variation condition, the two Sperry ads featured different visuals and different product attributes. Specifically, for the two-attribute condition, the first ad highlighted the first attribute and the second ad emphasized the second attribute. The cosmetic characteristics of the two ads also varied. For the four-attribute condition, each ad featured two of the four attributes. The first ad highlighted the first two attributes and the second ad emphasized the last two attributes. Similarly, the

same two visuals used for the Sperry ads in the two-attribute condition were employed in the four-attribute condition to reduce the confounding influence of visual differences across the two conditions.

For the repetition with cosmetic variation condition, the two Sperry ads featured the same product attributes, yet different visuals. Specifically, for the two-attribute condition, both ads featured the same two attributes. On the other hand, for the four-attribute condition, both ads addressed all four attributes. Two different visual formats were used for each of the two ads.

For the repetition with substantive variation condition, the two Sperry ads featured the same visuals but different product attributes. Specifically, for the two-attribute condition, the first ad highlighted the first attribute and the second ad featured the second attribute. For the four-attribute condition, each ad featured two of the four attributes. The first ad highlighted the first two attributes and the second ad emphasized the last two attributes.

Most importantly, the three variation strategies can be categorized into two groups based on the number of modes that the variation strategies involve. Specifically, the substantive/cosmetic variation condition falls into the category of two-mode variation, whereas the other two variation conditions fall into the category of one-mode variation.

Dependent Measures

Ad Liking

Participants rated their liking of each ad on a five-item seven-point Likert scale. The five items were adopted from Madden, Allen, & Twible (1988) and Mitchell and Olson (1981). The items were: "interesting," "good," "likable," "favorable" and "pleasant." Cronbach's reliability alpha of ad liking was deemed satisfactory at .92 and .94, respectively, when evaluating the two Sperry ads.

Ad Believability

Participants rated the believability of the ad on a four-item seven-point scale. The four items were adopted from Beltramini's (1982) advertising believability scale: "believable," "convincing," "reasonable," and "authentic." Cronbach's reliability alphas were deemed satisfactory, each at .91 when evaluating the two Sperry ads.

Brand Attitudes

Brand attitudes were measured with a five-item seven-point Likert scale. The items were adopted from Chang (2002). They were: "good," "like," "pleasant," "positive" and "good quality." Cronbach's reliability alpha for this scale was deemed satisfactory at .94.

RESULTS AND ANALYSES

The correlations among ad liking, ad believability, and brand attitudes were significant (Pearson's r ranged from .62 to .83, all $ps<.01$). Therefore, MANOVA was first conducted to test each set of hypotheses. As expected, MANOVA indicated that the two-way interaction between presence of competitor and number of product attributes was significant, $F(1, 344)=2.68, p=.05$.

ANOVA showed that the interaction between presence of competitor and number of product attributes on ad liking was not significant, $F(1, 345)=1.25, p=.26$. Therefore, H1a was not supported.

When ad believability was analyzed, ANOVA showed a significant interaction, $F(1, 345)=5.19, p=.02$, which was as expected. When there was no competitor's ad in the context, ads featuring two product attributes generated higher ratings than did ads featuring four product attributes, $M_{\text{two attributes}}=4.31, M_{\text{four attributes}}=3.72$, whereas, when there was a competitor's ad in the

context, ads featuring two product attributes generated lower ratings than did ads featuring four product attributes, $M_{\text{two attributes}}=3.84$, $M_{\text{four attributes}}=3.97$. The findings supported H1b.

When brand evaluations were analyzed, ANOVA showed that the interaction was not significant, $F(1, 345)=.07$, $p=.78$. Therefore, H1c was not supported.

Consistent with expectations, MANOVA indicated that the two-way interaction between presence of competitor and mode of repetition was significant, $F(1, 344)=3.02$, $p=.03$.

As expected, ANOVA revealed that the interaction on ad liking was significant, $F(1, 345)=4.80$, $p=.03$. When there was no competitor's ad in the context, ads varying on one mode generated higher ratings on than did ads varying on two modes, $M_{\text{one mode}}=4.20$, $M_{\text{two mode}}=3.81$, whereas when there was a competitor's ad in the context, ads varying on one mode generated lower ratings than did ads varying on two modes, $M_{\text{one mode}}=3.76$, $M_{\text{two mode}}=4.07$, supporting H2a.

ANOVA did not generate a significant interaction on ad believability, $F(1, 345)=.44$, $p=.51$. Yet, the means were in the expected directions. When there was no competitor's ad in the context, ads varying on one mode seemed to generate relatively higher ratings than did ads varying on two modes, $M_{\text{one mode}}=4.04$, $M_{\text{two mode}}=3.99$, whereas when there was a competitor's ad in the context, ads varying on one mode seemed to generate relatively lower ratings than did ads varying on two modes, $M_{\text{one mode}}=3.82$, $M_{\text{two mode}}=3.98$.

When brand evaluations were analyzed, ANOVA showed that the interaction was not significant, $F(1, 345)=1.46$, $p=.23$. However, the means were in the expected directions. When there was no competitor's ad in the context, ads featuring two product attributes generated higher ratings than did ads featuring four product attributes, $M_{\text{two attributes}}=4.14$, $M_{\text{four attributes}}=3.89$, whereas when there was a competitor's ad in the context, ads featuring two product attributes generated lower ratings than did ads featuring four product attributes, $M_{\text{two attributes}}=4.05$, $M_{\text{four attributes}}=4.16$.

MANOVA indicated that the interaction between number of attributes and number of repetition modes approached the significant level, $F(1, 345)=2.12$, $p=.10$.

However, as expected, the interaction on ad liking was significant, $F(1, 345)=6.05$, $p=.01$. As expected, when ads featured two-mode repetition strategies, simple effect analyses showed that promoting two product attributes generated higher ratings than did promoting four attributes, $F(1, 125)=5.23$, $p=.02$, $M_{\text{two attributes}}=4.24$, $M_{\text{four attributes}}=3.64$. Yet when ads featured one-mode repetition strategies, simple effect analyses indicated that promoting either two attributes or four attributes did not generate different ratings on ad liking, $F(1, 218)=.70$, $p=.41$, $M_{\text{two attributes}}=3.89$, $M_{\text{four attributes}}=4.07$. The findings confirmed the predictions of hypothesis 3a.

ANOVA indicated that the interaction on ad believability was significant, $F(1, 345)=5.33$, $p=.02$. As expected, when ads featured two-mode repetition strategies, simple effect analyses indicated that promoting two product attributes generated more favorable ratings than did promoting four attributes, $F(1, 125)=5.36$, $p=.02$, $M_{\text{two attributes}}=4.28$, $M_{\text{four attributes}}=3.68$. In clear contrast, when ads featured one-mode repetition strategies, simple contrast analyses demonstrated that promoting either two attributes or four attributes did not generate different ratings, $F(1, 218)=.40$, $p=.53$, $M_{\text{one mode}}=3.87$, $M_{\text{two mode}}=4.01$, supporting hypothesis 3b.

Finally, ANOVA showed that the interaction on brand evaluations was significant, $F(1, 345)=4.15$, $p=.04$. When ads featured two-mode repetition strategies, simple effect analyses showed that promoting two product attributes generated more

favorable brand evaluations than did promoting four attributes, $F(1, 125)=5.90$, $p=.02$, $M_{\text{two attributes}}=4.32$, $M_{\text{four attributes}}=3.74$, yet when ads featured one-mode repetition strategies, simple effect analyses indicated that promoting either two attributes or four attributes did not generate different ratings, $F(1, 125)=.04$, $p=.83$, $M_{\text{two attributes}}=4.08$, $M_{\text{four attributes}}=4.12$. Therefore, hypothesis 3c was supported.

It is also important to note that ratings of the Nike ad on liking, believability or brand evaluations did not vary when the content for Sperry ads changed (all $ps>.87$).

DISCUSSION

This study explores an ad context that is similar to what ad perceivers are exposed to on a daily basis. Within this cluttered viewing context, all messages compete for attention, and yet, ad perceivers' cognitive capacity is limited. As a result, ad perceivers cope with the glut of information by adopting different processing strategies. Therefore, understanding how ad perceivers make sense of cluttered message contexts, and at the same time manage message processing within the limits of their cognitive capacity, is important to researchers.

Findings indicate that ad perceivers seemed to adopt different processing strategies due to the presence of competitor's ad messages. In general, when competitors' ads are absent, participants rated the target ad featuring simple ad content more favorably than the target ad featuring complex ad content. Yet, when competitors' ads are present, participants in general generated more favorable responses to ad messages that featured higher number of attribute claims or ads varied with two modes of alterations. It is likely that, when processing ad messages for two competing brands, participants were motivated to find readily justified cues to develop their judgments, allowing number of attribute claims or number of variation modes to play an influencing role in the evaluation process. However, it is important to note that findings were not very consistent when the competitor's ad was present. One of the possible explanations is that individual difference such as product involvement has not taken into account. Individuals with high and low involvement may respond differently to two sneakers ads in a competitive context. The moderating influence of individuals' product involvement can be further explored in the future.

It is also important to note that the impact of context effects on ad perceivers' evaluations of the target ad and brand are mainly limited to new brands. The known brand, Nike, is not subject to the influence of context variations. These findings are consistent with past research. For example, Chang (2002) has demonstrated that evaluations of a familiar brand are less likely to be affected by ad strategies employed by competing ads in the context. Kent & Allen (1994) also showed that memory interference is less serious for familiar brands.

Findings of this study should be considered within its limitations. First, this study explores a cluttered ad context for print media. Visuals in print media are static, whereas visuals in television are dynamic (Bryce & Yalch, 1993). Therefore, findings of this study may not be directly generalized to understand the influence of a cluttered ad context in television. Second, the interactive relationship between the verbal and visual components of the message has not been controlled. Houston, Childers and Heckler (1987) demonstrated that when pictures corresponded well with the verbal component of the ad, messages were better recalled (see also Lutz & Lutz, 1977). Therefore, future investigations can explore the moderating influence of the interactivity between the verbal and visual components. Finally, Unnava and Burnkrant (1991) argued that verbal information varied in terms of its imagery-evoking

power. This study did not specifically control the imagery-evoking power of the verbal component and was not able to detect possible interference that might have been caused by the vividness of imagery that the verbal component evoked. Yet, given that the verbal components mainly concern attribute claims, ads claiming different product attributes should not differ much in the vividness of the evoked imagery.

Regardless of the limitations, this study sheds some light on our understanding of how ad perceivers balance between making sense out of competing ad messages and managing their cognitive work load within reasonable limits. Findings of this study have direct implications for media planners and creative professionals when they develop message strategies or media planning for a new or less-known brand. Specifically, when a cluttered media context is selected for ad placement, ad messages can promote a long list of attributes and repetition strategies can involve variations along both the visual and verbal mode.

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Effectively Communicating New Product Benefits to Consumers: The Use of Analogy versus Literal Similarity

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ABSTRACT

The main point this study wants to make is that the use of analogies in advertising for really new products is a more effective means of communicating a new product's distinctive benefits to consumers than is the use of literal similarity comparisons. This hypothesis was tested by means of an experiment with a 3 (comparison type: explicit analogy, implicit analogy, literal similarity) x 2 (product: Auto Mower, Smart Pen) design. The results showed a significant effect of the use of implicit analogy in advertising on consumer's benefit comprehension for one of the two really new products. The use of analogies in the ads did not increase consumer preference to a greater degree than did the use of literal similarities. We did, however, find a positive effect of benefit comprehension on product preference. We discuss these findings and outline directions for future research.

INTRODUCTION

New products play an essential role in providing increased sales, profits, and competitive strength for most organisations. A growing percentage of these new product introductions represent really new products; products that create entirely new categories (Gregan-Paxton and Roedder John 1997; Gregan-Paxton, Hibbard, Brunel, and Azar 2002), such as the personal digital assistant (PDA). A particular characteristic of really new products is that their distinctive benefits generally lie in technologically innovative features that are hard, or even impossible, to observe from the outside. This constitutes a serious problem to marketers, since the degree to which consumers perceive distinctive advantages in new products crucially affects their market acceptance (Cooper and Kleinschmidt 1995; Hultink and Robben 1999). Roehm and Sternthal acknowledge this problem and note that the challenge in marketing new products is "to help consumers identify and appreciate their product benefits, particularly those that might not be apparent from an inspection of a product's surface attributes" (2001, p. 257). As the strategic and financial importance of launching new products increases (Moreau, Lehmann, and Markman 2001a), it is necessary to investigate communication strategies during the introduction of really new products in order to facilitate consumer learning of their key benefits.

In general, marketers tend to turn to advertising to inform consumers about a new product. Advertising is relatively cheap, the information that is communicated to consumers is under control, and it can reach a mass audience (Hoch and Deighton 1989). Nevertheless, advertising is not the most effective tool for consumer learning of really new products, at least not when it is used in its traditional way of communicating product attributes and benefits. Ads regarding complex products, such as really new products, typically need to contain a high amount of attribute information because there is more content-related information to impart about a new PC, for instance, than about a bottle of perfume or soft drink (Abernethy and Franke 1996; Mortimer 2000). As consumers find it difficult to understand the link between product attributes and the benefits they provide (Hoeffler 2003), the use of analogies in advertising has been proposed as a promising means to enhance consumer learning of new product benefits.

Analogies are believed to be effective learning aids as they involve the transfer of existing knowledge to the new product and thus facilitate learning, increase comprehension, and direct consumers' attention to key benefits (Gregan-Paxton and Roedder John 1997). Recent research in marketing and consumer behavior has suggested that analogies may be useful to enhance consumer learning of really new products (Gregan-Paxton et al. 2002; Moreau et al. 2001a; Roehm and Sternthal 2001). Gregan-Paxton et al. even conclude that "the analogical learning literature is uniquely suited to the study of products that require consumers to create entirely new knowledge structures" (2002, p. 544). In spite of the indisputable value of previous research, two observations can be made that warrant further investigation into the effectiveness of the use of analogies for consumer learning of new products. First, previous studies have employed literal similarity matches instead of analogies (see Gregan-Paxton et al. 2002 for a notable exception). Roehm and Sternthal (2001), for example, compared nutritional management software (target) with financial management software (base) and a PDA (target) with a mobile phone (base). The two bases are closely related to the target domain and share both surface attributes and structural relations with it, qualifying them as literal similarities rather than analogies (the difference between analogy and literal similarity is explained later in this paper). We will argue that analogies serve the purpose of facilitating consumer learning of really new products better than literal similarity matches as the latter are less effective in explaining the distinctive competitive benefits of really new products. A second observation that warrants further investigation is that none of the reported studies have investigated benefit comprehension as the dependent variable. Gregan-Paxton et al. (2002) showed that the use of analogies directs consumers' attention to shared structural relations between target and base, but the question remains whether such a focus on corresponding relations also enhances consumers' comprehension of the key benefits of a really new product. It is the aim of the present study to answer this question by examining whether the use of analogies in ads for really new products leads to a better understanding of their key benefits than the use of literal similarity matches.

CONSUMER LEARNING BY ANALOGY

Analogical learning takes advantage of similarities between a familiar domain (the base) and a new domain (the target), using the relational commonalities (i.e., an interconnected system of properties or components) as a basis for generating inferences from the base to the target to enhance comprehension of the latter. Applying this framework to really new products, prior knowledge of a familiar, well-known base (e.g., secretary) may enable consumers to learn about and develop a representation of a new product (e.g., PDA).

Learning by analogy occurs through a series of stages: access, mapping, and transfer (Gentner 1989; Keane, Ledgeway, and Duff 1994). In the access stage, a relevant base becomes active in a person's memory and serves as a source of information about the target. Access is likely to occur spontaneously when the target shares a number of surface similarities (i.e., visible attributes) with the base (Gentner, Ratterman, and Forbus 1993). In a marketing

communications setting, the base is usually prompted from an external source, such as a print advertisement (Gregan-Paxton et al. 2002; Moreau et al. 2001a; Moreau, Markman, and Lehmann 2001b). Once the base has been activated, its content and structure are compared with the target in the mapping stage. Unlike access, mapping is characterized by a preference for relation-based rather than attribute-based comparisons between base and target (Clement and Gentner 1991; Gentner et al. 1993). Finally, in the transfer stage, the base and target are aligned based on the shared relations between the two. It is in this stage that learning occurs, when knowledge is moved from the base to the target along the mappings that have been made during the mapping stage.

ANALOGY VERSUS LITERAL SIMILARITY

The consumer and psychology literature distinguishes analogies from literal similarity comparisons (Gentner 1989; Gregan-Paxton and Roedder John 1997; Roehm and Sternthal 2001; Vosniadou 1989). This distinction is based on the conceptual distance between the base and the target of the comparison. An analogy refers to the transfer of knowledge between a base and target that belong to *disparate* conceptual domains, but which share a similar explanatory structure. An example of an analogy is the previously mentioned comparison between a secretary (base) and a PDA (target). Due to the conceptual difference between the base and target domains, analogies allow only relations to be mapped from base to target and not surface properties. In our example, a PDA and a secretary do not share any surface properties (i.e., there is no transfer of attributes), but transfer of relations does take place (e.g., like a secretary, a PDA manages appointments, address books, and documents). Unlike analogies, literal similarities pertain to the transfer of knowledge between a base and a target from *similar* domains. An example of a literal similarity comparison is a comparison between a PDA (target) and a base from a highly related domain, namely a mobile phone. Because of the conceptual closeness of the base and the target domain, transfer between the two may take place of both structural relations (e.g., the way wireless communication takes place) and surface attributes (e.g., display, keyboard, buttons, and other elements both products are made up of).

Effect on Comprehension

The disadvantage of using literal similarity comparisons instead of analogies in advertising for really new products is that they are less capable of conveying the key benefits of such products to consumers, which is precisely the purpose of using a comparison at all. A base from a closely related domain, such as a mobile phone in the case of a PDA, may share attributes and relations with the target, but it is less able to convey new information about the target (i.e., managing office related tasks) because it is exactly this new information that distinguishes the target from the base. Put otherwise, how should consumers learn the distinguishing benefits of a PDA by comparing it with a mobile phone if the mobile phone does not possess these benefits? More generally, a base from a domain that is similar to that of the target is never optimally suited to teach consumers the distinguishing benefits of the target since the base lacks exactly those distinguishing qualities. It has been argued that the slow adoption rate of mobile phones was due to the comparison drawn with traditional phones (Fusco 1994), which made it difficult for consumers to perceive the distinctive benefit (i.e., mobility) of the mobile phone.

Apart from their relative inability to communicate distinguishing benefits, literal similarity comparisons entail the risk that they stimulate consumers to make false inferences about the target. To illustrate, comparing a PDA to a mobile phone, consumers may

incorrectly conclude from their knowledge about mobile phones that one can receive and make phone calls with the PDA.

The arguments presented above have led us to conclude that the use of literal similarity in advertising is a relatively ineffective means of explaining the distinctive benefits of really new products to consumers. Analogies, on the other hand, are believed to be better suited to this end due to the conceptual remoteness of the base and the target domain. Whereas two similar domains imply the disadvantages that we have explained above (i.e., inability to communicate distinguishing benefits and risk of false inferences), disparate domains do not. Confronted with a base and a target that share particular structural relations but no surface attributes, consumers will focus on the common relations and disregard the non-corresponding attributes. According to Gregan-Paxton and Roeder John (1997), focusing on common relations (particularly between a base and a target from disparate domains) will enhance comprehension of (the distinctive benefits of) a really new product because structural relations are thought to be more informative about what benefits a product offers than are surface properties (Gregan-Paxton and Roeder John 1997). Of course, comprehension will only increase if the disparate base of the analogy is appropriately selected so that the common relations truly pertain to the distinctive benefits of the target, that is, the analogy has to be 'sound' (Gentner et al. 1993). Empirical support for these assertions comes from Gregan-Paxton et al. (2002) who demonstrated that consumers presented with a product description of a PDA including an analogy (i.e., a secretary) focused on corresponding relationships between target and base and disregarded dissimilarity in surface properties. Gregan-Paxton and her colleagues did not investigate, however, whether the focus on structural relationships and the disregarding of surface properties actually enhanced comprehension of the new product. Nevertheless, based on findings from other researchers they argue that the use of analogies increases the rate at which consumer expertise develops by providing "a structure capable of organizing the constellation of features comprising an unfamiliar domain" (2002, p. 545). We second this and hypothesize that:

H1: Consumers will better comprehend the distinctive benefits of a really new product that is advertised through an analogy than through a literal similarity.

Effect on Preference

Consumers typically have to learn about new benefits in order to appreciate really new products (Lehmann 1994; Urban, Weinberg, and Hauser 1996). Since benefit comprehension does not guarantee a positive evaluation of these benefits, marketers strive for communication goals that go beyond understanding. They aim to create a positively exaggerated impression of the key benefits in order to make their new product more appealing to consumers. Having said this, it can be expected that benefit comprehension will lead to a more positive evaluation of the new product. Marketers will make sure only to emphasize product benefits that consumers are likely to appreciate. Since an analogy is believed to attract attention to the key benefits of a really new product and given the assumption that consumers appreciate these key benefits, a positive relation is expected between the use of analogies versus literal similarities in ads for really new products and consumers' preference for the new product:

H2: Consumers will evaluate a really new product that is advertised through an analogy more positively than a really new product that is advertised through a literal similarity.

METHODOLOGY

Participants

The research was conducted among 99 members of a consumer panel consisting of a cross section of inhabitants of the community of Delft in the Netherlands. Participants ranged in age from 19 to 74 years ($M=48.3$) and approximately 52% of them were male. Only participants who possessed a home computer, private access to the Internet, new products such as an MP3, DVD, or digital (video) camera, and a house with a garden were selected, since they were likely to be innovative and interested in the two really new products examined in the study. Participation took 30 minutes and was rewarded with a small financial compensation equivalent to US\$ 6.

Design and Stimuli

The hypotheses were tested by means of an experiment with a 3 (comparison type: explicit analogy, implicit analogy, literal similarity) \times 2 (product: Auto Mower, Smart Pen) design. As a safeguard in the case that the analogy manipulation would not be strong enough in the implicit analogy condition, we decided to include an explicit analogy condition in the experimental design. In this condition, the analogy was manipulated more strongly by explicitly mentioning each correspondence between the base and the target in the body text of the ad in addition to mentioning the base in the sub headline and the first sentence of the body text (as was done in the implicit analogy condition). Each participant evaluated two different types of comparison, one for each product. Due to time constraints not every respondent was able to view a second ad and fill out the corresponding questionnaire, resulting in a total number of cases of 187. Both product and comparison type were presented in balanced orders to reduce carryover effects (Elmes, Kantowitz, and Roediger 1992).

Two really new products were chosen to enhance generalizability. The Auto Mower (i.e., an autonomous lawn mower) and the Smart Pen (i.e., a device that biometrically identifies its user) were selected on the basis of two criteria. First, participants had to be unfamiliar with the products, since a representation of either product had to be absent or at least limited. A pre-test ($n=124$) established that both really new products were unfamiliar to the participants ($M_{Auto\ Mower}=1.90$, $M_{Smart\ Pen}=1.92$ on a seven-point scale). Second, for both products two different knowledge domains had to be available, one that could serve as the base for the analogy (Auto Mower: robot, Smart Pen: fingerprint), and one that could serve as the base for the literal similarity comparison (Auto Mower: lawn mower; Smart Pen: ballpoint). These bases were generated and selected through pre-testing.

Six print ads were developed, one for each experimental condition (see appendix for examples). Print was selected as the experimental medium, because it is the primary medium in which consumer durables are advertised and it is consistent with previous research. The ads consisted of a body of text, a headline and two pictures: a picture of the really new product and of the base. The main purpose of the ads was to stress the comparison between the target product and the base domain. Centered at the top of each ad in large typeface was the product name. The comparison type was manipulated in the sub headline, "The Smart Pen is like a ballpoint [fingerprint]!" of which the base domain was printed in red. Below this sub headline a picture of the target product was shown. To strengthen the manipulation, the body opened with the sentence: "The Smart Pen works like a ballpoint [fingerprint]". Next to this text a picture of the base domain (ballpoint or fingerprint) was shown. For the explicit analogy condition the ad version addressed each correspondence between the base and the target in the body

text of the ad in addition to mentioning the base in the sub headline and the first sentence of the body text. Information about three other product attributes was included in the lower right corner of each ad to increase the ad's realism. A pre-test ($n=124$) revealed no significant differences ($p>.50$) between the ads in terms of participants' (a) difficulty of comprehending the ad, and (b) informativeness of the ad.

Procedure

The experiment was administered individually. Participants examined the stimulus print ad for 60 seconds after which they filled out the questionnaire containing the dependent variables. The experiment was then interrupted for approximately 10 minutes by a second, unrelated experiment, which served as a distracter task between the exposure to the first and the second ad. The procedure for the second ad was equal to that for the first ad after which participants were debriefed and received their compensation.

Dependent Measures

All items were measured on seven-point rating scales.

Benefit Comprehension. Participants' understanding of the benefits of the new product was captured by a three-item scale (Cronbach $\alpha=0.91$). For the Smart Pen, for example, participants were asked: "To what extent does the comparison between the Smart Pen and the [ballpoint/fingerprint] help you to clarify the new features of the advertised product" (comparison is: not helpful/helpful, not useful/useful, confusing/illuminating).

Product Preference. Based on Moreau et al. (2001a) consumers' product preference was assessed by means of a five-item scale (Cronbach $\alpha=0.84$) that captured participants' product attitude (good/bad, favorable/unfavorable, like/dislike), behavioral intention: "This is a product I would like to try" (completely disagree/completely agree), and need for information: "I would like to have more information about this product" (completely disagree/completely agree).

RESULTS

An ANOVA with benefit comprehension as the dependent variable yielded significant main effects for product ($F_{1,181}=35.98$, $p<.01$) and type of comparison ($F_{2,181}=4.16$, $p<.05$). The Auto Mower ($M=5.62$) generated a higher benefit comprehension than the Smart Pen ($M=4.26$). As predicted in the first hypothesis, ads containing an analogy increased benefit comprehension of a really new product more than ads containing a literal similarity ($M_{implicit\ analogy}=5.25$, $M_{explicit\ analogy}=5.05$, $M_{literal\ similarity}=4.49$). A Tukey post-hoc comparison test revealed that only the difference between the implicit analogy condition and the literal similarity condition reached significance ($mean\ difference_{literal\ similarity\ vs.\ implicit\ analogy}=.76$, $p<.05$; $mean\ difference_{literal\ similarity\ vs.\ explicit\ analogy}=.56$, $p=.12$; $mean\ difference_{implicit\ vs.\ explicit\ analogy}=.21$, $p=.74$). The insignificant difference between the implicit and explicit analogy conditions shows that our concern that the analogy manipulation in the implicit analogy condition might not be strong enough proved groundless.

The main effect of comparison type was qualified by a significant two-way interaction between product and type of comparison. The means indicate that the positive effect of analogy on benefit comprehension occurred for the Smart Pen, ($M_{implicit\ analogy}=4.92$, $M_{explicit\ analogy}=4.53$, $M_{literal\ similarity}=3.27$), but not of the Auto Mower ($M_{implicit\ analogy}=5.60$, $M_{explicit\ analogy}=5.58$, $M_{literal\ similarity}=5.68$; $F_{2,181}=5.14$, $p<.01$).

An ANOVA with product preference as the dependent variable failed to show any significant effects. All three comparison types generated equally positive preferences for both new products

($M_{\text{implicit analogy}}=4.61$, $M_{\text{explicit analogy}}=4.80$, and $M_{\text{literal similarity}}=4.55$). To investigate the possibility that the effect of comparison type on product preference was mediated by benefit comprehension, we repeated the analysis with benefit comprehension as a covariate. The analysis revealed a significant main effect of the covariate only ($F_{1,179}=21.56$, $p<.01$). Irrespective of experimental condition, consumers that comprehended the new product's benefits better, also showed greater appreciation of these products.

DISCUSSION

The main point this study wants to make is that the use of analogies in advertising for really new products is a more effective means of communicating a new product's distinctive benefits to consumers than is the use of literal similarity comparisons. The primary reason for the greater effectiveness of an analogy lies in the fact that the base domain in this type of comparison is fundamentally different from the target domain. The conceptual remoteness between the domains in an analogy entails two consequences for consumer comprehension of the benefits of a really new product that do not occur in the case of a literal similarity comparison. A first consequence is that consumers who process an analogy focus on the transfer of structural relations between the base and the target and are not distracted by surface properties, because relations are all that the base and target share. Structural relations carry more information about the benefits a new product offers than do surface properties, hence the greater explanatory power of analogies versus literal similarities. Second, consumers are less likely to transfer incorrect knowledge about relations and properties from the base to the target, when the base and the target are from conceptually remote domains, as is the case for analogies, than when they are from conceptually similar domains, as is the case for literal similarities. Put simply: when the base and the target do not look alike, consumers will be less likely to wrongly infer that they are alike.

Previous researchers investigated the effects of the use of analogies and literal similarities on information processing and comprehension. Gregan-Paxton et al. (2002) showed that ads containing an analogy lead recipients to focus their information processing activities to the mapping of structural relations and to ignore the mapping of features between the base and the target. Recipients of ads not containing an analogy, in contrast, showed a greater preference for the mapping of surface properties. The mapping of structural relations occurred much less frequently. What the study of Gregan-Paxton and her colleagues does not show, however, is that the use of analogies actually leads to enhanced comprehension of the new product and its benefits. The authors assume such a relation to exist, but they do not test it empirically. The relation between the use of a comparison in advertising and consumer comprehension has been tested by Roehm and Sternthal (2001). They demonstrate that under conditions of sufficient base knowledge and processing resources, ads containing analogies were better comprehended and more persuasive than ads containing literal similarity comparisons. The authors also showed that ads containing analogies, as opposed to ads containing literal similarities, lead to more intensive mapping of relations relative to surface properties. It is not exactly clear how these results should be interpreted, though, since it is not certain whether the 'analogies' that Roehm and Sternthal used in their study qualify as analogies (disparate domains) or literal similarities (closely-related domains). To illustrate, in the first experiment the target and base for the analogy condition were a new nutritional management software package and an existing financial management software package, and for the literal similarity condition they were a new financial management software package and an existing financial manage-

ment software package. In the second experiment, the target was a PDA, and the bases were a mobile telephone (analogy) versus a laptop computer (literal similarity).

It is not our purpose to criticize the Roehm and Sternthal study; rather we merely wish to illustrate how delicate and multi-interpretable the distinction between analogies and literal similarities is. In our study we attempted to play it safe by selecting clearly disparate bases for our targets in the analogy condition and testing them subsequently. This resulted in the bases for both comparison types that were described earlier. The results of our experiment showed that the use of the fingerprint analogy in the ad for the Smart Pen lead to a significantly higher level of benefit comprehension than the use of the ballpoint literal similarity comparison. This effect was not found for the Auto Mower. Benefit comprehension was equally high for the analogy and literal similarity condition. We can only speculate as to why a positive effect of analogy on benefit comprehension was found for the Smart Pen and not for the Auto Mower. Potential explanations that the Smart Pen was more novel or more complex than the Auto Mower should be rejected on the basis of the pre-tests that showed no significant differences regarding these two aspects. A more likely explanation could be that benefit comprehension was higher *a priori* for the Auto Mower than for the Smart Pen. The use of an analogy did not further increase the benefit comprehension for the Auto Mower, because benefit comprehension was already high. The mean benefit comprehension score of 5.6 on a seven-point scale for the Auto Mower seems to support this explanation. In hindsight, it would have been better if we had collected pre- and post-exposure measures of benefit comprehension. This is certainly an option that should be explored for future research, but many practical problems spring to mind, the most obvious of which is how one should measure comprehension of the benefits of a new product that somebody has never seen before without showing the person (an ad of) the product. Offering information about the new product in advance that will enable participants to rate their level of comprehension will at the same time affect the consumer learning process that is the object of investigation.

The use of analogies in the ads for the Smart Pen and Auto Mower did not increase consumer preference to a greater degree than did the use of literal similarities. We did, however, find a positive effect of benefit comprehension on product preference, which suggests that a positive relation between the two exists. Earlier, we argued that comprehension of a new product's benefits does not automatically lead to a higher appreciation of the new product. Clearly, consumers must appreciate the benefits in order to appreciate the product. From a marketing perspective, thus, an analogy should not solely *explain* the key benefits to consumers, but it should dramatize or *sell* the benefit(s) to them as well. Our results show that the analogies used in this study were not successful in this respect. Future research will need to focus on generating analogies that on the one hand explain the key benefits of a really new product to consumers and on the other hand create a positive exaggerated impression of these key benefits. The RAM-Conveyor theory (Rossiter and Percy, 1997) offers a methodology that may help marketers to do exactly this: to select appropriate conveyors (i.e., analogies) that explain the advertised new product's benefits while simultaneously amplifying them in order to install a positive impression of the product in consumers' minds.

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APPENDIX
Stimulus Material¹

IMPLICIT ANALOGY AD VERSION

LITERAL SIMILARITY AD VERSION

VERSION

Smartpen
Smartpen

The Smart Pen works like a fingerprint. The Smart Pen identifies the user when putting a signature on regular paper. Built-in sensors register the dynamics of the act of writing, such as the speed and acceleration of a signature, the pressure used when writing, and the angle at which the Smart Pen is held. Based on the dynamics of the act of writing a profile of the user is set up and stored in a chip. During the writing process encryption technology measures, codes, and verifies the signature of the user with the stored writing characteristics. In consequence, the Smart Pen is able to authenticate the user irrefutably.



The Smart Pen like a fingerprint !



NEW!

- Color: red, blue, green, and transparent
- Materials: plastic or stainless steel
- Power supply: cable or batteries

Smartpen
Smartpen

The Smart Pen works like a ballpoint. The Smart Pen identifies the user when putting a signature on regular paper. Built-in sensors register the dynamics of the act of writing, such as the speed and acceleration of a signature, the pressure used when writing, and the angle at which the Smart Pen is held. Based on the dynamics of the act of writing a profile of the user is set up and stored in a chip. During the writing process encryption technology measures, codes, and verifies the signature of the user with the stored writing characteristics. In consequence, the Smart Pen is able to authenticate the user irrefutably.



The Smart Pen like a ballpoint !



NEW!

- Color: red, blue, green, and transparent
- Materials: plastic or stainless steel
- Power supply: cable or batteries

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The Effects of Information Processing Modes on Consumers' Reactions to Comparative Advertising

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EXTENDED ABSTRACT

Although academic research in consumer behavior has devoted considerable attention to the effects of comparative advertising, research findings are equivocal. Some studies have shown that the presence of brand comparisons may enhance the positioning of the advertised brand (e.g., Dröge and Darmon 1987, Gotlieb and Sarel 1991). However, other studies have shown that comparative advertising does not result in significantly more positive evaluations (e.g., Goodwin and Etgar 1980) and can lead to more negative evaluations of the ad (e.g., Belch 1981). What can explain the existence of both positive and negative effects of comparative advertising?

We propose that consumers' mode of information processing moderates their reactions to comparative advertising and their subsequent ad and brand evaluations. Two modes of information processing are often contrasted: analytical processing and imagery processing (MacInnis and Price 1987). Analytical and imagery information processing result in different brand evaluation strategies. The analytical mode, a data-driven, attribute-based strategy, results in piecemeal attribute comparisons across brands, which are consistent with the presentation of data in comparative advertising. In contrast, the imagery mode of information processing, based on sensory representations of ideas and feelings, results in a within-brand evaluation strategy, which is consistent with the presentation of data in noncomparative ads. We propose that the consistency between analytical processing and comparative ads and the consistency between the imagery processing and noncomparative ads will lead to higher brand and ad evaluations than other combinations.

To test these predictions, we manipulated consumers' information processing mode both directly and indirectly. In our first study, we directly manipulated information processing mode by varying the instructions given to subjects about how to process the ad information. In our second study, we manipulated information processing mode indirectly by varying the product positioning in the ad to evoke different modes of information processing. In both studies, participants evaluated either a comparative advertisement or a noncomparative advertisement.

In study 1, eighty-three undergraduate students were randomly assigned to one of the four conditions of a 2 (analytical/imagery instructions) x 2 (noncomparative/comparative ad) between subjects experimental design. The product category (cars) and attributes depicted in the ads were the same across all conditions. The first factor manipulated the information processing instructions provided to subjects. The second factor manipulated the presence of comparative information in the ad. The information processing instructions clearly changed subjects' reactions to the presence/absence of comparative information in the ads. When subjects received imagery instructions, the noncomparative ad generated a more positive attitude towards the ad, a more positive attitude towards the advertised brand, and marginally greater purchase intentions, relative to the comparative ad. Conversely, when subjects received analytical instructions, the comparative ad, relative to the noncomparative ad, led to a marginally more positive attitude towards the ad, a more positive attitude towards the advertised brand, and greater purchase intentions.

In study 2, eighty-seven undergraduate students were randomly assigned to one of the four conditions of a 2 x 2 between

subjects design. We manipulated the positioning of the product being advertised (utilitarian vs. hedonic) and the type of ad (noncomparative vs. comparative). The product category (cars) was kept constant across conditions. Evaluations of hedonic products are expected to rely more on affect, while evaluations of utilitarian products are expected to be more objective, based on their functional capabilities (Pham 1998). Thus, ads positioning the product as hedonic should lead to more imagery information processing and more favorable evaluations of noncomparative ads relative to comparative ads. Ads positioning the same product as utilitarian should evoke more analytical information processing and more favorable evaluations of comparative ads relative to noncomparative ads.

As predicted, ads with a hedonic product positioning induced significantly more imagery processing than analytical processing and ads with a utilitarian product positioning induced significantly more analytical processing than imagery processing. Moreover, we found that consumers' reactions to comparative advertisements for products with a utilitarian or hedonic positioning are asymmetric. When the product positioning was utilitarian, comparative ads evoked more positive attitudes toward the brand and greater purchase intentions than noncomparative ads. In contrast, when the product positioning was hedonic, noncomparative ads generated more positive attitudes toward the ad and brand, and greater purchase intentions than comparative ads.

Taken together, our studies show that consumers' mode of information processing can explain both positive and negative effects of comparative advertising. When the imagery mode of processing predominates, comparative ads are more effective than noncomparative ads. However, when the analytical mode of processing predominates, comparative ads are less effective than noncomparative ads.

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Suspense as an Experience of Mixed Emotions: Feelings of Hope and Fear While Watching Suspenseful Commercials

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ABSTRACT

Advertisers frequently use creative appeals in television commercials to elicit consumer attention. One such appeal that is designed to enhance consumer interest is suspense. We report the results of two experiments studying the constituent emotions comprising the experience of suspense. Consistent with appraisal theory, Study 1 provides evidence that hope and fear do indeed underpin the suspense experience. Study 2 also examines the independent contribution of hope and fear to suspense. However, instead of assessing each emotion retrospectively, we investigate in-situ suspense by measuring respondents' moment-to-moment hope and fear reactions. Significant within-subject differences between suspenseful and nonsuspenseful commercials are reported for a variety of aggregate time-series measures.

INTRODUCTION

Advertisers use a variety of creative appeals to elicit consumer attention. A particularly useful appeal to arouse curiosity and maintain consumer interest is the use of suspense. Television commercials are often designed as mini-dramas with a linear plot marked by a beginning, middle and end. These dramas are typically characterized by a tightly woven plot that emphasizes the causal relationship between events occurring over a temporal frame (Stern 1994). A core element of these dramas is suspense.

The events depicted in a suspenseful drama are appraised by the viewer, reader or listener as having either desirable or undesirable consequences for the central character (i.e., protagonist). Carroll (1984, 1990) argued that suspense in drama may be viewed as the experience of apprehension about the resolution of conflicts and crises. The experience of apprehension is based on (a) fear that a desirable outcome may not occur, (b) fear that an undesirable outcome may occur, (c) hope that a desirable outcome will occur, (d) hope that an undesirable outcome will not occur, and (e) any possible combination of these hopes and fears. According to Zillmann (1996), "hopes and fears are inseparably intertwined in the apprehensions that produce suspense" (p. 202). It is therefore not surprising that appraisal theorists Ortony, Clore and Collins (1988) view suspense as "involving a Hope emotion and a Fear emotion coupled with the cognitive state of uncertainty" (capitalized in the original, p. 130; see also Kubovy 1999; Roseman, Antoniou, and Jose 1996).

Yet, in spite of the prevalence of hope and fear in emotion theories of suspense, no empirical work has been reported examining whether both are in fact present in the experience of suspense. Only one published study was found investigating the interplay of viewers' hope and fear emotions while watching television commercials (Alwitt 2002). However, this study never explicitly tested whether or not hope and fear actually constitute the suspense experience. The current research reports the results of two studies examining the co-occurrence of hope and fear emotions during suspenseful drama. More specifically, the nature of suspense is investigated by exploring the individual contributions made by each emotion during suspenseful and nonsuspenseful television commercials.

BACKGROUND

Appraisal theory suggests that the central determinants of emotions are the evaluation and interpretation of events along certain criteria. In the case of suspense, the intensity of hope and fear depend on the desirability of a particular outcome and the likelihood of its occurrence. Both have been described as prospect (Ortony et al. 1988) or anticipatory (Lazarus 1991) emotions because they depend on appraisals of future events. Hope is an emotion focused on the possibility that a dreaded outcome will not occur or the possibility that a desirable outcome will occur. It arises when people fear the worst but yearn for the best (Lazarus 1991). It is an interesting emotion in that it may be viewed either positively or negatively. Whereas one person might be hopeful of not losing something, another can feel hope as the possibility of gaining something. Fear, on the other hand, arises when the possibility of a desirable outcome is threatened or the possibility of an undesirable outcome becomes likely.

The presence of a hope emotion and a fear emotion under conditions of uncertainty suggests that suspense depends on two conflicting, yet complementary, emotions. As such, suspense is felt as a mixture of emotions. Such states have been described in terms of emotional ambivalence. Emotional ambivalence refers to the sequential or simultaneous experience of multiple emotions resulting from the appraisal of events occurring from one moment to the next (Ortony et al. 1988; Otnes, Lowrey and Shrum 1997).

To investigate whether individuals experience both hope and fear in response to suspenseful drama we used commercials previously determined to be either suspenseful or nonsuspenseful. In the first study we use strictly unipolar measures of emotion to examine the co-occurrence of hope and fear. We compare whether respondents are more likely to experience mixed emotions during exposure to suspenseful advertising compared to nonsuspenseful advertising. In the second study we examined in-situ hope and fear emotions while the suspenseful drama is actually being consumed.

STUDY 1

We first examine respondents' summary judgments of suspenseful drama, specifically their attitude toward the ad and enjoyment of the ad. Regarding the former, Alwitt (2002) reported that viewers' attitude toward the ad were more favorable for suspenseful commercials than nonsuspenseful commercials. We expect to find a similar effect here. In addition, we consider enjoyment of the ad. Research has shown that suspenseful drama, as opposed to nonsuspenseful drama, elicits greater levels of enjoyment (Bryant, Rockwell, and Owens 1994; Gan et al. 1997).

- H1: A more favorable attitude toward the ad will exist for suspenseful commercials than nonsuspenseful commercials.
- H2: Greater ad enjoyment will be reported for suspenseful commercials than nonsuspenseful commercials.

The next set of hypotheses explicitly considers the co-occurrence of hope and fear emotions in the experience of suspense.

Based on appraisal theory, we posit that both are in fact present and their joint effect can be differentiated on the basis of suspense level. More specifically, we examine both the frequency of their occurrence and measure their similarity and intensity. We view the co-occurrence of hope and fear under conditions of high suspense in terms of emotional ambivalence and hypothesize that suspense-level differences will be observed in a measure of ambivalence.

H3: Suspenseful commercials will elicit a greater frequency of hope and fear emotions compared to nonsuspenseful commercials.

H4: Emotional ambivalence will be greater for suspenseful commercials than for nonsuspenseful commercials.

METHOD

Sample and procedures. Study 1 was conducted in a computer laboratory setting. Participants were 36 undergraduates who received course credit for their participation. Students participated in groups of 6 to 14; however, they did not interact during the experiment. Stimuli were presented via a video projector and data were collected using Websurveyor data collector software. Upon entering the lab, participants were positioned at individual computer stations and given instructions regarding the format and features of the study. They were then directed to read a consent-to-participate form and written instructions which were presented via an Internet web site on the computer screen. Four television commercials were selected based on prior evaluations to accurately represent suspenseful and nonsuspenseful ads. Respondents were shown the four television commercials with viewing order counter-balanced across groups. Respondents were asked to complete a short web-based survey (see items below) after each commercial.

Measures. For each television commercial, the web-based survey instrument collected data on respondents' attitude toward the ad (very bad/very good; very unfavorable/very favorable; very negative/very positive) and enjoyment of the ad (not at all entertaining/very entertaining; not at all enjoyable/very enjoyable; not at all fun to watch/very fun to watch). For each of the three-item scales, data were collected along seven-point semantic differential scales. Cronbach alphas for the Aad and Entertainment scales across the four ads ranged from .86 to .95 with a mean of .90. Respondents were also asked to indicate their post hoc emotional response toward the character in the ad. Based on previous research by Larsen, McGraw, and Cacioppo (2001), the questions were phrased, "Do you feel hope for the character(s)? If YES, how hopeful did you feel?" Responses were measured on a 5-point scale ranging from 1–5 with the following labels: *slightly*(1), *moderately*(3), and *extremely*(5). The initial dichotomous (i.e., yes/no) question was intended to discourage participants from treating the unipolar measures as a bipolar measure. Respondents who reported not feeling an emotion were assigned a 0. A seven-point scale was also included at the end of the questionnaire as a manipulation check. It asked respondents the extent to which they agreed that the appeal used in the ad they had just seen was of a certain type. They were asked to respond to seven different appeals, one of which was suspense.

Assessment of Emotional Ambivalence. In their examination of attitude ambivalence, Thompson, Zanna and Griffin (1995) contend that two necessary and sufficient conditions exist in order to assess ambivalence. The first is that the two constituent components must be of a similar magnitude. Second, each component must be of at least a moderate intensity. Given a similar magnitude, ambivalence increases with intensity. They discuss four separate formulae for measuring ambivalence. They concluded that the preferred approach was one used by Griffin (see Thompson et al.

1995) because it accounts for both the similarity and intensity of the two contributing attitudes. It can be calculated by first subtracting the absolute difference of the positive and negative components from four (a constant required to allow the "1, 1" case to have an ambivalence score of 1) and then adding that to the average of the positive and negative components. The Griffin formula was used in the current study to assess levels of emotional ambivalence using the individual emotions of hope and fear.

RESULTS

Manipulation Check. A repeated-measures ANOVA with respondents' evaluations of each ad's level of suspense as the dependent variable yielded a significant effect, $F(3,33)=46.60$, $p<.001$. Simple contrasts indicated no significant differences between the two low suspense ads ($F(1,35)=1.63$, $p>.20$) or the two high suspense ads ($F(1,35)=0.05$, $p>.81$). Therefore, the data for the two low suspense ads were collapsed and are subsequently referred to as nonsuspenseful commercials and the data for the high suspense ads were collapsed and are referred to as suspenseful commercials.

Tests of H1 and H2: Ad type had a significant effect on ad enjoyment ($F(3, 33)=68.10$, $p<.01$) and attitude toward the ad ($F(3, 33)=16.38$, $p<.01$). Suspenseful ads were found to be significantly more entertaining ($M=5.89$) than nonsuspenseful ads ($M=3.01$; $t(35)=13.67$, $p<.01$). Furthermore, suspenseful ads ($M=5.53$) also resulted in a significantly more favorable attitude toward the ad than nonsuspenseful ads ($M=4.02$), paired $t(35)=6.72$, $p<.01$).

Test of H3: It was expected that suspenseful ads would elicit a greater frequency of hope and fear emotions compared to nonsuspenseful ads. This hypothesis was supported. The frequency of respondents endorsing both hope and fear for the suspenseful and nonsuspenseful ads is shown in Figures 1 & 2. Bars along the back walls of the graph indicate respondents who felt only hope, only fear, or neither emotion; bars in the middle area of the graph indicate respondents who felt both hope and fear. Further analysis indicates that 55% of respondents felt both hope and fear for the characters in the suspenseful condition, whereas there were no respondents who indicated the presence of both emotions in the nonsuspenseful condition, $\chi^2(3, N=36)=78.52$, $p<.01$.

Test of H4: As predicted, emotional ambivalence was greater for suspenseful commercials than for nonsuspenseful commercials. A significant effect of ad type was found for the Griffin ambivalence measure, $F(3, 33)=6.30$, $p<.01$. A comparison of the means for the suspenseful commercials ($M=4.48$) and nonsuspenseful commercials ($M=3.47$) also yielded a significant difference, paired $t(35)=3.63$, $p<.01$).

STUDY 1 DISCUSSION

The results of Study 1 indicate that people have more favorable attitudes toward suspenseful commercials and enjoy them more than nonsuspenseful commercials. More importantly, though, the results provide evidence that suspense exists as a mixed emotion state. Hope and fear are not mutually exclusive in the experience of suspense but, instead, are intertwined. Each emotion makes an individual contribution to the experience and as the similarity and intensity of each increases, so too does suspense.

STUDY 2

Study 1 revealed that the experience of suspense is indeed felt as a mixture of hope and fear emotions. However, a shortcoming of the first study is that respondents were asked to make post hoc summary assessments of the felt emotions. Most experiences unfold over a time duration that may range from seconds to hours. As such, experiences may be thought of as a series of outcomes

FIGURE 1
High Suspense (Hope & Fear)

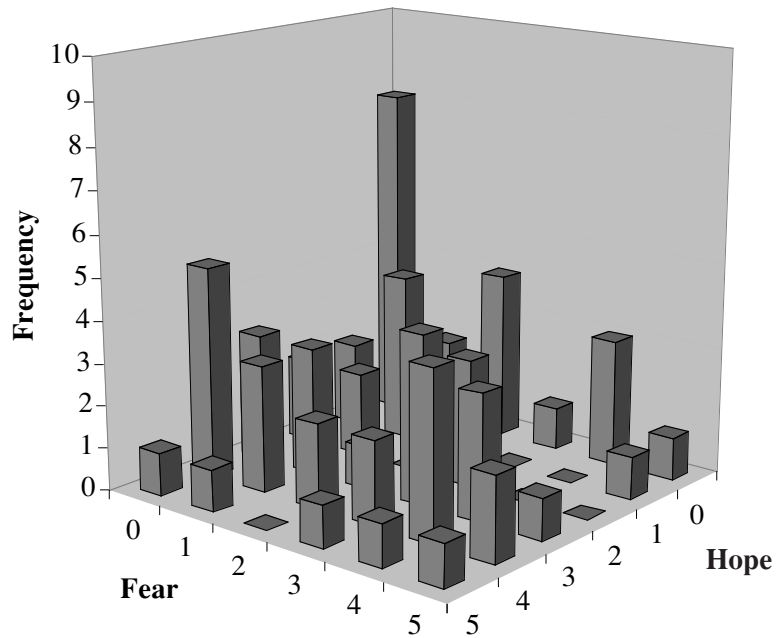
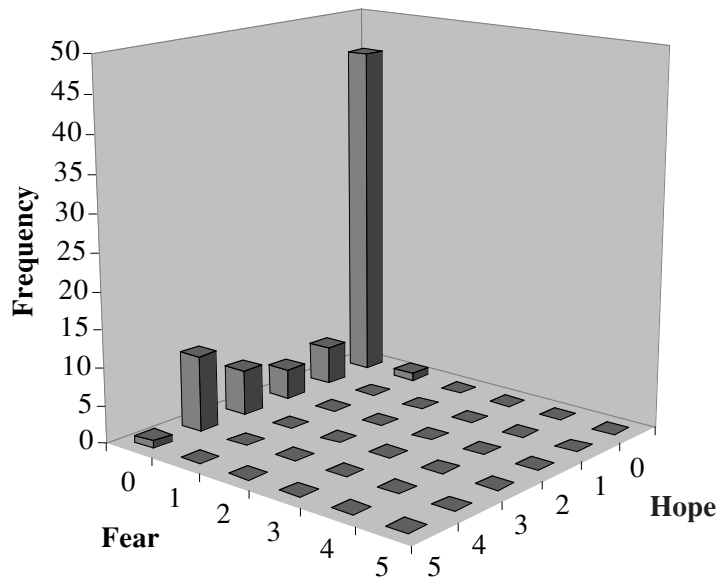


FIGURE 2
Low Suspense (Hope & Fear)



spaced over time or a temporal sequence (Loewenstein and Prelec 1993) in which a person's feelings from one moment to the next are likely to vary in intensity and even in sign. In the case of suspenseful drama, appraisals regarding the probability of alternative outcomes actually occurring change continuously across the temporal sequence and are the basis for fear and hope emotions. Consequently, suspense is felt in the moments leading to the resolution of the drama. Once the outcome becomes known, suspense gives rise to

other emotions (e.g., relief, disappointment) and summary evaluations of the experience. Accordingly, the second study uses a separate sample to examine the in-situ hope and fear emotions while the suspenseful drama is actually being consumed.

Unlike previous research which investigated suspense as the interplay between hope and fear on a single scale (Alwitt 2002), we consider the independent experience of each of these emotions during consumption using a within-subjects design. For each emo-

tion, we examine suspense-level differences in the affect trace across the temporal sequence. Moment-to-moment scores between and across consecutively ordered data points may be aggregated in a variety of ways so as to reflect the volatility present in the data. One way of aggregating the data is to consider the sum of felt emotion. The total intensity of fear and hope emotions across time ought to be greater while watching a highly suspenseful ad than for a nonsuspenseful ad where hope and fear are felt less intensely. The volatility observed in the pattern of observed moment-to-moment fear-hope reactions has also been captured in terms of standard deviation around the mean. Alwitt (2002) found a greater standard deviation of a continuous measure of fear-hope for suspenseful commercial than a nonsuspenseful commercial. We expect the same sort of pattern for both hope and fear when each is measured individually.

- H5: The overall mean level of (a) hope and (b) fear will be greater for suspenseful commercials than for nonsuspenseful commercials.
- H6: The standard deviation for (a) hope and (b) fear will be greater for suspenseful commercials than for nonsuspenseful commercials.

In addition to differences associated with aggregated data, certain key moments of a temporal sequence have also been found to differentiate judgments of experiences. One such moment in the sequence is the peak emotional experience. Research has consistently shown that the peak or highest intensity level influences evaluations of an experience (Fredrickson and Kahneman 1993; Varey and Kahneman 1992). In the context of television commercials, Baumgartner, Sujan and Padgett (1997) reported that the peak positive emotion rating over the course of a temporal sequence predicted ad liking. Thus, it appears that the peak emotional experience in a sequence has the ability to differentiate between different types of judgments about an overall experience. Accordingly, given the likelihood that both emotions will be present at higher levels of intensity during suspenseful rather than nonsuspenseful commercials, we predict the following:

- H7: The peak level of (a) hope and (b) fear will be greater for suspenseful commercials than for nonsuspenseful commercials.

Another way to examine the temporal series is to consider the total number of runs or directional changes recorded over the course of a consecutive sequence. For example, Alwitt (2002) used a single 10-point moment-to-moment continuum ranging from fear to hope and reported that suspenseful television commercials generated more directional changes from fear to hope (and vice versa) than nonsuspenseful commercials. Volatility observed in the pattern of observed moment-to-moment fear-hope reactions has also been captured in terms of overall range and standard deviation. Alwitt (2002) found that, compared to nonsuspenseful ads, participants watching suspenseful ads recorded a greater range between maximum and minimum scores, and also a larger standard deviation. Thus, we suggest the following hypotheses:

- H8: The total number of runs for (a) hope and (b) fear will be greater for suspenseful commercials than for nonsuspenseful commercials.

It should be noted that we offer no specific hypotheses concerning relationships between the time parameter measures selected for this study and summary evaluations of the experience.

Alwitt (2002) found that attitude toward the ad was positively related to total number of runs, and that perceived suspense was related to the standard deviation of hope-fear intensity, total number of runs, and the range between the high and low moment values of a sequence. She noted that it is not the presence or intensity of either hope or fear that account for these findings but, rather, the contrast between these emotions over time. Given that we consider just the independent effects of each emotion and not their interplay, we do not formally test their relationship to summary outcome measures. However, we do consider the juxtaposition of momentary hope and fear reactions over the course of consumption. We do this by comparing the mean value of absolute differences in respondents' moment-to-moment ratings of hope and fear. We expect the difference between the two affect traces to be greater under conditions of high suspense. The reason for this is that if the two emotions do in fact contribute to feelings of suspense, then hope should increase as fear decreases (and vice versa) under conditions of greater suspense. Thus, the following hypothesis:

- H9: Differences in moment-to-moment hope-fear reactions will be greater for suspenseful commercials than nonsuspenseful commercials.

METHOD

Sample and procedures. As in the first study, data were collected in a laboratory setting. Forty six undergraduates participated in exchange for course credit. Group sizes for the data collections varied from 10 to 14. After reading a consent form on a dedicated web site, respondents were shown the same four television commercials used in the first study. As before, commercial order was counterbalanced and respondents were asked to complete a short survey after each commercial. Upon completion of the fourth commercial and survey, respondents participated in an unrelated study that took approximately 30 minutes to complete. After completing this task, they were again shown the same four commercials.

For every ad in each of the two sets, respondents' moment-to-moment emotion reactions were collected every two seconds using Perception Analyzer® dial-turning instruments. Approximately half the respondents were instructed to provide moment-to-moment reactions in reference to felt hope for the protagonist's situation while watching the first set of commercials and to then report their moment-to-moment fear reactions during the second set of four commercials. This order was reversed for the other half of the sample. In all cases, respondents were told to turn the dial to the right from 0 to 100 according to the intensity with which they felt the specified emotion. They were also told to turn the dial in the opposite direction (i.e., to the left) when the intensity of the specified emotion dissipated. They were told to ignore all other emotions and to focus on just the assigned hope or fear emotion. All dials were returned to 0 at the beginning of each ad. No differences were found in mean emotion score according to dial-turning direction, $t(44)=.47, p>.40$.

Measures. The same seven-point semantic differential scales used in the first study to assess Aad and Entertainment were used in Study 2. All questionnaire items were administered via the web. Cronbach alphas for the Aad and Entertainment scales across the four ads ranged from .87 to .97 with a mean of .93. Likewise, the same single-item suspense measure used in Study 1 was included as a manipulation check.

In addition to the web-based surveys, a series of summary measures were constructed based on the affect trace of the moment-to-moment hope and fear reactions to each ad. Using a dial-turning instrument with a 0 to 100-point scale, data were collected twice for

each ad. On one occasion respondents' were asked to provide their moment-to-moment hope reactions and on the other they reported their fear reactions. The first aggregated time series measure was respondents' mean level of hope and fear. For each emotion, the measure was calculated by summing all the moment-to-moment data points across the commercial and then dividing the sum by the total number of two-second increments in the sequence. This was done because the length of each of the four commercials varied. Next, we considered the standard deviation surrounding hope and fear, as well as the peak scores for each of these emotions. The fourth set of measures was the mean number of runs or directional changes recorded by a respondent over the course of the commercial for hope and fear (Alwitt 2002; Pham, Cohen, Pracejus and Hughes 2001). A run is defined here as a dial change in either direction (i.e., from increasing to decreasing or vice versa) of one or more units in magnitude from one data point to the next. Thus, a data series of 8, 10, 9 and 15 would reflect two change-of-direction runs (10 to 9 and 9 to 15). The final measure was the mean of absolute differences between the moment-to-moment hope and fear traces. This was calculated by summing the absolute differences and dividing it by the number of time increments in the commercial.

RESULTS

Manipulation check. As in Study 1, a repeated-measures ANOVA was used to determine whether the commercials varied on the basis of suspense. The analysis yielded a significant difference, $F(3,43)=88.02$, $p<.001$. No difference was found between the two low suspense ads, $F(1,45)=2.02$, $p>.16$. A difference was found between the two high suspense ads, $F(1,45)=5.63$, $p<.03$. However, a suspense difference at the .001 level was found between the more highly rated low suspense commercial and the lower rated high suspense commercial, $F(1,45)=171.41$. Thus, data for the two low-suspense ads were collapsed and are subsequently referred to as nonsuspenseful commercials. Likewise, data for the high-suspense ads were collapsed and are referred to as suspenseful commercials.

We begin by replicating the results found earlier for H1 and H2. Consistent with Study 1, respondents had a more favorable attitude toward the ad ($M=5.16$) and derived greater enjoyment from watching suspenseful commercials ($M=5.49$) than nonsuspenseful commercials ($M's=3.94, 2.90$, respectively; paired $t's=5.41, 11.46$, $p's<.001$; $df=45$).

Tests of H5 to H7: A graphical summary of the data analyzed in these tests is shown in Figure 3. The results of paired t-tests indicated support for each of the hypotheses. The overall mean level of moment-to-moment hope and fear emotions was greater for the suspenseful ads ($M's=21.35, 35$, respectively) than the nonsuspenseful ads ($M's=9.22, 21.79$; paired $t's=4.17, 3.32$; $p's<.001, .002$; $df=45$). Interestingly, the predominant emotion reported was fear. Similarly, a wider standard deviation was found for hope and fear during suspenseful commercials ($M's=18.08, 28.24$, respectively) than nonsuspenseful commercials ($M's=9.39, 17.97$; paired $t's=4.75, 4.86$; $p's<.001$; $df=45$). This suggests that there was greater variance around the mean during suspenseful commercials which indicates that respondents were constantly adjusting their appraisals of the situation, thus influencing their emotional response. The results also indicate that the peak level of hope and fear during suspenseful commercials ($M's=51.48, 79.94$) was greater than the peak for nonsuspenseful ads ($M's=22.76, 44.15$; paired $t's=6.03, 7.35$; $p's<.001$, $df=35$). Again, the reader's attention is directed to the dominance of fear as the peak emotion during the consumption of suspenseful drama.

Test of H8: The eighth hypothesis predicted that the total number of runs would be greater during suspenseful commercials than nonsuspenseful commercials. Consistent with the graph shown in Figure 4, significant effects were found for hope and fear (paired $t's=5.19, 3.00$, $p's<.001, .01$; $df's=45$). The mean number of runs for hope and fear was greater during suspenseful commercials ($M's=.078, .096$) than nonsuspenseful commercials ($M's=.024, .055$). These results suggest that respondents constantly adjust their hope and fear reactions during suspenseful drama.

Test of H9: The final hypothesis posited that the mean value of absolute differences between moment-to-moment hope and fear over the course of the commercial would be greater under conditions of suspense. Again, the results support this contention. The mean absolute difference between hope and fear was greater while watching suspenseful commercials than nonsuspenseful commercials ($M's=61.53, 46.20$; paired $t=3.86$; $p<.001$; $df=45$). The finding suggests that appraisals of the action elicited greater fluctuations between hope and fear during conditions of high suspense.

GLOBAL DISCUSSION

The current research examines the nature of suspense using the context of television commercials. The results of two studies are reported detailing the differential effects attributable to suspense, as well as the constituent emotions comprising the suspense experience. Both studies found strong support for the advantages of using suspense as an advertising tactic. Specifically, viewers had more favorable attitudes and more enjoyable evaluations of suspenseful commercials than nonsuspenseful commercials.

An even more important contribution of this paper was our investigation of the emotions constituting the suspense experience. Our findings indicate that hope and fear do indeed contribute to the experience of suspense. In Study 1, we reported that the frequency with which study participants reported each was significantly greater under conditions of high suspense. In addition, the measure of emotional ambivalence used here indicated that the similarity and magnitude of each emotion was significantly greater under conditions of suspense than nonsuspense. In Study 2, we examined respondents' moment-to-moment hope and fear emotions over the course of the television commercials. In addition to overall mean and peak differences, the results indicated that respondents' momentary hope and fear responses fluctuated more frequently over the course of suspenseful commercials than nonsuspenseful commercials. Fluctuations of this sort characterize respondents' constant shift of appraisals regarding the possibility of desirable and undesirable outcomes.

In closing, our research represents an important first step in developing a better understanding of the constituent elements underlying an emotional experience. We focused on the roles of hope and fear in the experience of suspense. Our paper clearly demonstrates that suspense represents a mixed emotional state. Future research would do well to investigate the specific antecedents and consequences of both emotions as they relate to suspense using a temporal framework.

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FIGURE 3

Low vs. High Suspense: Differences in Aggregate Moment-to-Moment Hope and Fear Emotions

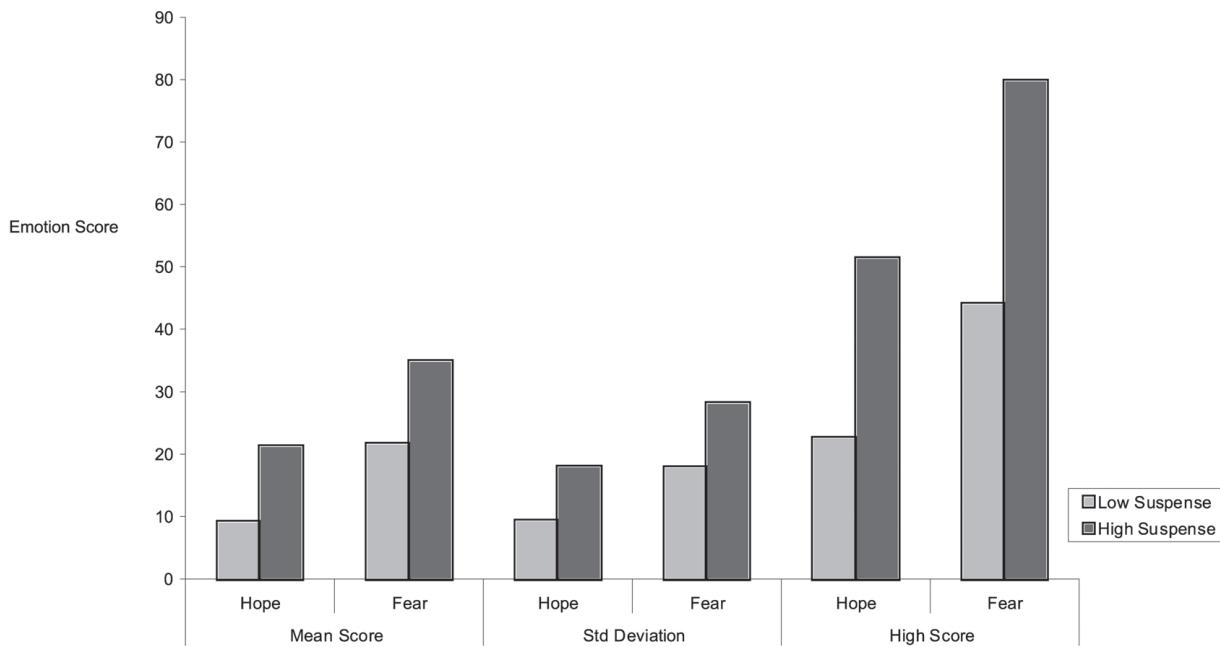
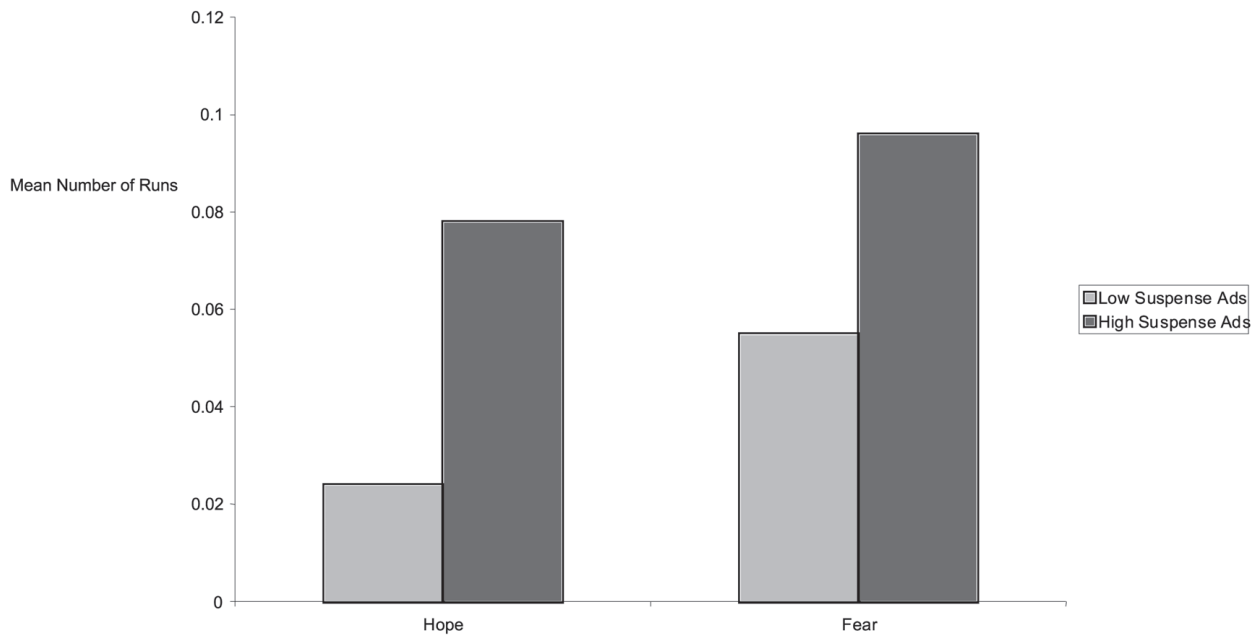


FIGURE 4

High vs. Low Suspense Commercials: Mean Number of Runs for Hope and Fear



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Forget the “Real” Thing—Take the Copy! An Explanatory Model for the Volitional Purchase of Counterfeit Products

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ABSTRACT

As the supply with fake products has been growing dramatically across the globe, manufacturers of the original products and governments find themselves in a constant battle against counterfeiters. While the supply side has attracted considerable attention of researchers, the knowledge on what drives customers to buy the fake rather than the original remains still far from consolidated. Based on a sample of 1040 respondents, this study uses the Theory of Planned Behavior to systematize past findings in the field and comes up with a model explaining key drivers of the demand for counterfeits.

INTRODUCTION

Counterfeiting, the production and sale of fake products, which seem identical to the original product, has been spreading across the globe at an alarming rate. Preferred targets of counterfeiters are products which carry a high brand image and require a relatively simple production technology, such as wearing apparel, consumer electronics, media, cigarettes, watches and toys (International AntiCounterfeiting Coalition, 2002). Manufacturers of the original products are well aware of these developments and leave no opportunity untapped to limit damages to their company’s brand reputation and profits (e.g., Green & Smith, 2002; Kay, 1990; Nash, 1989; Wee, Tan, & Cheok, 1995).

The academic literature displays a strong focus on the supply side, while the demand side—why consumers buy fake products—was neglected badly. Even if companies and governments manage to restrict the supply of fake products, counterfeiters have consistently demonstrated their abilities to find new ways to serve customers, as long as the demand is still thriving (Albers-Miller, 1999; Ang, Cheng, Lim, & Tambyah, 2001). It appears necessary, therefore, to focus more attention on the demand side in order to gain a better understanding of what drives customers to voluntarily buy counterfeits.

Within this paper, we attempt to take a fresh look at the demand side of counterfeiting. Specifically, we aim to consolidate existing findings and to develop a comprehensive, yet parsimonious model of the antecedents and drivers of volitional purchase of fake products. Using the theory of planned behavior as theoretical framework, we develop a conceptual model that explains the purchase intention for counterfeits and use a sample of 1040 Austrian consumers to test its explanatory power.

THEORETICAL BACKGROUND

Counterfeiting appears in two different forms, as deceptive and non-deceptive counterfeiting. Under deceptive counterfeiting, the consumer is not aware of the fact that he/she purchases a copy rather than the original product and cannot be held accountable for the behavior. We focus on non-deceptive counterfeiting, where consumers intentionally purchase fake products (Grossman & Shapiro, 1988; Phau & Prendergast, 1998). When looking at theoretical underpinnings to explain the demand for fake products, three streams of literature appear helpful in structuring and explaining this research question. First, counterfeits would not exist if it were not for brands and what they promise (Bloch, Bush, & Campbell, 1993; Cordell, Wongtada, & Kieschnick, 1996). Undoubtedly, the literature on brands and why people buy branded products provides insight in what makes counterfeits attractive.

Consumers are buying branded products basically for two reasons: physical product attributes and the - intangible - brand image associated with the product. They communicate meaning about their self-image and enhance their self-concept (e.g., Dornoff & Tatham, 1972; Onkvist & Shaw, 1987). This is especially true for luxury goods, which are bought much more for what they mean than for what they are (Dubois & Paternault, 1995; Nia & Zaichkowsky, 2000). While the fake product might not fully comply with all the physical attributes the original product offers, the image dimension of the original branded product is preserved. The price differential, however, is much to the advantage of the counterfeit product. The bottom line is that buying fake products means getting the prestige of branded products without paying for it (Cordell et al., 1996; Grossman & Shapiro, 1988).

Second, prevailing literature suggests that the intentional purchase of counterfeits is considered consumer misbehavior, “which violates the generally accepted norms of conduct in exchange and is therefore held in disrepute by marketers and by most consumers.” (Dodge, Edwards, & Fullerton, 1996; Fullerton & Punj, 1993, p. 570; 1997; Solomon, 1992; Vitell & Muncy, 1992). Often, misbehavior is provoked by certain characteristics or situational factors such as price, penalty and situation-specific elements (Dodge et al., 1996). This holds particularly true for counterfeits which sell at much lower prices than the original (Bloch et al., 1993). What may prevent consumers from engaging in this misbehavior is the fear of punishment. However big the temptation to misbehave, the decision to exhibit deviant behavior is strongly intertwined with the consumer’s ability to rationalize his/her behavior (Strutton, Vitell, & Pelton, 1994). Consumers frequently ease their conscience by concluding that their behavior is not “really” illegal or immoral, and they tend to come up with pseudo-rational excuses, even deflect the blame on someone else (Gellerman, 1986). Past research has identified anti-big-business sentiments as important to excuse the consumers’ misbehavior. Supporting counterfeiters by buying their products is justified, as they calculate more reasonably with lower margins than the original manufacturer. Moreover, they are deemed to simply be more efficient in R&D and distributing their products than the “big guys” (Ang et al., 2001; Tom, Garibaldi, Zeng, & Pilcher, 1998; Wee et al., 1995).

Thirdly, given the fragmented knowledge base in the field, we use the Theory of Planned Behavior (TPB) (Ajzen, 1991) for guidance in systematizing existing findings and adding additional variables, such as psychographic and demographic determinants. In brief, TPB states that behavior is determined by the intention to engage in such behavior, which in turn, is determined by the attitude toward the behavior and the subjective norm as well as the perceived behavioral control (Ajzen, 1991). We are using attitudes towards behavior rather than attitude towards objects (e.g. attitude towards a counterfeit item), as the former are said to be better predictors of behavior (Fishbein, 1967; Fishbein & Ajzen, 1975). Moreover, TPB incorporates the amount of control one has over the own behavior and elucidates its influence on it. In the case of behaviors that are difficult to perform, TPB proved more applicable than the Theory of Reasoned Action (TRA). The purchase of counterfeits seems to be a difficult decision, as temptations to consume are strong given the often tremendous price advantages of fake compared to original products.

CONCEPTUAL FRAMEWORK AND HYPOTHESES

In the following, the theoretical constructs and hypothesized relationships between the measures of the TPB are outlined in more detail. Intention represents an individual's motivation to put effort into displaying certain behavior. Therefore, behavior is influenced by intentions (Eagly & Chaiken, 1993). Thus, we suggest the following hypothesis:

H1: The more positive the intentions towards purchasing fake products are, the more likely consumers will actually purchase them.

In line with the TPB, the intention to purchase counterfeits is influenced by three groups of variables—the attitudes towards counterfeiting, subjective norm and perceived behavioral control. Past research identified mainly two directions in which pseudo-rational excuses to justify non-normative consumer behavior are developed (Sykes & Matza, 1957): towards the supplier of counterfeits by defending them for the reasons outlined below and towards one's own actions, being smart by purchasing the “cheaper” copy.

Defending counterfeiters. Previous studies showed that consumers display feelings of sympathy for small rather than large businesses (Fullerton & Punj, 1993; Moore, 1984; Tom et al., 1998). They perceive counterfeiters as more efficient in terms of how they conduct business and more customer-oriented than the original manufacturers (Ang et al., 2001; Tom et al., 1998; Wee et al., 1995). Along these lines, original-product manufacturers are blamed for charging exorbitant prices, while counterfeiters offer (fake) products at lower prices due to the more reasonable margins (Ang et al., 2001; Cordell et al., 1996; Sandler, 1994). Dodge et al. (1996) pointed out that direct economic consequences on the marketer would lead to a stronger condemnation of aberrant behavior than more general ones (Fullerton, Taylor, & Gosh, 1997). A very serious consequence of counterfeiting singled out in the literature is the chilling effect on technology development and firms' R&D expenditure (Jacobs, Samli, & Jedlik, 2001; Nill & Shultz, 1996; Wilke & Zaichkowsky, 1999). Therefore, it is hypothesized that:

H2: The more consumers defend counterfeiters, e.g., because of their more efficient business practices etc., the stronger is their intention to purchase counterfeits.

Smart Shopper. Buyers justify their misbehavior with pseudo-rational excuses. Tom et al. (1998) suggested that the purchase of counterfeits may seem to be a smart solution for consumers, who might not be able to afford the original or might not be willing to spend the money on the original, if they can get the copy for less (with similar benefits).

H3: The stronger the belief of consumers' that purchasing counterfeits creates a “smart” image, the stronger the intention to purchase counterfeits.

Embarrassment Potential. Branded products are used to improve a person's self-concept. This is achieved through the transfer of attributed meanings and thus the enrichment of self-value. To be effective however, the interaction with others is required, as only others deliver meaning to brands, and as brands are interpreted differently by different consumer groups (Aaker, 1999; Hogg, Cox, & Keeling, 2000; Keller, 1993). People who are buying branded products may be described as self-conscious and especially concerned about the impression they make. They are deemed to be

more compliant with societal standards and more sensitive to interpersonal rejections (Ang et al., 2001; Bushman, 1993; Nia & Zaichkowsky, 2000). When the impression on others is important, consumers who buy counterfeits run the risk that they may be “detected” of doing so, and consequently have to reckon with social sanctions. Therefore, we assume that:

H4: The stronger the perceived embarrassment potential of counterfeits, the weaker the intention to purchase counterfeits.

Subjective Norm. In line with the TPB, the normative pressure that relevant others exercise on an individual plays an important role in the formation of purchase intention and behavior. The subjective norm is defined as the consumer's perception of social pressure exerted on him regarding the purchase of (counterfeit) products. It is a function of normative belief expressing the consumer's perception of what relevant others think of whether one should or should not purchase counterfeits. Therefore, it is suggested that:

H5: The more consumers perceive a normative pressure from important others on the decision to buy counterfeits, the stronger the intention to actually purchase them.

Perceived behavioral control. Ajzen (1985) suggests that the degree to which intentions lead to actual behavior depends partly on the amount of control of the individual over this behavior (Eagly & Chaiken, 1993). External and internal factors may diminish or increase control. In the case of counterfeits the easy/difficult access to counterfeit products, the knowledge about these products and individuals' ability to access and purchase the original/counterfeits may serve as influencing factors. The more an individual finds itself in a position to act, the more likely this individual will display the intention to act. In the case of counterfeits, we assume that perceived behavioral control, i.e. easy access, knowledge about counterfeits, and high ability will positively influence the intention to purchase fake products (Ajzen, 1985, 1991).

H6: The higher the perceived behavioral control of purchasing counterfeits, the stronger the intention to purchase counterfeits.

Self Identity. Self identity was suggested as additional determinant of intention (Eagly & Chaiken, 1993; Sparks & Shepherd, 1992). Individuals who have a rather vague and uncertain self-concept tend to possess low self-esteem. This renders them less certain that they will be able to meet what they believe are others' standards for worthiness and more susceptible to the effects of outside influences on their self-concept (Brockner, 1984; Campbell, Chew, & Scratchley, 1991). Consequently, they may tend to acquire prestigious luxury products to signal a more elite social position, helping them to construct and preserve their individual identity and self-image. Especially when the behavior has become a central aspect of their self-concepts and is repeated, self identity is expected to explain consumers' intention (Cook, Kerr, & Moore, 2002; Eagly & Chaiken, 1993). Thus, it is predicted that:

H7: The weaker the self identity of the consumer, the stronger the intention to purchase counterfeits.

In addition to the variables that have a direct impact on the intention to purchase counterfeits, personality traits are regarded as antecedents to attitudes towards purchasing counterfeits.

Readiness to Take Risk. Perceived risk of purchase decisions is of high importance in the context of fake products (Cordell et al., 1996; Cox, 1967; Tan, 2002). Buying counterfeits may be considered risky in the light of the amount of money lost through malfunction or other quality deficiencies. Most important, however, is the social risk involved. Being detected as purchaser of counterfeit products, the consumer risks to be publicly sanctioned for using them (Wee et al., 1995). Therefore, the readiness to take risks was used as an antecedent to defensive attitudes towards counterfeiters, to embarrassment potential and towards smart shopping attitudes. Therefore, we derived the following hypotheses:

H8a: Readiness to take risks has a positive impact on the degree of defending counterfeiting due to e.g. efficient production and/or distribution.

H8b: Readiness to take risks has a negative impact on the embarrassment potential of counterfeit goods.

H8c: Readiness to take risks has a positive impact on the perception that purchasing counterfeits is a smart consumer behavior.

Fashion Involvement. Fashion items carrying a well-known brand are particularly prone to counterfeiting. As a rule, they have to go out of fashion after a certain period of time putting substantial financial burden on the consumers, if they want to stay up to date. Buying counterfeits may therefore be an acceptable and a thrifty alternative to buying the original product (Wee et al., 1995). As appearance and visibility are particularly salient for fashion items (Tom et al., 1998), the only deterrent to that behavior might be the embarrassment potential of counterfeits. Consequently, we propose the following antecedent:

H9a: Fashion involvement has a positive impact on the degree of defending counterfeiters due to e.g. efficient production and/or distribution.

H9b: Fashion involvement has a positive impact on the embarrassment potential of counterfeit goods.

H9c: Fashion involvement has a negative impact on the perception that purchasing counterfeits is a smart consumer behavior.

Ethical Predisposition. Buying fake products violates commonly shared norms in the marketplace (Dodge et al., 1996). Ethical considerations of what is “importantly right and wrong” (DeGeorge, 1982) play an important role in the consumption behavior, as they may have a self-binding effect on the individual. Therefore, we predict that a stronger awareness of ethical aspects of buying counterfeit goods will influence consumers’ embarrassment potential positively. Consumers want to impress others by purchasing counterfeit goods which ethically is wrong. The more they realize that the more they would feel ashamed and experience negative effects on the self-identity when being detected. Additionally, consumers who themselves have strong ethical predispositions are more independent of others’ opinions. The following hypotheses were derived:

H10a: The higher the ethical predisposition the more embarrassed a consumer reacts when being detected buying counterfeits.

H10b: A strong ethical predisposition weakens the normative pressure of important others.

H10c: A strong ethical predisposition strengthens the social identity of the consumer.

Price Consciousness as Mediating Variable between Intention and Behavior

Previous research points to financial reasons as the major incentive for the purchase of counterfeit goods. Bloch (1993, p.31) states that “people buy counterfeits because they are getting prestige without paying for it”. To control for the effect of price on behavior, we used price consciousness as a mediating variable.

H11: Price consciousness is mediating the effect of intention to purchase counterfeits on the actual behavior.

Price Level of Counterfeits as Moderating Variable

Consumers who willfully buy counterfeits benefit from getting the prestige of the original branded product for a fraction of its price (e.g., Ang et al., 2001; Bloch et al., 1993; Tom et al., 1998). While the importance of price is undisputed in the literature, the issue of price sensitivity was neglected until to date. It still remains unclear up to what price reduction customers still respond to the offer of counterfeiters. Therefore, we introduced two price levels (significantly cheaper and slightly cheaper than the original product).

H12: The effect of the intention to purchase counterfeits on the actual behavior is moderated by the price difference between counterfeit and original product.

METHODOLOGY

Sample and Data Collection

Based on the pertinent literature and expert interviews, a questionnaire was developed, pre-tested and checked for content validity. A quota sample (based on gender, education and age) of Austrian consumers was drawn and 1.469 questionnaires were distributed with the help of research assistants. Of the returned questionnaires, 1040 were usable for analysis, yielding a response rate of 70.8%. Gender was equally represented in the sample. Less than a third of our respondents (31.0%) received only elementary school level education, while 35.2% were educated through apprenticeship, with about another third having received at least secondary or vocational school education. Average age of respondents ranged was 35.7 years (S.D.=13.70).

Measurement

Behavior. Behavior was measured based on past purchases of counterfeits using a single item.

Intention. Following Fishbein (1967) and Fishbein and Ajzen (1975), the proximal cause of behavior is one’s intention to engage in the behavior. The intention to purchase counterfeits of brand products was measured using single items. In addition, we considered that the intention to purchase counterfeits is related to the price of the item (Bloch et al., 1993). Therefore, two different price levels were deemed important (slightly vs. significantly cheaper than the original branded product).

Attitudes. Consumers’ attitudes towards counterfeiting were investigated through the use of a multi-item scale. Items were anchored in a five-point Likert-scale, ranging from 1 “strongly disagree”, 3 “neither agree nor disagree” to 5 “strongly agree”. Based on the literature review, 13 items were developed and served as measures of consumers’ attitudes towards counterfeiting and purchasing counterfeit luxury brands.

Subjective Norm was measured with the Normative Interpersonal Influence Susceptibility Scale developed by Bearden et al.(1989). It measures the degree to which a person expresses the

need to identify with others and a willingness to conform to their expectations about purchase decisions.

Perceived Behavioral Control was operationalized using a single item by asking whether the respondent considers purchasing a counterfeit, if it were offered to him/her in the future.

Self Identity was measured through the Self-Concept Clarity Scale (Campbell et al., 1996). The items tap the confidence aspect of self-concept clarity, and target internal consistency and temporal stability of self-concept (Campbell et al., 1996).

Personality Traits. To measure the *Readiness to Take Risk*, an established scale ("Risk Taker (Purchase)" by Raju (1980)) was slightly modified. *Fashion Involvement* (using Tigert's (1976) "Fashion Involvement Factor (FIF)") is deemed to reflect important fashion behavioral activities (e.g. adopting early, interest in and knowledge about fashion, monitoring fashion trends). The consumer's *ethical predisposition* was measured employing Fullerton's et al. (1996) set of 15 scenarios of unethical conduct in commonly experienced purchase situations that are structured in a way as to convey the idea that respondents are judging the behavior of others, not their own.

ANALYSIS AND RESULTS

Exploratory factor analyses were initially employed to purify the multi-item scales. Items exhibiting significant loadings on the intended factor and no substantial cross-loadings were retained. Reliability checks proved satisfactory, ranging from Cronbach's alpha=.51 to .68 for the attitude dimensions. For the remaining scales one factor each could be extracted (Cronbach's alpha ranging from .62 to .85). This set of items was then subjected to confirmatory factor analyses using AMOS 4.0 (Arbuckle & Wothke, 1999). The objective was to assess the applicability of the developed scale and, subsequently to estimate the structural models. Having satisfied the various measurement issues, the structural models were estimated.

In order to test the moderated influence of the price levels (significantly versus slightly cheaper than original) on the causal relationship between the attitudes towards counterfeiting, subjective norm, perceived behavioral control and self identity on intention to purchase fake brands, a multi-model analysis was used. The price level of counterfeits significantly moderates the causal relationships between the three attitude measures, the subjective norm, the perceived behavioral control and self identity ($\Delta\chi^2(7)=23.58$, $p<.001$, support for H12). The structural equation model has a significant chi-square value¹ ($\chi^2(1461)=5602.33$ ($p<.001$)) and a χ^2/df ratio of 3.83.² Other fit statistics are: RMSEA=.05, CFI=.79, TLI=.77 and IFI=.79. Sample size and number of indicators seem to influence the model fit. However, we accepted the model because of the satisfactory RMSEA value and the acceptable value of the χ^2/df ratio. The results regarding the moderated effects are described in the following, followed with the more general impacts of personality traits on attitudes towards counterfeiting, subjective norm and self identity.

¹Since the value of χ^2 and in addition, the ratio χ^2/df is determined largely by the sample size, the evaluation of the model fit should include other indices: for example RSMEA, which is a population discrepancy function, or Bollen's comparative fit index (CFI) being an example of putting the to-be-tested-model into some perspective (e.g. comparing it to other models) (Arbuckle & Wothke, 1999).

²The critical ratio χ^2/df is sometimes proposed to be 1 for correct models (Arbuckle & Wothke, 1999), or ranging between 1 and 3 (Carmines & McIver, 1981), or also allowing a range between 2 and 5 (Marsh & Hocevar, 1985).

Predicting Purchase of Counterfeits through Intention to Purchase Counterfeits. The intention to purchase counterfeits impacts significantly the behavior of purchasing counterfeits (supporting H1). The unstandardized estimate is .45 ($p<.001$). The more people are willing to purchase counterfeits, the more likely they purchase counterfeit products. In order to test for mediating effects of consumers' price consciousness, total, direct and indirect effects were calculated. Price consciousness was hypothesized to mediate the relationship between the intention to purchase counterfeits and the actual behavior. However, no significant indirect effects were found (rejecting H11). It seems that the degree to which consumers care about the price in general does not affect the actual behavior regarding purchasing fake brands.

Antecedents to Intention to Purchase Counterfeits at Various Price Levels. Given the significant effect of the price levels on the intention, the specific causal relationships are calculated. The intention to purchase counterfeits at a significantly cheaper price is influenced by all three attitude dimensions (counterfeit defender, embarrassment potential and smart shopper) at a highly significant level ($p<.001$). Therefore the H2, H3 and H4 are supported for counterfeits at a significantly cheaper price. In contrast, the intention to purchase slightly cheaper counterfeits is only significantly influenced by the attitude of being a counterfeit defender ($p<.01$) and being a Smart Shopper ($p<.001$, support for H2 and H4). The more respondents agree on the fact that counterfeiting should be defended, the more willing they are to purchase significantly and slightly cheaper counterfeits. They would be kept from purchasing significantly cheaper counterfeits only when they fear to be detected wearing counterfeits. The more people think that purchasing counterfeits makes consumers smart, the more they intend to do so.

The normative pressure of important others on the intention to purchase counterfeits is highly significant at both price levels (support for H5). The greatest impact on the intention to purchase counterfeits has the perceived behavioral control: The more people think they are able to engage in that behavior and have the required resources (such as e.g. time, money) the more they are willing to purchase counterfeits at both price levels ($p<.001$, support for H6). While self identity has a significant impact on the intention to purchase slightly cheaper counterfeits ($p<.05$), this was not proven for significantly cheaper counterfeits (partly supporting H7).

Additionally, price consciousness and access to counterfeits were included into the model. While price consciousness does not affect the intention in both cases, the access to counterfeit products is significant at both price levels ($p<.05$). In brief, the price level is mainly moderating the effect of the attitudes on the intention to purchase counterfeits. The fear to be detected with counterfeits is only strong when significantly cheaper products are concerned.

Antecedents to Attitudes towards Counterfeiting, Subjective Norm and Self Identity. Some of the attitude dimensions are significantly influenced by personality traits, namely the embarrassment potential and the perception of the consumer to be smart ("Smart Shopper"). No measured personality trait impacts the "Counterfeit Defender" significantly (rejecting H8a and H9a). Those respondents who are highly involved with fashion (support for H9b) and have a higher ethical disposition (support for H10a) would react more embarrassed if discovered wearing counterfeits ($p<.001$). Additionally, higher readiness to take risks would decrease the likelihood of feeling embarrassed ($p<.001$, supporting H8b). The level of risk readiness is impacting positively the degree to which consumers think they act smartly when purchasing counterfeits ($p<.001$, supporting H8c). Finally, the smart shopper attitude is also negatively influenced by fashion involvement, although less significantly ($p<.05$, support for H9c): A higher interest in fashion weakens the attitude that purchasing counterfeits is a smart

TABLE 1
Measurement Models Moderated by Price Level of Counterfeits (Significantly vs. Slightly Cheaper than Original Product)

<i>Hypothesized Paths (Endogenous Variables)</i>		<i>Significantly Cheaper</i>			<i>Slightly Cheaper</i>		
		β	C.R.	P	β	C.R.	P
<i>Attitudes</i>							
Counterfeit Defender	> Intention	.19	3.23	***	.19	3.01	**
Embarrassment	> Intention	-.13	-3.39	***	-.05	-1.13	
Smart Shopper	> Intention	.33	5.27	***	.32	4.94	***
<i>Subjective Norm</i>							
Subjective Norm	> Intention	.12	4.26	***	.23	7.52	***
<i>Perceived Behavioral Control</i>							
Perceived Behavioral Control	> Intention	.48	19.92	***	.32	11.83	***
<i>Self Identity</i>							
Self Concept Clarity	> Intention	-.02	-.40		.11	2.53	*
<i>Price Consciousness</i>							
Price Consciousness	> Intention	.08	1.63		-.06	-1.12	
<i>Access to Counterfeits</i>							
Access to Counterfeits	> Intention	.08	2.30	*	.11	2.82	*

Note: As suggested by Bollen (1989) unstandardized estimates are used.
 *** p<0.001, ** p<0.01, * p<0.05

behavior. The more ethically a consumer reacts the less important is the opinion of significant others ($p < .001$, support for H10b). The ethical disposition has no impact on self identity (rejecting H10c).

CONCLUSIONS

The model which was based on past research and our theoretical considerations was confirmed. Moreover, the Theory of Planned Behavior makes a strong contribution towards explaining the demand for fake products. The strongest influence on the intention to buy fake products comes from perceived behavioral control. The fewer the obstacles to purchase counterfeits in terms of time needed to find them, geographic barriers, etc., the more likely consumers will intend to buy them. Another strong effect was observed, when looking at the perception of being a smart shopper. Given these two results, it appears more useful to address the consumer using affective measures rather than cognitive.

When looking at the subjective norm and embarrassment potential, an interesting phenomenon occurred. At a price level which is only slightly cheaper than the original, the embarrassment potential did not affect the intention to purchase, while the subjective norm did. However, at a significantly cheaper price of the counterfeit, the subjective norm did have a - rather limited - effect, while embarrassment potential strongly influenced intentions. Our interpretation is that this is a result of the type of risk involved in each one of the decisions. At a very small discount, the financial risk of making the wrong decision by buying a fake product and not the slightly more expensive original is rather high. Therefore, the

individual seeks the reassurance of relevant others. However, the social risk of buying a fake product that does not live up to the original and is therefore detected by others is not as strong, as consumers may assume that the high price of the counterfeit is justified with a higher quality. On the other hand, if the price discount is high, the financial risk is reduced, while the social risk increases. A cheap copy of an original brand heightens the chance to be discovered from relevant others as someone who does not own the original, which might be extremely embarrassing to this person.

Less important as the drivers mentioned up to this point, but without difference between price levels, the attitude towards counterfeiting and the defense of counterfeiters' actions influence the intention to buy. So, it seems that consumer-related drivers have a stronger effect than supplier-related factors. Thinking of a potential communication campaign, it appears more successful to target the individual's attitudes towards the own behavior than trying to influence the perception of counterfeiters. Self identity, price consciousness and the access to fake products displayed very little to no effect on the intentions to purchase counterfeits. As to the antecedents, risk readiness has very strong impact (on embarrassment potential and “smart shopper”). Risk-ready individuals do not fear the embarrassment potential of being disguised as owning a fake. The individual's ethical disposition influences embarrassment potential and the subjective norm. A strong ethical disposition seems to supersede the subjective norm from relevant others. Fashion involvement had a strong influence on embarrassment potential and a weaker one on smart shopper.

TABLE 2
Measurement Model for Antecedents of Attitudes, Subjective Norm and Perceived Behavioral Control

<i>Hypothesized Paths</i>				
		γ	C.R.	P
<i>Exogenous Variables</i>		<i>Attitudes</i>		
Fashion Involvement	> Counterfeit Defender	.05	1.50	
Risk Readiness	> Counterfeit Defender	-.12	-1.80	
Fashion Involvement	> Embarrassment	.28	6.30	***
Risk Readiness	> Embarrassment	-.54	-5.62	***
Ethical Disposition	> Embarrassment	.24	5.00	***
Fashion Involvement	> Smart Shopper	-.14	-2.83	*
Risk Readiness	> Smart Shopper	.40	3.95	***
		<i>Subjective Norm</i>		
Ethical Disposition	> Subjective Norm	-.30	-5.96	***
		<i>Self Identity</i>		
Ethical Disposition	> Self Concept Clarity	.05	1.24	

Note: As suggested by Bollen (1989) unstandardized estimates are used.
 *** p<0.001, ** p<0.01, * p<0.05

The Theory of Planned Behavior was established as a valuable instrument for model development in the context of the purchase behavior for fake products. Several avenues for future research emerge: First, it appears useful to test the applicability of the derived model to different product categories. The prevailing literature suggests that products like software entail a differently weighted set of risk (high functional and most likely financial, lower social risk) than luxury brands. Second, additional insight could be obtained by including a comparison of performance of fake vs. original product to increase the explanatory power of our model. Finally, as counterfeiting is a global phenomenon that can be fought only on a global scale, it appears useful to the model for its applicability in various country/culture contexts.

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The Effect of Novel Attributes on Product Evaluations: The Moderating Roles of Brand Equity and Involvement

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EXTENDED ABSTRACT

Thanks to the modern technology, many new products are developed with attributes that are novel to most consumers. For instance, a computer product can have "WLAN", and a bottle of hand wash liquid contains "PCA-NA". These attributes are usually seen in marketing communication materials, but they are seldom properly explained to consumers. Traditional consumer research assumes that consumers must be able to understand the meanings of attributes in order to properly evaluate the product. With novel attributes, consumers must infer or elaborate the meanings and values of these attributes in order to make product choices. Much research has been performed to investigate how attributes of different natures can influence consumers' attitudes. For instance, research has considered how irrelevant attributes can influence consumers' product judgments (Meyvis & Janiszewski 2002). There is also research addressing the effects of new attributes (Nowlis & Simonson 1996), and the effects of high-tech attributes (Ziamou & Ratneshwar 2002) on consumers' product attitudes. But relatively few studies have considered the effect of novel attributes (Mukherjee & Hoyer 2001). Research on the effect of novel attributes on product attitudes indicates that novel attributes can have either positive or negative effects on product judgments, depending on the complexity of the products (Mukherjee & Hoyer 2001). Novel attributes can positively elevate product attitudes when the product is relatively simple to use or operate. It would negatively impact product attitudes when the product is complicated. Thus even when consumers do not really know the meanings and values of these attributes, novel attributes can still differentially influence the overall product judgments. These results bear important implications for product managers in their decisions of whether one should use novel attributes in marketing communications.

The present study planned to explore the factors that may influence the effects of novel attributes on product value judgments. Because consumers differing in involvement have different motivations and knowledge to process the attribute information, the interpretations of novel attribute information may be different for consumers with different involvement levels, leading to the possible difference in the effects of novel attributes on consumers' product attitudes. Moreover, brands with different equity are different in various aspects, such as the pioneering images and the differential perception of innovativeness, as well as consumers' brand attitudes. The differences in the innovativeness perception and pioneering images may affect the interpretations of the novel attributes, mainly because of the novelty that the novel attribute implies. Thus the effect of novel attributes may be different when the equity of the brands is different. Studies were conducted to explore these research conjectures. Results were mixed in these studies. A preliminary study provided some supportive evidence. However, the control procedure was less than ideal in the preliminary study. Additional replications were therefore conducted with improved experimental procedures. Null effects and effects in different directions were obtained in these studies. Results were not consistent across these studies. Thus overall speaking, the results were not very supportive of the conjectures. In this regard, the status of the present research is somewhat preliminary and is not conclusive. Future research is needed to more thoroughly explore the effects of novel attributes. The directions for the future research can

be discussed in several respects. First, there are many possible reasons to account for the observed results, such as differences in the experimental procedures and the selections of materials. Studies with more complete considerations are needed to explore these possibilities. Second, it does seem that there are many other unexplored contextual factors that have contributed to the observed effects, in addition to those that were included in the present research. These unattended factors may have confounded the present results. Future research should consider these task and contextual factors and how they affect the effects of novel attributes. Finally, taken together, the bigger picture of the research calls for the need to study the inferential processes involved in novel attributes (Kardes, Posavac & Cronley 2004). Given the uncertain nature in the meanings and values of novel attributes, consumers use cues in the task environment to form their attitudes and to interpret the meanings and values of novel attributes. Variations in these contextual factors can affect the specific inferential processes and the resulting product attitudes. Future research does not just need to study the effects of the individual contextual cues mentioned above, but also needs to further examine how these cues are combined and processed from a process perspective. A complete picture of the novel attributes can be revealed only when the contextual factors and the specific processes are thoroughly studied.

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The Moderating Effect of Self-Monitoring on Consumer Response to Gender Role Portrayals

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EXTENDED ABSTRACT

During the last three decades, a substantial body of knowledge has accumulated on the moderating role of self-monitoring with respect to consumer behavior (Gangestad and Snyder 2000). One area in which our knowledge about the moderating effect of self-monitoring is limited is consumer attitudes toward commercial gender role portrayals. The topic is of considerable importance since gender identity can be a key aspect of brand positioning. The effectiveness of persuasive messages can therefore be considerably enhanced by knowing which consumer characteristics moderate the responsiveness to gender role portrayals; and self-monitoring could be one of these potential moderators.

The primary theoretical sources we rely on are Wood and Eagly's (2002) biosocial model of gender differences and self-monitoring theory (Gangestad and Snyder 2000; Snyder 1974). Wood and Eagly (2002) view gender roles as a result of social interaction whereby women and men learn to display particular behaviors in society. From this point of view, both gender (biological sex) and gender roles (masculinity and femininity) may shape specific behavior patterns, either independently or in interaction. On the other hand, the theory of self-monitoring suggests that people with a high expressive control may be motivated by social recognition and status more than people with lower levels of expressive control (Gangestad and Snyder 2000; Snyder 1974). Based on these theoretical accounts, the following hypotheses are developed:

- H1a: Higher levels of self-monitoring lead to a higher identification with masculine gender roles.
- H1b: The positive relationship between self-monitoring and masculine gender identity is stronger for women than for men.
- H2a: High self-monitors respond more favorably to masculine gender role portrayals than low self-monitors.
- H2b: High self-monitoring women respond more favorably to the masculine role portrayal of their sex than high self-monitoring men.

To test these hypotheses, two empirical studies are presented that use different methodological approaches. Study 1 relies on cross-sectional data to demonstrate that, independently of gender, high self-monitors identify more with masculine gender roles than low self-monitors. In study 2, we use an experimental design to show that high self-monitors respond more favorably than low self-monitors to brands featuring a strongly masculine positioning. As a result, H1a and H2a are supported and H1b and H2b are not supported. The studies show that high levels of self-monitoring lead to a strong identification with masculinity for both women and men and this is manifested in their positive responses to masculine gender role portrayals, too. At an applied level, this means that advertisers may well benefit from enhancing the masculine image of their brands, at least in the studied product category. This is even more so since low self-monitors do not reject masculine role portrayals either.

These results point to several intriguing directions for future research. First, it would be interesting to explore whether high self-monitoring people, be they men or women, react positively to masculine-type portrayals in real ad settings. A second avenue for future research would be to investigate the moderating role of self-

monitoring on attitudes to "gendered" product categories (e.g. wine, SUVs, fashion) and brands (e.g. Marlboro, Always). Third, it would also be worthwhile to examine the generalization of the framework in a broader cross-cultural perspective. The present studies were conducted in a Western society dominated by a masculine rather than a feminine orientation. (Hofstede 1980, 1991, 1998). Future research may undertake comparative studies in several countries with varying levels of masculinity/femininity scores.

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Children and Their Brand Relationships

Patricia Robinson, Time Inc.

Steven Maxwell Kates, Simon Fraser University

EXTENDED ABSTRACT

In this article, we explore children's socialization into consumer-brand relationships. In order to understand young children's brand consumption, we interviewed twenty parent-child dyads, comprised of ten children aged six- to seven-years old, ten children aged nine- to ten-years old, and twenty parents, recruited through a snowball sample strategy. Four relationship styles emerged from the data: uberbrand relationships, lifestyle relationships, fad relationships, and phase relationships. These four brand relationship patterns are distinct from one another along three key properties: duration, marketer involvement, and interdependence on the brand (i.e., the ways that the brand intertwines with children's lives in everyday usage). Subsequently, we propose a research agenda that poses basic questions about children's brand relationship quality and about the brand-related meanings and consumer practices that develop over childhood.

Understanding whether children form and maintain consumer-brand relationships is critical in order to understand the ways that brands—as culturally shared and personal meanings—peers, and parents socialize children into various meanings and practices associated with consumer culture, influencing their consumption in later years. First, we review relevant literature on children's socialization. We argue that children as young as five or six may act as viable relationship partners. Prior research also suggests that children have the faculty to participate in brand relationships (Ji 2002). Ji (2002) proposes that children form brand relationships derived from her research consisting of five hour-long individual and group interviews with three children from the same middle-class family. Children's participation in consumer-brand relationships was evinced in Ji's (2002) study by children's recall of brand names and past interactions with brands. Yet, Ji's (2002) definition does not fully capture the critical interdependence and intimacy aspects of brand relationships (see Fournier 1998, p. 365).

Twenty parent-child dyads were interviewed, comprised of ten children aged six- to seven-years old, ten children aged nine- to ten-years old, and twenty parents, recruited through a snowball sample strategy, allowing the researchers to access cliques and study peer influence. Parents were given a full explanation of the nature and purpose of the interview before consenting. In many families, siblings were also briefly interviewed allowing us additional insights into brands as socialization agents, and enhancing knowledge about the family's consumption patterns. Theoretical sampling was employed to maintain an equal gender ratio among the child participants and ensure equal numbers of participants within each age group. Families were from a wide range of socioeconomic backgrounds on the basis of observation of their homes and the brands and circumstances discussed in the interview.

Four relationship styles emerged from the data: uberbrand relationships, lifestyle relationships, fad relationships, and phase relationships. The four children's brand relationship patterns we describe are distinct from one another along three key properties: duration, marketer involvement, and interdependence on the brand (i.e., the ways that the brand intertwines with children's lives in everyday usage).

The uberbrand is an enduring brand relationship style that is highly passionate and grounded in many tangible connections between the child consumer and the brand. Children demonstrate

strong commitment to the brand by collecting multiple brand extensions, strengthening their relationship by increasing the diversity of brand interactions. Marketers, with heavy promotional activities, often initiate uberbrand relationships. While uberbrand relationships show that children accumulate various brand extensions under the common category of the brand, informants displaying lifestyle brand relationships collect different brands and participate in activities with common meanings across product and activity categories. Children, to support an enduring hobby or pastime, engage in multiple brand relationships, with similar meanings across brands. Marketer influence on the brand relationships may be variable dependent on the hobby or lifestyle. Older children's identity projects may also be tangibilized through these brand related activities. Fad relationships are intense but short-lived phenomena, buttressed by heavy promotional efforts; they disappear as rapidly as they arrived (usually a few months). Fads are characterized by children's short-lived passion for the brand, and their length of brand commitment is dependent on constant support from marketers and peers' influences. Phases are brand relationships defined by longer-term commitment and high passion for the brand. However, phases are distinguished from fads by a child's individual pull towards a brand, attracted by its perceived characteristics, compared to a fad's push by marketing activity. Phases are also more enduring than fads, for the relationship does not solely rely on marketing support or the encouragement of peers.

The goals of future brand-related socialization research may provide insights into (a) the structure of children's brand relationships, that is, the kind of relationships young consumers have, (b) the interactive, social processes involved in forming, maintaining, and dissolving children's consumer-brand relationships, and (c) the impact of diverse socialization agents on children's consumer-brand relationships. Further, research may endeavor to discover how pervasive and significant a role brands play in socializing children to the marketplace.

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SPECIAL SESSION SUMMARY

How Well Do We Know Each Other? Theory and Method in Dyadic Prediction

June Cotte, University of Western Ontario

SESSION OVERVIEW

How accurately can we predict or estimate the preferences and behaviors of other people whom we know well? This question has substantive as well as theoretical implications for consumer behavior. Its substantive importance is very apparent in many everyday contexts—giving gifts, buying products and brands that will be consumed by several members of a household, and providing proxy reports in consumer surveys, to name a few. From a theoretical standpoint, it raises many intriguing issues; for example, what cognitive strategies might people use to predict or recall the preferences and behaviors of others? And might the manner in which predictions are elicited, in of itself, impact on the precision of the answers? Further, what explains the fact that people occasionally assume that the preferences of close others (e.g., immediate family members or good friends) are overly similar to their own, while in other situations they err on the side of excessive dissimilarity? Are there motivational factors at work that might bias judgments? How can we best exploit the insights available from dyadic data?

Prior consumer research exists in this area but has been sporadic (see, e.g., Davis, Hoch and Ragsdale 1986; Hoch 1987). But of late the research has been invigorated by a conjunction of factors including advances in social cognition and judgment theory as well as a renewal of interest in family socialization and intergenerational influences on consumer preferences. This session brings together three sets of researchers who have investigated the topic of predicting others' preferences and behaviors with dyadic data. Bickart, Phillips, and Menon examine the predictive accuracy of proxy reports of behavioral frequencies. They theorize how memory processes and judgment strategies should affect accuracy and report data from a survey of 40 dyads of student roommates. They find the regularity of the behavior only affects predictive accuracy when respondents are encouraged to use implicit theories (versus episodic memory) when making predictions. In addition, the closeness of the relationship only aided predictive accuracy when use of these implicit theories was cued. Their study offers methodological guidance to survey designers interested in predictive, dyadic data.

Wilkie and Moore study similarity and predictive accuracy in usage behaviors and brand preferences in packaged goods categories. Their data are based on 102 mother-daughter dyads. Within a theoretical framework of intergenerational influences they examine predictive accuracy through the lens of family relationships, and awareness of family members' actions. Their work identifies a set of methodological issues that offer challenges to researchers in intergenerational consumer behavior, discuss some conceptual approaches to handling them, and illustrates some interesting findings that can be uncovered with their methodology. Finally, Cotte, Chowdhury, Kenny, and Ratneshwar present a new methodology for assessing predictive accuracy in dyads. Their data come from a survey of 39 dyads of siblings in the domain of leisure goals and activities. They suggest how family socialization influences, as well as self-identity factors, are likely to influence actual (vs. assumed) similarity in preferences between siblings and thereby affect accuracy in prediction. The intriguing methodological approach they present is based on a new form of idiographic (within dyad) and nomothetic (across dyads) analysis that is invaluable in

assessing predictive accuracy as well as actual and assumed similarity.

The proposed session should quite attractive to at least three groups of ACR researchers: (1) researchers interested in cutting-edge methodologies for dyadic analysis, (2) those who study consumer judgment and decision-making processes, and (3) people who are interested in family socialization processes and influences in consumer behavior. We anticipate a very fruitful interchange of ideas among the various authors who will be presenting the three papers and with the audience members as well.

EXTENDED ABSTRACTS

“Predicting Others’ Behavioral Frequencies: The Role of Judgment Strategy, Knowledge, And Regularity”

Barbara Bickart, Rutgers University–Camden

Joan M. Phillips, University of Notre Dame

Geeta Menon, New York University

Consumers make judgments about other peoples' behavioral frequencies, both explicitly during surveys and implicitly (e.g., when making household purchase decisions). In this paper we examine how the memory structure accessed to construct a judgment about another person's behavior affects the accuracy of such judgments. Specifically, we are interested in the extent to which accuracy varies depending on whether judgments are based on implicit theories about the other person, versus whether judgments are constructed based on recall of specific episodes of the behavior. We posit that the accuracy of implicit theories versus specific episodes will vary depending on the characteristics of the target behavior as well as the closeness of the dyad's relationship. Specifically, we predict that the use of implicit theories will be most accurate when (a) the target behavior is regular and (b) when the dyad members are “closer”—that is, when they have the opportunity to construct accurate implicit theories about their partner's behavior.

To test these hypotheses, we conducted an experiment with 40 pairs of roommates at two universities. For seven days, participants maintained individual daily diaries in which they recorded the frequency with which they engaged in ten behaviors each day. In addition, they noted whether or not their roommate was present each time they engaged in the behavior. Thus, we had a measure of the extent to which the roommate observed the specific episode of the behavior.

Then, both members of the dyad completed a follow-up survey in which they were asked to report on their roommate's behavior during the previous seven days, as well as their own behavior. In this follow-up questionnaire, we manipulated the memory structure most accessible to participants by varying the wording of the behavioral recall question. Each dyad was randomly assigned to one of two versions of the follow-up questionnaire. In the “count” version, the respondents were asked, “How many times in the past seven days has your roommate (BEHAVIOR)?” for each of the ten behaviors. They were then asked the same set of questions regarding their own behavior. In this condition, we were attempting to increase the accessibility of episodic memory. In the “estimate” version, the respondents were asked, “On average, in a typical seven-day period, how many times does your roommate (BEHAV-

IOR)?" for each of the ten behaviors, followed by the same set of questions about their own behavior. In this condition, we were attempting to increase the accessibility of implicit memory structures. We also measured the regularity of the behavior, and the closeness of the relationship using Berscheid, Snyder, & Omoto's (1989) Relationship Closeness Inventory.

The findings are consistent with our predictions. First, we found that wording of the behavioral frequency question moderates the effect of regularity on the accuracy of frequency reports of behaviors such that regularity only affects reporting accuracy when respondents are asked to estimate (i.e., the use of implicit theories is encouraged). These results are consistent with Menon (1993, 1997), but while her work only examined self-reports, our investigation extends these results to the realm of reports about others.

Further, we show that the wording of the behavioral frequency question also moderates the effects of the closeness of a relationship on the accuracy of reports about others. Respondents in a close relationship with their partner provided more accurate reports of their partners' behavior, but only when the use of implicit theories was cued. Closeness of the relationship had no effect on reporting accuracy when the use of episodic memory was encouraged. This finding is consistent with the idea that over a period of time, people acquire general knowledge about other peoples' behavior (i.e., implicit theories) and then use these theories to predict their partner's behavioral frequencies with some accuracy. Interestingly, we did not find any significant effects of actual observation of the behavior on reporting accuracy. This finding is consistent with Colvin et al.'s (1997) conclusion that relationship closeness rather than simple observation may be most crucial in determining empathic accuracy.

We discuss the theoretical implications of the findings for understanding how memory structures about others affect prediction judgment processes, as well as the practical implications for designing consumer surveys and directions for future research.

"Some Methodological Advances in Intergenerational Consumer Research on the Family"

William L. Wilkie, University of Notre Dame

Elizabeth S. Moore, University of Notre Dame

The topic of family influences in consumer behavior remains a formidable research area today. Children live with their families for many years. An enormous amount of consumer learning and personal formation occurs during this time. Intergenerational research in consumer behavior asks "To what extent are beliefs and preferences formed during these early years carried forward into adulthood?" The methodological issues involved in capturing this extensive and complex set of family influence processes are challenging.

The present paper arose while conducting an extended analysis of the role of intergenerational influences (IG) as a source of brand equity. As we suspected from prior literature, and as found in that resultant paper (Moore, Wilkie and Lutz 2002) as well, intergenerational influences appear to be a pervasive influence in the marketplace. For some product categories, IG helps to determine primary demand: that is, the segments of users and nonusers among young adults. We also found that IG is a significant source of brand equity for some leading brands, but, interestingly, not for some of their leading competitors. We concluded (as have prior researchers on this topic) that this IG phenomenon deserves more attention from the consumer research community than it has received to date.

The root concepts and analyses relevant to IG influences reflect intrafamily similarity, and can involve dyadic (or more)

measures reflecting the different family members being studied. Thus the "capacity to predict" issue here involves uncovering underlying relationships amongst family members, including both knowledge and others' actions. The challenge is to accurately capture learning that has occurred over a long period of time, and then assess its current impacts. One of the most difficult aspects of this challenge is dealing with the fact that much of IG influence has long been internalized as a child reaches adulthood—how are these particular influences to be isolated? In conducting our own IG analyses we encountered a number of interesting and somewhat complex methodological issues that are also likely to arise for other researchers undertaking work in this area in the future. In this paper, we raise some of these issues for more detailed consideration, together with data results as illustrations.

The data here is based on parallel surveys of 102 mothers and their young adult daughters, across 24 packaged good categories. Each of 102 family pairs thus constitutes a dyad for analysis purposes. Our underlying Hierarchy of Effects-type model suggests that intra-familial influence ties should reveal themselves at several levels of measurement and in a serial progression: (1) shared bases for even entering particular product categories (use/non-use), (2) with the daughter's knowledge of her mother's preferences, (3) as a possible logical precursor to including these in her personal consideration class for purchasing, with this (4) leading to a possible shared brand preference over time. Measures were then taken across these four levels for each of the 24 packaged goods categories. Separate measures were collected from the mother and daughter in each family, with no communication between them.

As we discuss in the current paper, we discovered that our dyadic analytic approach needed to be designed to successively uncover multiple levels of effects. Because our conception of IG influences is that they (a) exist in many forms, and (b) are internalized so as to be embedded within children's self-identities, an inferential analytic approach was required to adequately detect and assess their presence. Thus, we developed a process in which successive "layers" of potential IG impacts would be "peeled back" or examined in turn. In a sense, this analysis allows us to systematically move deeper into the phenomenon in a search for embedded effects that might have been partially or totally masked by other factors. Chance levels of agreement also have to be considered and statistically eliminated. That is, the simple magnitudes of association and prediction do not necessarily reflect true IG influence—a lower number for one product category might actually represent a stronger IG effect than a higher number in another category. The paper discusses the difficulties posed by such marketplace factors as the presence of "icon" brands (there does not appear to be a straightforward means of solving this issue), product use/non-use, and differing numbers of competing brands, and suggests means for addressing these in future studies.

In delving into the details of the analytical thinking, we also present in this paper previously unreported findings that reveal some very intriguing conditional IG relationships. For example, we discuss how our IG analysis approach includes an assessment of "cohort effects" (shared preferences and behaviors within given age groups, that differ between age groups), and how these effects are expected to undercut IG influences themselves, primarily by operating on the daughters to break down previous affinities from the earlier years in the family homestead. By looking across "layers" of impacts in our analysis, we are able to see that cohort forces are in fact at work, and that they do interact with IG forces in some very interesting ways. For example, differences across cohorts in the use/non-use of certain categories appeared, as did cohort differences in some brands preferred (reflecting that some

brands are appealing more to the mother's generation, some more to the daughter's).

This cohort approach allowed us to identify a new layer of IG influence, which we term the "IG Brand Defender Effect." This is an IG indicator that does not exist across the general market, but will only be uncovered in selected segments for selected brands. Specifically, in our data some older brands still popular with the mothers had registered significant declines in support among the younger daughter cohort. Now, this itself is likely to be evidence of a breakdown in IG influence in the face of the forces for change in this dynamic marketplace (consumer packaged goods). However, our "layered analysis" approach further suggested that it was still reasonable to search for IG influence within this conditioned result. In this paper we report how we conducted this further search, and how we did find this effect. In brief, for a number of those brands that are "out of favor" with the younger generation, we discovered a small but loyal group of IG daughters who are providing the little support that brand has remaining in this generation. In other words, these brands would be significantly worse off without this group of loyal IG "brand defenders."

"Similarity, Predictive Accuracy and Assumed Similarity Among Dyads: Substantive and Methodological Issues"

June Cotte, University of Western Ontario

Tilottama G. Chowdhury, University of Connecticut

David A. Kenny, University of Connecticut

S. Ratneswar, University of Missouri-Columbia

Advances in methodology in the areas of social cognition and judgment theory provide opportunities for consumer researchers interested in prediction to extend the way in which they consider predictive, dyadic data. Two major streams of research have been the work of Kenny and his colleagues (Kenny 1994; Kenny and Acitelli 2001; Kenny and Albright 1987; Kenny and Winquist 2001), who have focused on assumed similarity and predictive accuracy. In contrast, Hoch's work (e.g. Davis, Hoch and Ragsdale 1986; Hoch 1987) has focused on various forms of accuracy and measurement of the biases in, and the processes of, people's predictions of others. Both of these literatures, in psychology and consumer research, respectively, have studied reasonably similar dyad members (husbands and wives being a common dyad). However, neither of these two streams have addressed changes in predictive accuracy and assumed similarity when there are theoretical reasons that the members of the dyad may be motivated to be seen, and to consider themselves, as very different.

One dyad type where one might expect there to be both similarities and differences is a sibling pair. A family exerts a complex influence on the behaviors of its members. For example, in her prior research, Cotte found that innovative behavior is influenced both intergenerationally and intragenerationally (Cotte and Wood 2004). The nature of sibling influence, however, is a matter of some debate. Siblings can be important role models for each other and in many cases could act as a relevant peer group for comparison and modeling (Pechmann and Knight 2002). However, research over the last two decades has also documented that siblings are surprisingly different from one another (Dunn and Plomin 1990; Hoffman 1991; Plomin and Daniels 1987; Schacter et al. 1976).

One domain where one might expect to see sibling similarities is leisure choice. The family socialization and modeling process will likely teach children about the desirability of select leisure goals (Moschis 1987). For example, in families where a dominant theme is careful risk aversion, children are perhaps socialized to avoid thrill-seeking goals for themselves. Conversely, in families that encourage goals like "reaching for the stars", the children may

grow up to internalize these goals, translating them into action in leisure by engaging in activities designed to meet this motivational goal, for example, competitive athletics. Thus, the family socialization literature suggests that we should find considerable similarity between siblings in leisure goals and activities. In addition, Kenny (1996) points out three additional reasons for sibling similarity. Their unique similarity could be due to mutual influence (they discuss leisure together), information overlap (when siblings participate in leisure together) and finally, siblings may interpret the meaning of leisure in a similar way.

Notwithstanding, a person's goals for leisure should also be derived from, and related to, that individual's overall goal structure or self-identity (Huffman et al. 2000). Indeed, the domain of leisure should be highly salient to the overall self-identity, since leisure choices allow one to "play" and try out new possible selves (Markus and Ruvolo 1989; Shamir 1992; Stryker 1987). Therefore, in addition to the family socialization influence, leisure goals should reflect an individual's own self-identity. And to the extent that siblings' self-identities are independent of each other and the family influence factor, the similarity in their leisure goals should be reduced.

To examine these issues, we recruited 39 undergraduate students and their adult siblings. At the beginning of the behavioral lab session, subjects were asked to name all siblings. A randomization scheme using the first letter of each sibling's name determined which sibling participated as the other half of the dyad. These subjects were mailed the same questionnaire (with appropriate changes and a cover letter, plus a pre-paid phone card as an incentive). The questionnaire asked self preferences for leisure activities and leisure goals, then for predictions about the sibling on the same set of preferences for leisure activities and leisure goals. The design was counter-balanced: one half answered goals, then activities, and the other half answered activities, then goals. Also, one half made ratings of self first, then predicted the sibling. The other half rated the sibling first, then rated themselves.

Following Kenny and Winquist (2001), we analyze the dyadic data in two separate but complementary ways (nomothetic and idiographic analyses). Indeed, one main contribution of this paper is building on this work and applying it in the consumer behavior domain. The nomothetic analysis captures the correlational structure of dyadic ratings for *individual* items or measures (e.g., specific leisure activities or leisure goals). The objective of the nomothetic analysis is to estimate the *overall* correlation between the ratings of the members of the dyads, when pooled over the *total* set of items or measures. This correlation is estimated via a structural model, more specifically, by estimating a measurement model using the unrestricted least squares method in LISREL. Our presentation will walk participants through the new procedure to estimate these dyadic models for predictive accuracy, actual similarity and assumed similarity. This involves corrections for differential elevation effects, and a large number of models. Ultimately, the LISREL output provides a correlation matrix with a single value, i.e., the pooled correlation, for the dyadic ratings for (as an example) the 28 leisure activities in our study.

Our results show that for these siblings assumed similarity is higher than actual similarity; this confirms a false consensus bias, and argues against an anchor and adjustment process. There is also a difference based on level of specificity. For *activities*, the siblings are more similar actually, and this is observable, so they are more accurate. For *goals*, the false consensus explanation for predictive inaccuracy is valid—inaccuracy results from assumed similarity when they are not similar. Finally, siblings are more similar on activities compared to goals, and they are less accurate when

predicting goals—likely because of the combination of false consensus and lack of actual similarity for goals. The level of specificity is thus a likely contributor to the mixed results for predictive accuracy found in the prior literature.

In summary, our research provides some explanations for the prior conflicting findings in the literature. We have some new insights, based in theory and data, for why inaccuracy may occur and how we can measure it. We are one of the first groups of consumer researchers making a concerted attempt to put some structure into the analysis of dyadic, predictive data. Thus, we build on Kenny and Winqvist's (2001) theory development to show how this method actually works. This method can be used in any dyadic setting, to show to what extent a prediction is based on the "truth" and/or by assumed similarity. Finally, we show that differing motivations for wanting to appear alike or different can influence predictive accuracy.

SPECIAL SESSION SUMMARY

Magnifying Effects of Immediate Consumer Experiences

Ziv Carmon, INSEAD
Joachim Vosgerau, INSEAD

SESSION OVERVIEW

Consumer researchers are becoming increasingly interested in consumers' experiences (see e.g., Ariely and Carmon 2003; Schmitt 2003). This session explored an important characteristic of such experiences—their immediacy. We show that immediate experiences have significantly greater impact on judgment and decision-making than experiences that are less immediate. Each of the papers in the sessions focuses on a different aspect of immediacy.

The first paper shows that consumers weigh information drawn from direct experiences more heavily, controlling for content, format, vividness, and reinforcement learning. The second paper demonstrates that consumers judge immediate feelings as more intense than equivalent past feelings due to greater accessibility for visceral arousal states. The authors also identify a simple debiasing method, waiting, and show that it can diminish the difference in accessibility and eliminate the intensity-bias. The third paper shows that consumers prefer immediate ('real-time') broadcasts over less immediate (tape-recorded) ones. The notion is that immediate experiences such as real-time broadcasts are indeterminate and thus associated with greater excitement than determinate experiences, leading to judgments that are more optimistic yet also more pessimistic.

Collectively the papers in the session show that immediacy of experiences can have magnifying effects, significantly influencing consumer judgments and decisions, and they explore several reasons for those effects. The discussant, Baba Shiv, concluded the session, offering insightful comments and suggestions for each of the papers.

Extended abstract of those three papers appear below.

EXTENDED ABSTRACTS

"The Tree of Experience in the Forest of Information: Overweighing Personal Over Vicarious Experience"

Niklas Karlsson, Göteborg University

George Loewenstein, Carnegie Mellon University

Uri Simonsohn, University of Pennsylvania

Information often comes from multiple sources. Standard models of decision-making assume that, when forming expectations, people will weigh different sources according to their diagnosticity. Holding diagnosticity constant, how a specific piece of information was obtained should be irrelevant. Psychological research as well as intuition, however, suggests that the process through which information is obtained often has an impact on the weight information is given.

One dimension over which sources of information differ is vividness, defined by Nisbett and Ross (1980) as the propensity of information to attract and hold attention. Prior research has shown that vivid information is given more weight in decision-making than comparatively pallid information. For example, people respond more strongly to single cases than statistics about multiple ones, to identified than statistical victims, and, most central to the research reported here, to direct than vicarious experience.

Most of the research documenting such effects, however, confounds three differences between vivid and pallid information: content, format and vividness. The potential confound of informa-

tional content is particularly problematic when it comes to assessing the significance of vividness, since differences in informational content, unlike difference in vividness, are relevant. For example, previous work has shown that individuals are more likely to purchase insurance after having experienced a natural disaster first hand (Kunreuther and Slovic 1978). Living through an earthquake is certainly a more vivid experience than learning about them vicariously, but it is also more informative. There are many details about the consequences of an earthquake (e.g. idiosyncratic risks) that can only be learned by experiencing one directly. The documented effect of living through such disasters, therefore, cannot unambiguously be attributed to its vividness.

The format of information may also be an important confound. Typically, people learn about vivid and pallid information from sources that present information in dramatically different formats; for example, those who live through an earthquake observe actual damage while those who don't are likely to acquire most of their information from news reports and the like. Taylor and Thompson (1982), in an important review of the vividness literature, suggest that people's inability to adequately understand information presented in statistical format may be all that's behind the premium placed on direct experience. This highlights the importance of adequately controlling for format when studying the relative importance of vividness.

In this paper we present findings from two studies designed to vary only the source of the information (experienced vs. vicarious) while holding constant both informational content and format. Our results suggest that people overweight personal experience even in these circumstances. We report results from two experiments, which employed the same basic paradigm. In both experiments groups of subjects participated in several rounds of a game in randomly assigned subgroups that played independently of one-another. In every round each of the subgroups played the game once. After every subgroup had played a round of the game, all subjects observed the actions of all participants in each subgroup. Subjects were then reassigned to new subgroups for the next round (again randomly formed). This process was repeated until the end of the experiment.

The key feature of these experiments is that, because of the random rematching, the behavior of all subjects in all subgroups is equally informative of what to expect in subsequent rounds, and hence should be equally relevant to everyone. Thus, everyone observed the same factual information (the choices of all participants in that round) in the exact same format; yet for each subject some actions were directly experienced (those of subjects in their subgroup) while others were not (those of subjects in other subgroups). We compared players' reactions to the behavior of the person(s) they were directly playing with, to their reactions to the behavior of others. By creating a situation in which vicarious experience was objectively as informative as personal experience, we avoided the problem inherent in many previous studies that personal experience could in fact be more informative of one's own future outcomes.

The two games we examined were the "weak-link" game and the prisoner's dilemma (PD). These games differ in ways that allow us to address overlapping, but somewhat different issues. In the

weak-link game, optimal behavior for oneself depends on the behavior of other players; it is, therefore, a good game for examining the optimality of information utilization. In the prisoner's dilemma game, on the other hand, defecting is always the dominant action, particularly when, as in our game, there is anonymity and random switching of partners across rounds. The fact that defecting always yields a higher payoff in the PD game provided further evidence for overweighting of experienced information because it allowed us to rule out reinforcement-learning as an alternative explanation. The simpler structure of the PD also allowed us to conduct additional analyses to examine the specific process underlying the effect.

"Intensity Bias in Temporal Emotional Comparisons"

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When people experience an emotion, it is natural for them to compare the intensity of their current feelings to the intensity of their previous feelings. Enjoying a comedic theater production, fine cuisine, or vacation naturally raises the question of whether one's current enjoyment is more or less intense than previous feelings of amusement, culinary delight, or relaxation. Such temporal emotional comparisons may pervade consumer experience and influence consumer decision making. Consumers presumably prefer to spend money on funnier plays, better meals, and more relaxing vacations.

An initial set of field and laboratory studies indicates that consumers experience an *intensity bias* when they make temporal emotional comparisons. That is, they (erroneously) judge their current feelings to be more intense, all else equal, than their previous feelings. Consumers who had just completed an aerobics class judged their current feelings of aerobic intensity to be more intense than their feelings during their previous workout (Study 1). Participants who were "in love" reported that their current romantic feelings to be more intense than their previous romantic feelings (Study 2). Bringing our investigation into the lab, participants who watched a series of scary movies judged their current fear to be more intense than their previous feelings of fear (Study 3). Importantly, these participants also misremembered their previous feelings as having been less intense than they initially reported them as being.

We suggest that the intensity bias stems partly from the differential accessibility of perceptions of current visceral arousal versus memory for previous visceral arousal. Because perceptions of current visceral arousal are more accessible than memory for previous visceral arousal, consumers infer that their previous emotions were less intense than their current emotions. In one pair of studies, participants used the accessibility of another person's memories for visceral arousal to infer the intensity of that person's previous emotional experience (Study 4a); participants also used the intensity of another person's previous emotional experience to infer the accessibility of that person's memories for visceral arousal (Study 4b). In another study, participants who watched a series of sad and amusing films reported more perceptions of current visceral arousal compared to memories of visceral arousal during a previous emotional experience (Study 5); moreover, the differential accessibility of visceral perceptions versus memories was closely associated with participants' judgments that their current feelings were more intense than their previous feelings. In another experiment, some participants were led to believe that they had the unique ability to recall visceral memories (Study 6). We reasoned that these participants would give their limited visceral memories greater weight when making temporal emotional comparisons than participants in a control condition, who were told nothing about the uniqueness of their visceral memories. As expected, participants

who were led to believe that their ability to recall visceral memories was unique exhibited a larger intensity bias, misremembering their previous feelings as less intense, compared to participants in a control condition.

Preliminary results from an ongoing study suggest that the intensity bias influences decision making. Participants are asked to listen to two annoying sounds, twenty minutes apart. Immediately after listening to the second noise, participants select one of the two sounds to listen to a second time in the future. Consistent with the intensity bias, participants tend to select the first, more temporally distant noise, to listen to a second time, presumably because they judge their feelings of annoyance while listening to that noise to be less intense compared to their feelings during the second, more recent sound.

How might people learn to make more accurate temporal emotional comparisons? A final pair of studies suggests a simple debasing strategy: wait. Participants were asked to indicate whether their feelings while climbing a mountain (Study 6) or crossing a scary suspension bridge (Study 7) on a particular day were more intense than during previous climbs and crossings. Immediately after climbing or crossing, participants reported that their current feelings were more intense than their previous feelings. However, this intensity bias was reliably diminished when participants answered these questions following a 30-minute delay, when their current emotions had subsided. This pattern is consistent with the possibility that the differential accessibility of emotional knowledge diminished as time passes and current feelings become past feelings. That is, the difference in accessibility of emotional knowledge is less for two past emotions than for a current versus past emotion.

Taken together, these studies indicate that people judge their current emotional experience to be perpetually unique. Current emotions of various kinds are falsely judged to be more intense than previous emotions. This intensity bias appears to influence decision making, and may have important implications for self-control and addiction. These studies illustrate an important way in which people's judgments of the emotional here and now is biased by mis-memory of emotions past.

"Indeterminacy and Live Television"

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When the exam schedule for our MBA program was announced for a recent term, furious students stormed into the dean's office, demanding that an exam be rescheduled. This exam had unintentionally been scheduled such that it was to perfectly overlap with a semi-final game of the soccer world cup. The dean felt that rescheduling the exam would set a dangerous precedent. He announced a seemingly perfect solution: the exam would proceed as scheduled, the game would be recorded and then shown in the exam auditorium as soon as the exam, and coincidentally also the game, ended. Anticipating possible objections to his plan, the dean explained that examinees would not be able to obtain any information about how the game had evolved before or while watching the recorded game (the exam auditorium plus adjacent lavatory and vending machine areas would be closed off, cell phones would not be allowed, etc.). Hence, he explained, except for the time delay, students would have the *same sensory experience and uncertainty* as if the exam were rescheduled. However, far from settling the issue, student protests intensified.

A key difference between what the dean suggested and what the students wanted is that viewers of live TV know that at any time during the broadcast what will happen is not decided a priori.

Watching the game live is thus an indeterminate experience. In contrast, although they may well not know what will happen, viewers of a taped broadcast of the same game know that this is set a priori (e.g., by how the game was actually played). Watching the game taped is thus a determinate experience. Our proposition is that indeterminate experiences (e.g., watching an interesting sports match live) are associated with greater excitement than equivalent determinate experiences (e.g., watching the same match on tape without knowing the result). Greater excitement for indeterminate experiences in turn is hypothesized to cause the preference for the former, and to cause emotions to be stronger leading to more optimistic yet more pessimistic judgments about the event.

To test our hypotheses, we control for several alternative explanations that could account for why consumers might prefer live TV. First, people often watch live broadcasts together with others. Such sharing of experiences may enhance their appeal as it may serve a social verification function (e.g., Hardin and Higgins 1996). Second, anyone who is impatient (i.e., has a positive discount rate) should prefer to watch a desirable event in real time, at the first possible opportunity, to watching the same event tape-delayed, all else equal (Frederick, Loewenstein, and O'Donoghue 2002). Third, watching an event live may give viewers with a stake in its outcome an illusory sense of being able to influence that outcome (Langer 1975), as if by magic, for example, they could help their team beat its opponent.

The first study set out to show that indeterminacy can account for a preference for live TV independently of a preference for sharing experiences. If the latter causes the preference for live broadcasts, this preference should disappear when the experience cannot be shared. As predicted by indeterminacy and contrary to the sharing experience explanation, respondents were more likely to watch an upcoming soccer match when they had the prospect of watching it live—even when they could not share the experience with others (respondents were told that they would not learn anything about how the match unfolded before watching it to assure that manipulating indeterminacy did not affect their uncertainty about the game, as in the opening anecdote). Furthermore, anticipated excitement fully mediated viewing preferences, lending further support to the proposition that indeterminacy causes excitement which leads to a preference for live-broadcasts.

To demonstrate that effects of indeterminacy extend beyond sports competitions, we investigate another domain of broadcast events in a second experiment, a talk show, in addition to soccer. To manipulate indeterminacy, we informed participants that the referee of an upcoming soccer match was bribed and that the questions and answers in the talk show were agreed upon before the broadcast. Making both events less indeterminate in this way should reduce the appeal of watching them live. In fact, under such circumstances, viewers may be better off with delayed recordings that allow them to choose freely when to watch the event, to forward and rewind the recording, and to skip commercials. The alternative account of impatience predicts that consumers will always prefer live rather than recorded broadcasts, whether the events are indeterminate or not. As predicted, there was an interaction of broadcast format and indeterminacy. Respondents were more likely to watch the indeterminate soccer match and the unscripted talk show live rather than taped. In contrast, the determinate soccer match with the bribed referee and the scripted talk show were preferred taped rather than live.

Study 3 tests indeterminacy against illusion of control. According to illusion of control, viewers of a live broadcast of, say, a soccer match would experience a sense of control over the outcome of the game. Hence, they would judge their favored team to be more likely to win and less likely to lose than viewers who watch the same

match taped. In contrast, indeterminacy would cause participants to be more excited and to interpret their excitement as indicating more intense feelings about the outcome in question. The greater intensity of these feelings, in turn, makes the outcomes appear more likely (Rottenstreich and Hsee 2001). So when asked about the probability that their favored team will lose, they attribute the greater excitement from watching the match live as indicating that a loss is more likely (than if they were watching the game taped). Importantly, the same logic applies when the question is about the probability that the favored team will win rather than lose. Thus, we predict that an indeterminate live broadcast can yield superadditive probability judgments of complimentary outcomes (i.e., $p(\text{win or draw}) + p(\text{loss}) > 1$).

When having the prospect of watching the soccer match taped, respondents judged the probability of Stuttgart winning or tying as equally likely as Stuttgart losing, with neither rating differed from 50%. In contrast, for the live broadcast conditions, participants rated Stuttgart as more likely to win or draw and also more likely to lose; as predicted, both ratings were significantly greater than 50% indicating superadditivity of the complementary probabilities. A similar pattern was observed for the respondents' willingness to bet. These results support hypothesis two that indeterminacy magnifies emotions causing consumers to be more optimistic yet more pessimistic about the same event.

An important theoretical implication is that indeterminacy may well shed new light on well-known findings of illusion of control. Extant demonstrations of illusion of control in terms of exaggerated confidence in obtaining the desired outcome have relied only on measures of success. We observed exaggerated probabilities for success *and* for failure. Such a pattern of both enhanced optimism and enhanced pessimism is predicted by indeterminacy but is at odds with illusion of control that predicts greater optimism and less pessimism.

In conclusion, in this paper we introduce the notion of indeterminacy and show that it is associated with greater excitement that can influence preferences and judgments. Interestingly, indeterminacy has these effects even though comparable indeterminate and determinate experiences do not differ at a sensory level or in terms of uncertainty. All that is different is the meta-knowledge about whether the experience is indeterminate or not. We believe that this seemingly subtle characteristic can help explain perceptions of consumption experiences in a variety of domains such as performing arts, vacations, or gaming.

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Money, Time, or Blood: How and Why the Salience of Conflicting Identities Affects Consumer Choice

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SESSION OVERVIEW

Recent studies on the effects of identity on human behavior have important application to the field of marketing and consumer decision-making. For example, Claude Steele and colleagues have shown that reminding African-American students of their race prior to taking a standardized test undermines their test scores (Steele and Aronson 1995). Margaret Shih and colleagues (Shih, Pittinsky, and Ambady 1999) have suggested that people actually have *multiple* identities that vary in salience over time; which identity is top-of-mind has a powerful effect on behavior. For example, Asian women prompted to think about their gender score poorly on a math test but the same students prompted to consider their race score very well. Recently, LeBoeuf and Shafir (2003, working paper) have extended the notion of conflicting identity salience to consumer choice, by showing (for example) that Princeton students prompted to think about their identity as academic achievers are more likely to choose 'serious' magazines such as Newsweek, while those prompted to think about their social lives chose more frivolous titles (e.g. Cosmopolitan).

In this session, we extended the notion of identity salience further into the field of consumer decision-making. We presented three papers that have in common their interest in the contextual effects of identity salience, but differ in terms of the types of 'identities' involved, the dependent variables of interest, as well as in terms of the cognitive mechanisms they presume to underlie the overall phenomenon. Rohit Deshpande (Harvard University) acted as discussant, ably summarizing the session.

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EXTENDED ABSTRACTS

"Why Tip the Waitress?: How Identity Moderates the Conflict Between Economic and Social Norms"

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 Jessica Goldberg, University of Michigan
 Norbert Schwarz, University of Michigan

Behavioral decision researchers are perennially interested in the question of why people fail to behave in an economically normative fashion. One possibility is that people are unfamiliar with these norms, but another possibility is that people find these norms less compelling than others that conflict. A classic example is what we might call the "why tip the waitress" problem. From one perspective, it is not economically "rational" to tip a waitress in an out-of-town restaurant, because the customer cannot benefit from improved service in the future. Yet most of us leave money on the table, because social norms encourage us to tip serving staff.

When decision norms conflict, which norm is adhered to will depend on which is most salient. In particular, we propose that for some people (business students, for example), economic rationality is a highly salient decision norm, whereas for others (psychology students) it may be present but less salient. However, even when economic standards for decision-making are made prominent in people's minds, they may be rejected as unimportant. Thus, if one does not see economic rationality as critical to one's self-concept, one should not be strongly affected by economic primes. In contrast, if one does not see social relationships are critical to one's self-concept, one should not be strongly affected by social primes.

We have investigated these hypotheses in an experiment involving 250 students evenly divided between the psychology and business/marketing departments at the University of Michigan. We first primed economic or social norms in a seemingly unrelated task, for example by asking subjects for examples of memorable social experiences, or asking subjects for what budgeting advice they might offer new students. Subjects then responded to a series of questions about allocating funds between an alternative with a personal economic benefit and one with a benefit to one's friends or relations (for example, how much to tip a waitress, or what price to set a rare penny found in your pocket to a friend who collects them). Finally, subjects were asked scale questions assessing the extent to which their social and economic identities were critical to their self-concept (derived from LeBoeuf and Shafir 2003). We found that priming affected monetary allocations; as predicted, the effect was strong for those for whom the prime was important to their self-concept (i.e., psychology students high on "economic identity") but not those for whom it was chronically accessible (business students).

In addition to our theoretical motivation, we confess to a somewhat morbid curiosity as to the main effects of the study: do business students tip more or less than psychology students? We find that business students, as expected, rate their "economic" identity as more critical to their self-concept than do psychology students. However, business students did not tip differently than did psych students over the course of the entire experiment. In the first replication, business students tipped *less* than psychology students when primed economically, *but more* than psych students when primed socially. In all subsequent problems, however, business students primed socially appeared to compensate for their earlier generosity by reducing their contributions to others. We anticipate an interesting discussion about whether this represents a lack of moral compass or whether it should be interpreted more optimistically.

"From Ideal to Real: How Prior Contemplation of the Ideal Can Undo Self-Favoritism"

Kurt Carlson, Duke University
 Robin Tanner, Duke University

Theorists claim that individuals have many versions of themselves, which can be activated to accommodate the demands of a given. One such self is the ideal self, which represents the aspirations of the individual. We propose that the ideal self wants to be heard and so intervenes to influence a broad range of self reports. If biased self-reports occur because the ideal self wants to be heard, then it may be possible to debias self reports by providing the ideal

self with a voice before the actual self is queried. We investigate this possibility in a series of studies by comparing the responses of those whose ideal self was not given a voice (standard condition) with those who were first allowed to express their ideal self (voiced condition). For example, if the standard condition question was "How likely are you to donate blood?" participants in the voiced condition would answer the question "In an ideal world, how likely would you be to donate blood?" before responding to the question "How likely are you to donate blood?"

In study 1, participants were asked about their future engagement in three aspirational behaviors: calling friends, eating vegetables, and exercising. For all three, participants in the voiced condition reported less future engagement in the behavior than those in the standard condition. Study 2 replicated Study 1 using a socially desirable behavior, giving blood. The study was modified to capture estimates of the likelihood of others giving blood, after own behavior predictions. This enabled us to explore an alternative explanation of study 1, which is that the ideal voice question acts as an unattainable anchor which is contrasted away from in subsequent responses. If this were the case, such a contrast should be observed on all estimates. We found instead that invoking the ideal self only had an effect on the prediction of one's own behavior.

In study 3 we switched from examining future behavior, to traits and abilities. We found that voiced condition participants reported lower estimates of math ability and patience levels, relative to those in the standard condition. Study 4 replicated study 3, using both a more homogeneous subject population (undergraduate students) as well as a new response scale that requested a self evaluation relative to other undergraduate students at the same university. These changes allowed us to examine the accuracy of voiced and standard participants' responses because the midpoint of the response scale now represented the peer group average. As expected, average ratings for the voiced condition were lower than those of the standard condition and were not reliably above the true peer average. Thus, it appears that self reported estimates of participants in the voiced condition were (on average) objectively unbiased.

In many of our studies the initial ideal responses in the voiced condition were indistinguishable from the actual responses in the standard condition. This result supports the claim that the default response in many situations is an idealized one. We discuss various alternative accounts for the data, such as anchoring and adjustment and contrast effects, and conclude that they cannot explain the observed data pattern. Finally, we discuss possible practical uses of this method and suggest, for example, that this technique has promise for marketing researchers interested in obtaining the best estimates for current and future consumer behavior in settings where ideal and actual selves do not coincide.

"To Thine Own Selves Be True: The Effects of Moral Identity and Organizational Status on the Preference for Moral Actions That Differ in Self-Investment"

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Americus Reed II, University of Pennsylvania

Moral action has been defined as showing social responsiveness to the needs of others (Gilligan 1982). This definition implies that a consumer who donates time to a charitable organization and one who gives money to that organization both perform moral acts. But what determines the desirability of these two actions? When given a choice, which of the two actions might a consumer prefer? These questions are the focus of this study.

Answering the question of what determines preferences to give time vs. to give money is difficult because of social and

economic costs. Past research has addressed the specific question of what motivates volunteerism per se (cf. Snyder and Omoto 1995; Clary et. al 1998), but there is less research on what might explain preferences for donating time, when there is equal opportunity to simply provide equivalent financial resources instead. The present study examines this question by investigating an individual-level construct called moral identity that we believe can predict preference for donating time vs. making equivalent monetary donations to organizations that provide social goods. We examine the joint effects of moral identity and organizational status on these preferences. In all cases, we test these relationships while controlling for the unique opportunity costs of consumers in different jobs and organizations.

Data from 310 working adults show that even when accounting for unique opportunity costs, moral identity is positively related to the self-reported preference for donating time vs. donating money to community organizations. Although organizational status was negatively related to preferring to give time vs. give money, the effect was weaker for consumers with a stronger moral identity. Donating time requires a greater involvement of the self than donating money. In addition, the social needs satisfied by these two acts are not identical. Some human needs, like affection, affirmation, or love, can be delivered only when the giver forms a relational bond with the receiver. So while the consumer who donates money to an organization like the Salvation Army contributes materially to meeting the needs of others, a qualitatively different set of needs are satisfied if the consumer decides to offer companionship, inspiration, and emotional support to an at-risk teenager by giving time to an organization like Big Brothers/Big Sisters(r) (cf. Clary, et. al 1998).

This study provides an initial glimpse into how the multiple selves that people use to define who they are might influence a specific judgment about giving time versus money. This study also offers two new contributions to the marketing and decision theory literature. First, it introduces the concept of moral identity into the literature as a possible motivational variable that connects consumers to others through self-validating acts like donating time. Second, it examines the effect of a competing role-based organizational identity associated with having high formal status.

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The Use of Corporate Social Responsibility Arguments in Communication Campaigns: Does Source Credibility Matter?

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EXTENDED ABSTRACT

More companies than ever engage in Corporate Social Responsibility (CSR) activities. Recent research in marketing, however, shows that communicating about CSR activities does not necessarily result in positive business effects for companies (Sen and Bhattacharya 2001). Furthermore, it seems that companies that are doing the most in the area of CSR are also the ones that are criticized the most (*S.E.E. Newsletter* 2001). In this context, some companies are afraid of communicating about their CSR activities. Moreover, consumers tend to be increasingly skeptical about sources of information controlled by companies (Elliot et al. 1993). These issues raise the question of the influence of the type of source used to communicate about CSR (i.e., influence of its perceived credibility) and of the long-term profitability of CSR communication.

Hypotheses

Mohr, Webb and Harris (2001) report that many consumers are cynical about the positive things described in the media and commercial sources of information. Sources controlled by the company are likely to be considered as less credible and less trustworthy than sources controlled by consumer associations. Hovland and Weiss (1951) have shown that attitude change (in the direction advocated by the message) is much stronger when the source is perceived as highly credible than when the source is not as credible. Eisend (2003) showed that the impact of source credibility has increased over the years. It was therefore hypothesized that CSR activities of the company communicated via consumer-controlled sources of information are likely to have a larger positive impact on consumers' attitudes than CSR activities communicated via company-controlled sources of information (*H1*).

Results from Swaen and Vanhamme (2003) indicate that the positive effect of CSR arguments is totally cancelled out if the company is accused of behaving non socially later on. These results could be explained by a contrast effect (Sherif and Hovland 1961). When a company overtly promotes itself as socially responsible, it creates a more positive context than when it does not mention its CSR activities in its campaigns. As a result, negative information about the company's alleged irresponsible acts will come across as more discrepant with the context in the former case and may thus result in more negative judgments than in the latter case (*H2*). This contrast effect should appear no matter the type of medium used.

Methodology

The experimental design is a 2 (CSR vs. NO CSR) by 2 (article of a consumer association vs. company website) by 2 (measures before and after accusation vs. measures only after accusation) between-subject design.

Half of the respondents were asked to read an Internet page printed from the website of a fictive company. The other half of the participants saw exactly the same information, but formatted as an article published by an independent consumer association. For half of the participants the information on the Internet page or in the article contained general statements about the company and its products. Other participants saw identical information, but in addition the text contained information about the firm's CSR activities. Finally, for half of the participants, the conditions in-

involved a measure of the company and product perceptions, purchase intentions, and trust in the company before (*pre-test*) and after (*post-test*) respondents read the newspaper article accusing the company of committing irresponsible acts. For the other half of the respondents, these measures were only collected once, after the negative information about the company's irresponsible acts. 379 respondents participated in the study.

Results

Before the negative CSR-related information, the scores of company and product perceptions, purchase intentions and trust are significantly higher for respondents who read CSR information in an article published by an independent consumer association than for those who read the same information on the company website. Furthermore, the scores are also significantly higher for respondents who read the consumer association's article without CSR arguments than for those who read the full description including CSR arguments on the company website. These results support *H1* and highlight that the source seems to matter more than CSR arguments. However, after the negative information, the initial stronger positive effect due to the credible source (consumer association) disappears.

Contrast analysis of the '*pre-test*' measures shows no significant differences between CSR and no CSR conditions. For the 'consumer association' conditions the difference approaches marginal significance, however.

Moreover—after the respondents read the newspaper article with the negative CSR-related information—scores for the perceptions of the company and its products, purchase intentions, and trust were significantly lower in all conditions.

But, contrary to what was hypothesized (*H2*), promoting itself as socially responsible seems to partially protect the company against accusations of irresponsible behaviors. After such accusations, companies promoting themselves as socially responsible through an article from a consumer association are still perceived more positively and have a better product perception than companies not using CSR arguments in their campaigns. Product perception and purchase intentions are also higher for companies that promoted themselves as socially responsible on their websites than for companies that did not use CSR elements on their websites.

Conclusions

This study clearly highlights that using a source that is not perceived as controlled by the company increases the positive impact of CSR campaigns on consumers' attitudes. The choice of the right source may even lead to better outcomes than using CSR arguments (these 'source effects' do, however, not remain stronger than the 'CSR effects' if the company is facing accusations of irresponsible acts later on).

This research also confirmed that accusations of irresponsible acts—whatever the source used—do lead to a strong deterioration of consumers' attitudes. However, the results showed that—even if CSR campaigns do not necessarily lead to better outcomes for the company in the short term—, they may still partially protect companies facing crises, such as accusations of irresponsible acts.

These results suggest that companies should communicate their CSR campaigns through sources of information that are perceived as

independent from the company. These sources of information generate the highest positive effects in the short term and protect equally against accusations of irresponsible behaviors than other sources of information. Furthermore communicating about the company CSR activities does not seem to backfire if the company is accused of behaving irresponsibly later on.

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Antecedents of Green Purchase Behavior: An Examination of Collectivism, Environmental Concern, and PCE

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ABSTRACT

Applying the conceptual framework of value-attitude-behavior relationship, the present study identifies key antecedents of green purchase behavior and develops a model for explaining their influence on ecological consumption. Using structural equation modeling, the effects of collectivism, environmental concern and Perceived Consumer Effectiveness (PCE) on ecological purchase and their interrelationships are investigated. Results suggest that the influence of collectivism flow through PCE; the collectivistic value orientations influence beliefs about consumer effectiveness, which in turn influence green buying behavior. Environmental concern, on the other hand, directly influences green purchase behavior. Implications and directions for future research are discussed.

INTRODUCTION

Public concern for environmental issues has gradually increased over the past three decades since the inception of Earth Day. Over 70 percent of Americans reported that they were in support of environmental protection and 49 percent said they would avoid purchasing products that are potentially harmful to the environment (Hueber 1991). Marketers have reacted to consumers' growing environmental consciousness by developing "environmentally friendly" products (Kohl 1990). However, only a few "green" products have been successful (Reitman 1991) despite the vast majority of consumers reporting that their purchases were influenced by environmental concerns (Chase and Smith 1992).

Little empirical evidence exists to support that proenvironmental attitudes and beliefs translate into environmentally conscious behavior such as green buying and recycling (Hume 1991). It is notable that proenvironmental behaviors differ from general purchase-related consumer behaviors. Engaging in a general purchase behavior is driven by an assessment of its benefits and costs that are relevant solely to the individual consumer performing the behavior. By contrast, environmentally conscious behavior is unlikely to deliver instant personal gain or gratification, but rather the future-oriented outcome (e.g., cleaner environment) that often benefits society as a whole (McCarty and Shrum 2001).

Accordingly, academic research in this area has centered on the identification of consumer motivation underlying proenvironmental behaviors (e.g., Bagozzi and Dabholkar 1994; Lee and Holden 1999) and the explication of the relationship between cognitive or motivational factors and environmentally conscious behavior (e.g., Dietz, Stern, and Guagnano 1998; Karp 1996; McCarty and Shrum 1993, 1994). Despite the continued efforts, it is still difficult to predict consumer acceptance of proenvironmental behavior. Prior research has identified several key factors motivating environmentally conscious behavior, including individuals' concerns about the environment, their beliefs about their ability to ease the problem (Elle, Weiner, and Cobb-Walgren 1991), and an overall orientation towards the welfare of others (Schwartz 1977; Stern, Dietz, and Kalof 1993) or towards their relationship with others (McCarty and Shrum 2001).

The purpose of the study presented in this paper is to develop and test a model that explains the potential influences of consumer value orientation and general proenvironmental concerns and be-

liefs on green buying behaviors. Moreover, the study clarifies how these variables relate to each other. The findings of this study further our understanding of what drives green buying behavior and provide implications for public policy makers and marketers.

THEORETICAL BACKGROUND

Collectivism and Green Purchase

Originated from Hofstede's work (1980), the notion of individualism versus collectivism illustrates differences in basic beliefs that individuals hold with respect to their interaction with others, priority of group goals, and perceived importance of unity with others. In general, people from individualistic cultures tend to be independent and self-oriented whereas those from collectivistic cultures are more interdependent and group-oriented. Individualism is characterized by independence, self-reliance, freedom of choice, and a high level of competition (Triandis 1989), while collectivism emphasizes interdependence, in-group harmony, family security, group-oriented goals, social hierarchies, cooperation, and a low level of competition (Hofstede 1980; Triandis 1995). This value orientation has been investigated mostly at the aggregate level to detect similarities and differences across cultures. An alternative view argues that a person may possess both individualistic and collectivistic tendencies and individuals within a culture differ in their value orientation. Consequently, personal beliefs with regards to the cultural orientation can be examined at the individual, psychological level and these person-level tendencies, often termed *idiocentrism* and *allocentrism* referring to individualism and collectivism, respectively, are considered to replicate the cultural-level classification (Triandis 1989, 1994).

Individualistic or collectivistic orientations have been found to influence a variety of social behaviors. Likewise, person-level tendencies of individualism or collectivism appeared to influence their motivation to engage in environmentally conscious behaviors. McCarty and Shrum (1994, 2001) found a positive impact of collectivism on consumer beliefs about recycling and their recycling behavior. That is, collectivistic persons are more likely to engage in recycling behaviors because they tend to be more cooperative, be more willing to help others, and emphasize group goals over personal ones than individualistic people. By contrast, people with individualistic tendencies tend to view recycling less important (McCarty and Shrum 2001) and are less likely to participate in behaviors for resource conservation (Dunlap and Van Liere 1984) than collectivistic people. Similar results were also found for ecological commitments (Li 1997), but little is known about the potential influences of collectivism or individualism on green purchase behaviors.

Theoretically, values can motivate and influence behavior (Carman 1977; Williams 1979). As the most abstract and general cognition, values guide the actions and judgments of people across specific situations and stimuli (Rokeach 1973); however, because values (as conceptualized in the tradition of social psychology) are the guiding foundations for attitude and belief development, values typically influence behavior indirectly through more specific attitudes or beliefs with regards to an object, topic or idea (Parsons and Shils 1951; Tolman 1951). The studies by McCarty and Shrum

(1994, 2001) showed an indirect effect of collectivism on recycling behavior mediated by the attitudes and beliefs related to recycling. Similar to these findings, the effects of collectivism on green purchase behaviors are predicted to flow through more specific attitudinal and cognitive concepts. The literature suggests environmental concerns and consumer self-efficacy as potential intervening variables in the relationship between collectivism and green buying behaviors.

Environmental Concerns and Green Purchase

Fundamental to environmental research is an individual's concern for the environment (Hines et al. 1987). Environmental concern denotes an individual's general orientation toward the environment and an individual's concern level as to environmental issues has been found to be a useful predictor of environmentally conscious behavior ranging from recycling behavior (Arbuthnot and Ligg 1975; Kellgren and Wood 1986; Simmons and Widmar 1990) to green buying behavior (Chan 1996; Donaton and Fitzgerald 1992; Kerr 1990; Ottman 1993; Schlossberg 1992). For instance, consumers with a stronger concern for the environment are more likely to purchase products as a result of their environmental claims (Mainieri et al. 1997) than those who are less concerned about the environmental issues.

An individual's environmental concern has also been found to relate to his or her fundamental beliefs or values (e.g., Schultz 2000; Stern et al. 1995) and can be determined by the individual's core value orientation. For example, environmental concerns are positively influenced by altruistic values including biospherism, but negatively relate to egoistic values (Schultz and Zelezny 1998). Similarly, collectivism may be linked to environmental concerns due to its emphasis on the well-being of the group members.

Central to the logic of the aforementioned relationships between collectivism, environmental concerns, and green purchase behaviors is a hierarchical model of value-attitude-behavior that has served as the conceptual framework for predicting a wide range of behaviors (e.g., Follows and Jobber 2000; Homer and Kahle 1988; McCarty and Shrum 1994). Yet, the strengths of the attitude-behavior relationship have been controversial (e.g., a weaker relationship than expected). Other factors such as behavioral intentions and situational factors have been suggested as additional variables explaining behavior, and some studies attempted to explain consumer participation in environmental behaviors by focusing on motivational concepts such as personal efficacy.

Perceived Consumer Effectiveness (PCE) and Green Purchase

Similar to the concept of self-efficacy in social learning theory (Bandura 1986), Perceived Consumer Effectiveness (PCE) refers to the extent to which individuals believe that their actions make a difference in solving a problem (Ellen, Weiner, and Cobb-Walgren 1991). PCE, defined as "the evaluation of the self in the context of the issue" (Berger and Corbin 1992, 80-81), differs from an attitude that reflects an evaluation of an issue (Tesser and Shaffer 1990).

Ellen, Weiner and Cobb-Walgren (1991) demonstrate that PCE for environmental issues is also distinct from environmental concerns or attitudes and make a unique contribution to the prediction of environmentally conscious behaviors such as green purchase. Consumer concerns about the environmental issues might not easily translate into proenvironmental behaviors; however, individuals with a strong belief that their environmentally conscious behavior will result in a positive outcome are more likely to engage in such behaviors in support of their concerns for the environment. Accordingly, self-efficacy beliefs may influence the likelihood of performing green purchase behavior.

PCE is determined by knowledge as well as direct and indirect experiences and varies with individuals as their personal knowledge and experiences differ (Brown 1979; Thompson 1981). Some people believe that their actions result in particular outcomes and thus bring about changes, while others have little confidence in their ability to make a difference. PCE is situation or issue-specific and this personal belief might be formed under the influence of more general or abstract value orientations. Individuals with a more collectivistic tendency are interdependent with members of their culture and their behaviors are shaped primarily on the basis of group norms and goals (Mills and Clark 1982). People who have a more collectivistic orientation also rate themselves higher on collectivist traits including respectfulness, obedience, dutifulness, reciprocity, self-sacrifice, conformity, and cooperativeness than those from individualistic cultures (Grimm et al. 1999). Thus, these collectivistic individuals might expect other members to perform the same behavior and thus have greater beliefs in making differences by engaging in the behavior at the aggregate level although the behavior is performed individually.

THE PROPOSED MODEL AND HYPOTHESES

The purpose of this study is to systematically assess the effects of collectivism, environmental concerns, and PCE on green purchase behavior and to explicate the interrelationships among the constructs. In light of the aforementioned discussion, a model is constructed and Figure 1 presents the proposed model with the hypothesized structural linkages among the variables. General predictions suggest that the value orientation of collectivism, defined and operationalized at the individual level, exert indirect effects on green buying behavior through PCE as well as direct effects. At the same time, environmental concerns might positively relate to green buying behavior according to the attitude-behavior framework. Specific hypotheses for the causal paths between the variables are put forth as follows:

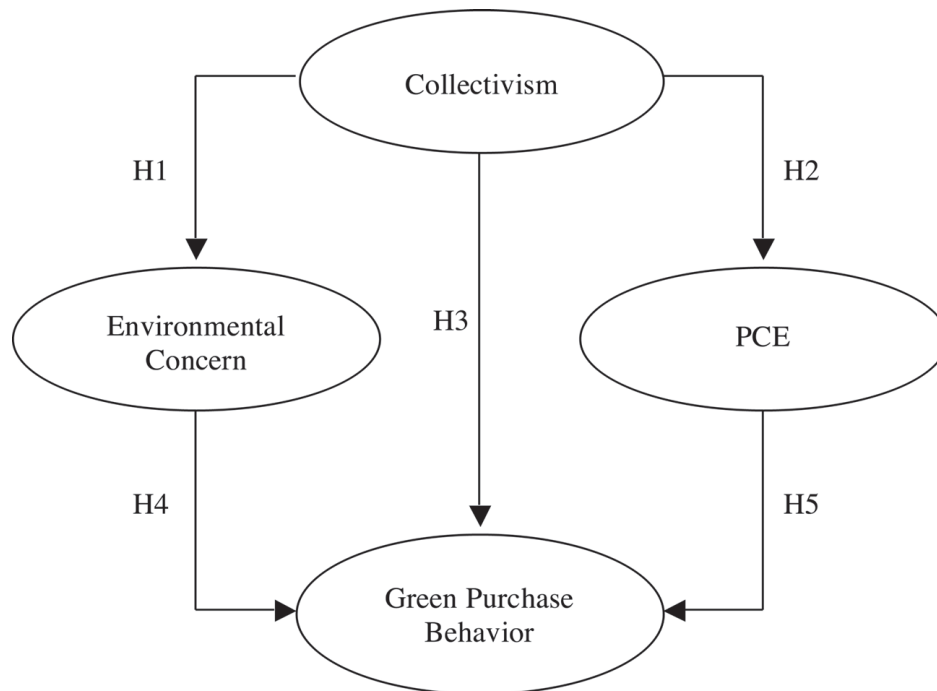
- H1: Collectivism directly and positively relates to environmental concern. People who are more collectivistic are likely to be more concerned about environmental problems than are those who are less collectivistic.
- H2: Collectivism directly and positively relates to perceived consumer effectiveness (PCE). People who are more collectivistic are likely to have higher self-efficacy in solving environmental problems than are those who are less collectivistic.
- H3: Collectivism directly and positively relates to green purchase behavior. People who are more collectivistic are more likely to engage in ecological consumption than those who are less collectivistic.
- H4: Environmental concern directly and positively relates to green purchase behavior. People with a high level of environmental concern are more likely to engage in proenvironmental behavior than are those who are less concerned about environmental issues.
- H5: PCE directly and positively relates to green purchase behavior. People who have higher PCE are more likely to engage in ecological consumption than are those with lower PCE.

METHOD

Participants

Data for the study were collected through a self-administered survey distributed to students enrolled at a Midwestern university.

FIGURE 1
Proposed Model



A total of 304 undergraduates participated in the study. The respondents ranged in age from 18 years to 29 years, with an average of 20 years. Of the total respondents, 40 percent were male and 60 percent were female. Over 82 percent were Caucasians and approximately 72 percent of the participants majored in advertising, public relations, or telecommunications.

Measures

Each latent construct was measured using multiple items, mostly adapted from previous literature. Collectivism was measured on a five-point, four-item scale with anchors of (1) "not at all important" to (5) "extremely important" (e.g., Yamaguchi 1990). PCE and environmental concerns were assessed on a seven-point, five-item, Likert-type scale respectively with endpoints of (1) "strongly disagree" to (7) "strongly agree." Respondents indicated the extent to which they engaged in purchasing green products on a five-point scale anchored with (1) "never," (2) "rarely," (3) "sometimes," (4) "often," and (5) "always." The specific items for the constructs as well as their means, standard deviations, and reliabilities are reported in Table 1.

DATA ANALYSIS AND RESULTS

To understand interrelationships between the constructs of interest, a proposed structural equation model was tested and retested with AMOS 4, using a two-step model-building approach that tests the measurement model before examining the hypothesized structural linkages (Anderson and Gerbing 1988). First, a measurement model that included latent constructs and indicators was first analyzed. Second, the proposed model with hypothesized relationships was tested and refined through a series of tests in an attempt to better explain the data. As a result, a final model is

presented. Missing data were treated with listwise deletion of cases and 302 cases were used for analysis.

The measurement model showed that all of the items significantly loaded on their corresponding factors ($p < .01$). With the use of existing scale items adapted from the literature for measuring the latent variables, the indicators were hypothesized to load on only one factor and the error terms were not allowed to covary unless a compelling conceptual justification was provided. Table 1 reports the factor loadings for each latent variable and correlations, covariances, and variances of the latent constructs are presented in Table 2. Overall, the goodness-of-fit indices indicated a good fit of the measurement model; $\chi^2 = 211.84$, $d.f. = 144$, $p < .01$; $GFI = .93$; $AGFI = .91$; $TFI = .96$; $CFI = .96$; $RMSEA = .04$.

Testing Hypotheses

The first step in testing the fit of the model was to estimate the paths in the proposed model in Figure 1. Of the five hypothesized relationships, three were statistically significant in the expected direction ($p < .01$), supporting H2 (collectivism to PCE), H4 (environmental concerns to green purchase behavior), and H5 (PCE to behavior). Contrary to expectations, however, two relationships were not significant ($p > .05$), thereby disconfirming H1 (collectivism to environmental concerns) and H3 (collectivism to behavior). Unstandardized and standardized path coefficients for the proposed model are reported in Table 3.

The goodness-of-fit indices suggest that the proposed model fit the data well; $\chi^2 = 237.10$, $d.f. = 145$, $p < .01$; $GFI = .92$; $AGFI = .90$; $TFI = .94$; $CFI = .95$; $RMSEA = .05$. However, in an attempt to refine the models and achieve parsimony, the non-significant relationships were tested in the second phase of the analysis by systematically relaxing a restriction and examining the resultant change in

TABLE 1
Summary of Measures, Descriptive Statistics, and Factor Loadings

Constructs	Measures	Unstd.	Std.
<i>Collectivism</i> Mean=3.58 SD=.93 Alpha=.76	I respect the majority's wish.	1.00*	.65
	I support my group, where they are right or wrong.	1.06	.59
	I respect decisions made by my group.	.87	.71
	I maintain harmony in my group.	.65	.52
<i>Perceived Consumer Effectiveness</i> ^a Mean=5.15 SD=1.16 Alpha=.74	Each person's behavior can have a positive effect on society by signing a petition in support of promoting the environment.	1.00*	.57
	I feel I can help solve natural resource problem by conserving water and energy.	1.41	.82
	I can protect the environment by buying products that are friendly to the environment.	1.16	.74
	There is not much that I can do about the environment (R). I feel capable of helping solve the environment problems.	.84 .76	.47 .46
<i>Environmental Concerns</i> ^a Mean=5.19 SD=1.85 Alpha=.84	I am extremely worried about the state of the world's environment and what it will mean for my future.	1.00*	.79
	Mankind is severely abusing the environment.	.89	.76
	When humans interfere with nature it often produces disastrous consequences.	.80	.67
	The balance of nature is very delicate and easily upset. Humans must live in harmony with nature in order to survive.	.69 .66	.65 .64
<i>Green Purchase Behavior</i> M=2.48 SD=1.23 Alpha=.83	I make a special effort to buy paper and plastic products that are made from recycled materials.	1.00*	.57
	I have switched products for ecological reasons.	1.40	.79
	When I have a choice between two equal products, I purchase the one less harmful to other people and the environment.	1.40	.71
	I make a special effort to buy household chemicals such as detergents and cleansing solutions that are environmentally friendly. I have avoided buying a product because it had potentially harmful environmental effects.	1.29 1.27	.68 .69

Notes: ^a Items were measured on a 7-point scale. The other items were assessed on a 5-point scale.
 * Reference indicators
 All factor loadings are significant (p<.01).

TABLE 2
Correlation-Variance-Covariance Matrix for Latent Constructs

	Collectivism	PCE	Environmental Concern	Green Purchase
Collectivism	.401	.114	.025	.017
PCE	.224	.650	.321	.145
Environmental Concern	.035	.351	1.288	.326
Green Purchase	.044	.300	.480	.359

Note: Variances are on the diagonal. Correlations are in the lower triangle and covariances are in the upper triangle.

TABLE 3
Parameter Estimates and Summary of Model-Fit Statistics

	Relationship From → To	Proposed Model		Final Model	
		Unstd.	Std.	Unstd.	Std.
H1	Collectivism → Environmental Concerns	.11 ^a	.06	—	—
H2	Collectivism → PCE	.29	.23	.28	.22
H3	Collectivism → Behavior	-.01 ^a	-.01	—	—
H4	Environmental Concerns → Behaviors	.13	.44	.23	.44
H5	PCE → Behaviors	.11	.18	.13	.17
<i>Goodness-of-fit indices</i>					
	χ^2 (d.f.)	237.10 (145)		237.77 (147)	
	Goodness of Fit Index (GFI)	.92		.92	
	Adjusted GFI (AGFI)	.90		.90	
	Tucker-Lewis Index (TLI)	.94		.94	
	Comparative Fit Index (CFI)	.95		.95	
	RMSEA	.05		.05	

Notes: ^a $p > .05$, All other parameters are significant at $p < .01$.

chi-square. That is, the chi-square indices of the models without each of the paths were re-estimated and compared to the proposed model. The paths from collectivism (1) to environmental concerns (H1) and (2) to behaviors (H3) were tested and found not to yield significant changes in chi-square: (1) $\chi^2_{\text{difference}} = .65$, d.f.=1, $p > .1$, (2) $\chi^2_{\text{difference}} = .03$, d.f.=1, $p > .1$. Thus, these paths were removed from the original model as they did not significantly contribute to an improvement of the model fit. Parameter estimates for the revised model are presented in Table 3. The modified model also accounts for the data well; $\chi^2 = 237.77$, d.f.=147, $p < .01$; GFI=.92; AGFI=.90; TFI=.94; CFI=.95; RMSEA=.05. While the fit of the modified model did not improve much from the original model, it is presented as the final model since it is more parsimonious without any non-significant causal linkages. See the final model in Figure 2.

DISCUSSION

As public concern for the environment increases, green marketing, which appeals to consumers with products that are “green” or “environmentally friendly,” emerged as a new strategy. Ecologically themed product claims, such as “safe for the environment” and “biodegradable” (Hastak, Horst, and Mazis 1994), became common in the 1980s (Davis 1993; Ottman 1998). However, there is skepticism about how committed consumers are to environmentally friendly products in the real marketplace. Not all people who consider themselves environmentally concerned purchase and consume products environmentally positioned.

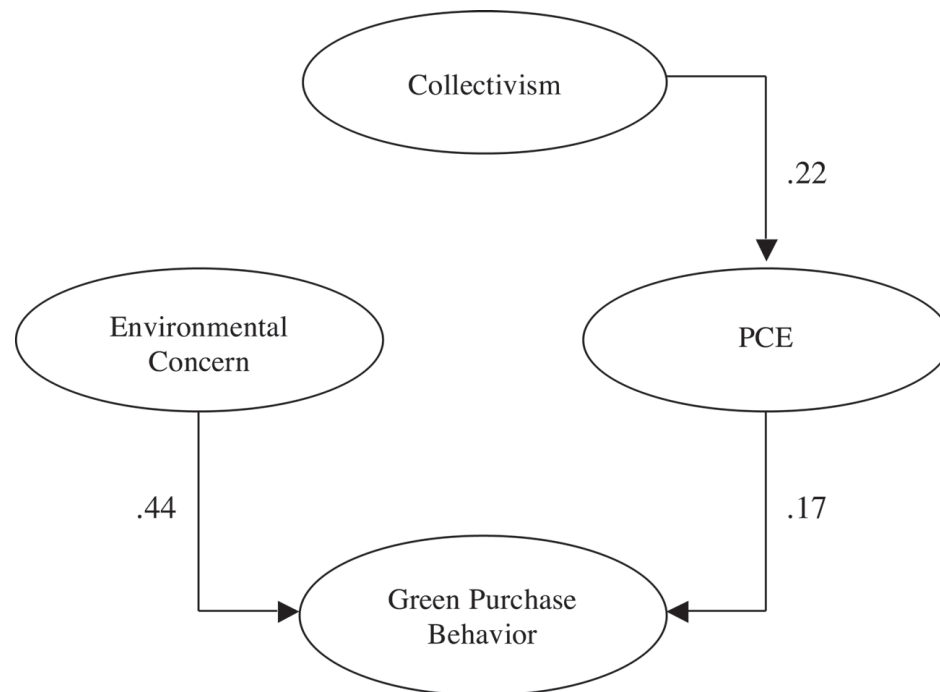
Past studies of environmental or ecological concern have examined this environmental concern as an attitude toward the environment and as reflected in past behaviors. Few studies have attempted to model the psychological determinants of ecological consumption (see Ellen, Wiener, and Cobb-Walgreen 1991 for a notable example) and no empirical research has tested a theoretical model integrating consumer values and environmental concern and assessing their influence on green purchase decisions. The study presented in this paper provides a deeper understanding of green

buying behavior by focusing on how collectivism, environmental concern, and PCE drive ecological consumptions as well as how relate to each other.

As the starting point for the model presented in this paper, collectivism, defined as an individual-level value orientation, appeared to positively influence individuals’ tendency to buy green products, but only through their positive beliefs about self-efficacy. Collectivistic individuals who value group goals and cooperation might be highly motivated to make proenvironmental choices by having stronger beliefs that their behavior would make a difference in mitigating environmental problems. Greater perceived self-efficacy directly influences the likelihood that consumers actually engage in green purchase behavior. These findings seem to reflect the unique nature of proenvironmental behavior. Unlike general product purchase decisions, ecological consumption choices are future and group oriented. That is, instead of instant gratification for the buyer, using green products often provides benefits for the entire society in the long term. Continuous reinforcement of self-efficacy should be provided for further promoting consumer commitment to green purchase. Environmental concerns also had a direct, positive influence on green purchase, suggesting that consumers who possess strong environmental concern may be interested in consumption of products that reflect that concern. However, environmental attitudes or concerns that reflect an individuals’ orientation or belief toward the environment specifically appear to be not related to their collectivistic tendencies at a more general level.

Theoretically, the approach used in this study resembles the conceptual framework of several previous studies on proenvironmental behaviors that emphasize the role of intervening variables between values and behavior (Homer and Kahle 1988; McCarty and Shrum 1993, 1994, 2001). Findings of this study also highlight the importance of consumer attitudes towards issues closely related to the behavior of interest in understanding the relationship between values and behavior. Fundamental values that individuals hold at an abstract level can motivate and drive behav-

FIGURE 2
Modified Model



Note: All the path parameters are standardized coefficients and significant ($p < .01$).

ior, but attitudes and beliefs measured with regards to a particular object or topic may intervene between the abstract values and the specific behavior. Therefore, a better predictor of target behavior can be obtained by considering the level of specificity of attitudes and behavior or motivational factors such as personal efficacy and behavioral intentions.

In practical terms, findings of this study offer implications for marketers and public policy makers who promote green products or programs for proenvironmental behavior. Taken together, the results suggest that it is important to increase consumer awareness of the environmental issues and enhance the perceived efficacy of their contribution to improving them. Applied to the segmentation and targeting strategies, promotional messages can be tailored to collectivistic people with an appeal that emphasizes the importance of their role in improving the environment as an achievement of group goals such as the society's well-being. For example, the portrayal of an individuals' green behavior contributing to the welfare of the community they belong to might effectively encourage people to act proenvironmentally. For those who are already environmentally concerned, an emphasis on success they can yield by taking environmentally conscious actions might be effective for promoting their ecological purchase and consumption.

LIMITATIONS AND SUGGESTIONS FOR FUTURE RESEARCH

As with any other studies using a student sample, the findings of this study might not represent consumers at large. A replication of this study with more general consumers of a wide range in their characteristics might be necessary to attest the applicability of the

model to the broader public. Similarly, the model presented in this paper was tested for green buying decisions only, so the interrelationships among the variables might vary with different types of proenvironmental behavior such as recycling or energy saving behavior.

The conceptualization of collectivism and its relationship to other related variables in the model needs future work. Although not significant, collectivism appeared to have a negative direct effect on green purchase, contrary to the expectation. A stream of research on the value orientations of collectivism and individualism suggests an explanation for this potentially negative relationship between collectivism and proenvironmental behavior. Collectivistic individuals see themselves as a part of one or more groups they belong in and emphasize the values and norms of those in-groups (Triandis 1995). Accordingly, individuals with more collectivistic tendencies put a greater emphasis on the interests of members of their in-groups than the welfare of the general public comprising outsiders as well. Collectivistic people are more likely to pursue the goals of their in-groups than those of out-groups or the public at large when these goals are in conflict. By contrast, individuals with individualistic orientations tend not to make a sharp distinction between in-groups and out-groups when responding to the needs of others and they often meet outsiders and form new in-groups (Triandis 1990; Triandis, McCusker, and Hui 1990). As a result, individualistic people are more open to new ideas and behaviors, whereas collectivistic people tend to retain traditional ideas and be reluctant to change their behaviors and habits (Triandis 1972). There alternative predictions for the effects of collectivism on ecological behavior warrant future research.

In line with the relevant literature, the value-attitude-behavior structure proved useful for understanding the predictors of environmentally conscious behavior and their interrelationships. Future research should continue to delve into this question as to what drives ecologically friendly behaviors by incorporating more cultural and psychological factors. A more comprehensive model could be constructed in which more relevant variables are identified and the related variables are laid out from general to specific with regards to the issue of interest or context of target behavior.

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Becoming Sensitive to Ethical Consumption Behavior: Narratives of Survival in an Uncertain and Unpredictable World

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ABSTRACT

This paper examines ethical consumption behavior as a subjective and contextual phenomenon. For this study, nine informants who modified their consumption lifestyle and adopted ethical consumption practices were interviewed using existential phenomenology. The hermeneutic analysis of the 458 verbatim-transcribed pages provided insights into the factors influencing the development of alternative lifestyles and the meanings consumers associate to ethical consumption. Ultimately, ethical consumption behavior responds to an individual choice that is contingent upon living in an uncertain and unpredictable world.

INTRODUCTION

Ethical consumption behaviors are “decision making, purchases, or other consumption experiences that are affected by the consumer’s ethical concerns” (Cooper-Martin and Holbrook 1993, p. 113). In an effort to better understand ethical consumption behavior, researchers have taken at least three distinct directions. Those three distinct orientations can be named agentic, structural, and dualistic approaches.

First, some researchers focus on defining ethical consumers’ criteria in terms of demographics, socioeconomics, psychographics, pro-social behaviors, ideologies, or beliefs (Rawvas 2001; Tanner and Kast 2003; Zhongzhi 2001). By labeling the supposed characteristics of ethical consumers, these studies attempt to identify the causes of consuming ethically. For example, some researchers emphasize that cultural personality types (Pitta et al. 1999; Rawvas 2001; Singhapakdi et al. 1999), or collective concerns (Kim and Choi 2004) are important determinants in ethical consumer decision-making. Under this perspective, ethical consumption behavior is believed to reflect rational and intentional individual choices.

While the first stream of research suggests that individuals’ characteristics affect ethical-decision making process, another stream points toward social obligations. By focusing on the underlying “moral principles and standards that guide behavior of individuals or groups as they obtain, use, and dispose goods and services” (Muncy and Vitell 1992, p. 298), this second field considers that individuals consume in order to be part of society. For example, studies by Grove et al. (1989) and Chatzidakis et al. (2004) suggest that consumers try to conform to prescribed normative consumer behavior (Chatzidakis et al. 2004; Grove et al. 1989). Similarly, Van Dam and Apeldoorn (1996) emphasize the influential role of marketing theory in the development of ethical consumption behavior. For them, consumer demand responds closely to structural ideologies (Van Dam and Apeldoorn 1996). Such an argument places the consumer as subservient to normative and prescribed discourses of ethical consumption. This approach suggests that ethical consumption behavior is a phenomenon directed and controlled by the systems and structures of production and competition (Baudrillard 1998; Baudrillard 1978; Baudrillard and Levin 1981).

Finally, researchers have combined both fields suggesting that individual characteristics and social obligations simultaneously affect ethical decision-making. For example, Davies et al. (2002) emphasized that both personal norms and social norms are important determinants in the recycling-decision-making process. Similarly, when Shaw and Shiu (2002) developed a theory of planned behavior in the context of ethical consumption behavior, they

considered both self-identity and ethical obligation. Self-identity represents the “pertinent part of an individual self that relates to a particular behavior” and ethical obligation reflects “an individual’s internalized ethical rules” (Shaw and Shiu 2002, p. 287). Both studies concluded that social norms must be internalized in order to impact ethical behavior. When social norms are not internalized but taken as categorical imperatives, individuals develop coping strategies without modifying their behavior (Chatzidakis et al. 2004). With this approach, ethical consumption behavior is no longer a fixed practice determined by either individual characteristics or by normative obligations, but rather a result of the interplay between individual choice (agency) and societal power (structure). On the one hand, ethical consumption behavior is a rational and voluntary choice that reflects individual characteristics, taste, and preferences. On the other hand, ethical consumption behavior is fabricated and imposed by a complex system of social, cultural, and material (re)production. As such, ethical consumption behavior is a selfless and active practice (Cooper-Martin and Holbrook 1993), yet it is carried out within constraints imposed by material situation (i.e.: global warming, waste, pollution) and structural power. Again, a critical aspect of this approach is that social norms must be internalized before it influences behavior. Arguably, effort is required to understand the process through which individuals internalize social norms and obligations. It is precisely in this area that this research aims to contribute.

This study offers an analysis on the dynamic process of how consumers who believe to consume ethically internalize discourses and practices of ethical consumption behavior. The focus here is not on ethical truth but on the interplay between the individual characteristics (agent) and the structural properties of the social systems (structure). The reflexive modernization thesis offers a useful framework for analyzing the interplay between agency and structure (Giddens 1984).

ORIENTING CONCEPTUAL FRAMEWORK: REFLEXIVE MODERNIZATION

The idea of reflexive modernization is presented based on one of the most prominent radical liberal theorist of today: Anthony Giddens. For the author of *Consequence of Modernity* (1990), *Modernity and Self-identity* (1991), *The Transformation of Intimacy* (1992), and more recently *Runaway World* (2002), the primary aspects of reflexive modernization rest on a dynamic relationship between a changing environment (the structure) and knowledgeable and capable individuals (the agent). A chronological reading shows Giddens progressively evolving from issues of risks and post-traditional order to concepts of institutional reflexivity and self-reflexive project (Beck et al. 1994; Giddens 1990; Giddens 1991; Giddens 2003; Giddens 2002; Giddens 1998; Giddens and Cassell 1993).

Anthony Giddens developed his notion of reflexive modernization based on our changing environment (Giddens 2002). For him, we are in the process of moving from a traditional world of calculable risks to one out of control, which he calls a “runaway world” (2002). Giddens developed his arguments looking at issues of risks and de-traditionalization. Using the term manufactured risks, Giddens emphasizes that the most threatening risks in society no longer come “from the fixities of tradition or nature” but rather

from “the very impact of our developing knowledge upon the world” (Giddens 2002, p.26). Risks, such as global climate change, increasing social inequalities, or the development of divorce are global, local, and personal threats that arise from our own intervention upon nature. Manufactured risks cannot be predicted, calculated, or controlled, and thus remain largely unknown. There are no institutions prepared for the worst imaginable incidents such as a nuclear power plant explosion. For such incidents, the calculation of hazard is impossible. Consequences and damages of such incidents are beyond human perception; they overlap delimitations in time and space, and concern everyone. Thus, the idea of controllability, certainty, and security collapses. Giddens argues that living in context of unpredictable risks and uncertainty forces us to live in an experiential world, where day-to-day life is a “dangerous adventure” (Beck et al. 1994, p. 59).

In addition to manufactured risks, Giddens comments on the importance of de-traditionalization. Giddens argues that individuals actively revise their narrative of self-identity in response to living in a “post-traditional order.” The term “post-traditional order” or “late modernity” refers to a process of moving from a traditional world in which order came from institutions, normalizing values, and routines; to a runaway world, in which boundaries blur, patterns dissolve, and social customs and established practices no longer offer guidance (Giddens 1991). In this context, Giddens argues that individuals are liberated from the structural power of small communities and traditions. They are divorced from underlying traditional order and enter into the voluntaristic realm of taste, choice and preference. They are free to question their present existence and anticipate future possibilities (Giddens 1991, p. 47). The process of questioning “how shall I live” and the self-monitoring of actions in the context of post-traditional order is part of the reflexive mobilizing of self-identity. It is the freeing of social life from the fixities of customs and traditions in relation to manufactured risks that leads individuals to engage in a reflexivity of modern social life.

The reflexivity of modern social life consists in the fact that social practices are constantly examined and reformed in the light of incoming information about those very practices, thus constitutively altering their character (Giddens 1990, p. 38-39).

With the diffusion of information on ecological uncertainty, social inequalities, and instability of the global order, individuals become aware that traditional institutions such as nation, family, or work have become inadequate to the task they were asked to perform. Responsive of the inadequacy of institutions, individuals become suspicious of arguments mounted by corporate and state institutions with inherent legitimate authorities. This process of questioning institutional power is what Giddens (1990) calls institutional reflexivity. It implies reflection on or knowledge of the problems and limitations of modernity. Essentially, institutional reflexivity is about changes in relationships and roles within traditional structural boundaries that define society. The agent is freed from “the formulaic truth of tradition” (Giddens, 1994, p. 106).

Freed from the social monitoring of their own actions and normative imprisonment, individuals are forced to order and reorder their activities in the light of their new understanding of the world. Individual’s identity is no longer inscribed within tradition, rules, or customs; rather it is an ongoing project of construction, change, and development (Lash 1999). From the idea that identity is no longer given, individuals shift from being passive, non-reflexive marionettes to being active and reflexive agents. The idea

of everyday life becomes a site of expression, in which individuals are self-reflexive projects committed to civil and political freedom. It involves engaging in an autonomous monitoring of day-to-day practices. This shift derives from a cognitive awareness of the self and the increasing diversity of lifestyle choices. Giddens’ formulation clearly emanates from Erikson’s conception of identity as a “process located in the core of the individual and yet also in the core of his communal culture.” Erikson recognized the essential need for a subjective sense of continuous existence and a coherent memory. This perspective allows for conceptualizations of consumption behavior, in which the knowledgeable agents respond to, critique, and construct social structures in day-to-day choices and practices.

METHODOLOGY

A highly effective way of analyzing the dynamic process of how consumers who believe to consume ethically internalize discourses and practices of ethical consumption behavior in context of contemporary societal conditions is through the study of stories. Stories do not represent facts, but experiences in which individuals encode their day-to-day practices with symbolism and meanings (Giddens 1996; McAdams and Ochberg 1988). They constitute, and are constituted, by essential elements of the individual’s sense of self. In particular, Colby’s (2003) work shows the powerful use of life stories as a way of describing the interaction between the self and morality (Colby 2003). McAdams’s work on lives in transition also exemplifies stories as a powerful medium for considering individual’s sense of identity (McAdams 1997). Stories are qualitative lenses through which one can observe, document, feel, and understand human experiences (Fiese et al. 1999). Thus, using ethical consumers’ life stories can provide a valuable window on the way individuals internalize discourses and practices of ethical consumption behavior.

To gather ethical consumer stories, this study follows the methodology of existential phenomenological interviews (Thompson et al. 1989). Respondents who believe to consume ethically were interviewed in the United States during the year 2003. They were recruited by postings at several health stores and newspapers. All participants had internalized meanings of ethical consumption within their language, discourse, and narratives. Yet, as recommended by Thompson (1997), the respondents did not have a theoretical knowledge of the topic being studied. Due to an emphasis on depth of understanding, the respondent pool was small: nine informants. In terms of the *Journal of Consumer Research*, the recommended number of informants for interpretive research should range between 3 and 20 (Fournier 1998; Murray 2002).

In order to attain the ethical consumer’s first-person description of his/her specific experience, the interview technique required that some trust and pleasant atmosphere existed between the researcher and participants. One practical solution to facilitate trust was to give each informant a pseudonym and assure them of anonymity and confidentiality. Another was to perform the interviews, or rather the conversations, in a comfortable and quiet place in which the informants felt free to describe their ethical consumption experiences in detail.

Since the study draws on the conceptual framework of reflexive modernization, the role of the researcher was to help each informant exhibit a high degree of reflexivity. Toward this aim, the interview began with small talks to help the informant become comfortable with speaking into a recording device. Once the informants expressed openness and will to share their experiences, lengthier and more detailed descriptions were encouraged using questions and probes, as well as thoughts and feelings. The context of the interview gradually helped the respondents to self reflect and

to co-author their stories of ethical consumption behavior. Each interview lasted between one and three hours.

ANALYSIS AND RESULTS

Participants adopted a specific grammar or discourse of ethical consumption through a progression of temporal events. A hermeneutical framework was used to analyze the temporal sequencing of key events and to ascertain the progression of adopting discourses and practices of ethical consumption behavior (Thompson 1997). The iterative analyses of moving back and forth between the data and the conceptual framework of reflexive modernization helped define, sharpen, and differentiate three themes. The three themes were finalized as destabilization, displacement, and discovery.

The theme destabilization has two characteristics: unpredictable and uncontrollable events and ontological insecurity. Informants' stories of ethical consumption behavior show the importance of triggering events that destabilized their vision of life and existence. The events were either abrupt events that happened at a specific time and space or recurring events. In each case, the events were uncontrollable and unpredictable incidents over which informants had no control. Examples of events from the analysis include rape (Laila), physical injury (Robert), children leaving home (Mary), inheritance (Amelia), watching terrifying pictures of butchered animals (Philippe), or dreaming about the end of natural resources (Alexia). For the informants, these events were life-transforming insights resulting from a profound emotion or affective experience.

No one and nothing, not even the parents, friends, institutions, or governments were able to prevent the events from happening. For example, Laila's faith in God and her respect for her parent's norms and values did not protect her from being raped. Similarly, Mary's life commitment to being the perfect wife and mother did not prevent the children from leaving home. The uncontrollability and unpredictability of the events showed the informants that life can neither be predicted nor controlled. Following the events, informants' descriptions of people, institutions, society, and the world gave emphasis to a pessimistic outlook on reality. Their stories described a world that mistreats animal (Philippe), enriches the few and impoverishes the many (Amelia), destroys individuality and creativity (Laila), eliminates local markets and grocery stores (Robert), gradually reduces all values to those of a global hamburger / Coca-Cola society (Mary), and strongly threatens the ecological environment and the availability of natural resources (Alexia). Overall, the uncontrollable and unpredictable events changed informants' view on their life and the world. One of the informants even described the event as an "awakening event" that made her conscious of her life and actions, and the world surrounding her (Laila).

Under the theory of reflexive modernization, Ulrich Beck (1999) speaks about living in a world risk society. For him, the world is facing ecological destruction and technological-industrial dangers, poverty, and weapons of mass-destruction. Similarly, Giddens (1995) describes our contemporary society as a place where nothing can be predicted nor controlled. The uncontrollable and unpredictable event destabilized the idea that governments, institutions, or traditions provide security. The "ontological security" (Giddens 1990; Giddens 1995), or "protective cocoon" (Goffman 1956) disappears. According to Giddens (1991), ontological security is one of the main unconscious human needs. It is a sense of personal safety and absence of threat.

The second theme named displacement marks informants' detachment from the world and others and the start of existential questioning. Again, an unpredictable and uncontrollable event

destabilized informants' ontological security. As the basic human needs of safety and security were no longer fulfilled, informants came to confront their own responsibility of living. As Sartre would say, informants were "condemned to be free" (Sartre 1966; Sartre 1957). Informants were "thrown" into a world of possibilities, free from social normative constraints. They were then forced to question the nature of their existence and their identity. As Laclau mentioned, "If the world of God can no longer be heard, we can start giving our own voice a new dignity" (Laclau 1990). It involves searching for the meaning of life in the self rather than in God's words.

The dominant reaction to the collapse of security and the process of existential questioning was for the informants to see themselves as a helpless victim of external circumstances. Informants perceived old realities as an illusion and expressed feelings of emptiness and disorientation. They felt powerless and lonely, expressing severe anxiety and fear.

The concepts of anxiety and fear are important elements of the reflexive modernization thesis. According to Giddens (1991, p. 44-45), anxiety is essentially "an unconsciously organized state of fear" and "rising anxiety tends to threaten awareness of self-identity." Anxiety attacks the core of the self by distancing the experience of the self from its relation to the world. As the self is distanced from the world and others, it is confronted to the burden of freedom, the necessity to choose an existence.

Discourses and practices of ethical consumption behavior were actualized in informants' life only if during a phase of discovery. The last theme called discovery implies discovering and recognizing ethical consumption behavior and a new identity through an involvement with others. Others' life examples opened informants to a new possibility of being and a new way of consuming. Here, anxiety and fear were broken down, legitimization and justifications for a change in consumption lifestyle were found, and a sense of a new identity emerged.

This last theme clearly shows that ethical consumers do not exist outside time and context as if they were singular human beings with immutable and autonomous properties, encapsulated in magical 'ethical' islands. On the contrary, informants internalized discourses and practices of ethical consumption behavior through their relations with others and the world. They adopted rhetoric of ethics, or the notion of the common good, in their day-to-day consumption practices as it related to social and political contexts and consequences. Adopting ethical discourses and practices generated a process of value alignment guided by a commitment to the self and to others, a negotiation of subjective expressions, and a procedure of identification.¹ Such processes embraced an ongoing dialectical interplay between the individual's past, present, and anticipated future and his/her complex social environment. Fundamentally, this theme emphasizes that the process of adopting ethical discourses and practices is historically developed and is the manifestation of social interdependence (Dolan 2002).

The importance of social shaping in the internalization of discourses and practices of consumption lifestyles is prevalent in consumer behavior literature (Schouten 1991; Schouten and McAlexander 1995). Studying Harley Davidson Bikers, Schouten and McAlexander (1995) speak about social shaping in term of "commitment-based status hierarchy." For them, the gradual transformation consumption practices entails a commitment to a subculture.

¹Identification is a term employed by Melucci in "The Playing Self" to characterize the procedure, processual, self-reflexive, and constructed manner in which we define ourselves.

CONCLUSION

This study analyzed the how of ethical consumption behavior. It emphasizes the process of internalization of discourses and practices of ethical consumption behavior.

The framing of an ethical consumption behavior starts with the implicit human need for security. After an unpredictable and uncontrollable event, informants felt in the grip of forces over which they had no power. With available cultural discourses and the help of others' life examples, they realized that the powerlessness they experienced was not a sign of personal failing, but reflected the incapacities of institution to provide security.

With the analysis, it became clear that the internalization of ethical consumption discourses and practices did not solely emerge from a rational reflection or cognition, but rather from a life-transforming event that led informants to (re)assess their environment and (re)shape their lives. Here, ethical consumption behavior is viewed as a dynamic socially constructed concept whereby consumers are mutually constituted by their own agency and by their changing structural environment. Ultimately, ethical consumption behavior represents an individual choice that is contingent upon living in a world risk society (Beck 1999). On those terms, adopting ethical consumption behavior refers to a project of becoming "the kind of person one should aspire to be, the type of life one is encouraged to lead, the practices which are invented to turn into moral beings, into the right sort of person" (Weeks, 1995, p. 56).

The use of the reflexive modernization thesis in this study provides important inferences on consumption practices. Consumption used to be seen as almost exclusively a function of a real subject motivated by needs and confronted by real objects as sources of satisfaction. Such perspective gave ultimate power to a rational, creative, and autonomous consumer, free from structural influences. In clear opposition to this under-determined view of consumer sovereignty were the critical theorists such as Galbraith (1979), Marcuse (1964), or Baudrillard (1998) who noted that consumers, although apparently free, were in fact dominated by processes of massification, domination, and commodification² structured by The Hidden Persuaders (Packard 1980). Under this second perspective, the consumers are manipulated by an unlimited structural power. While this suggests important oppositional views on consumption, the reflexive modernization thesis provides a useful dialectical view on consumption (Cherrier and Murray 2004; Dolan 2002; Giddens 1998; Murray 2002; Weeks 2000; Weeks 2003).

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²See Cherrier and Murray (2004).

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***FUN*draising: Having Fun while Raising Funds**

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EXTENDED ABSTRACT

Charities around the globe are experiencing funding challenges that jeopardize the ability of these organizations to perform their missions. Government support is in decline (Hibbert and Horne 1995), direct donations are falling, and the number of charities seeking funding continues to grow each year (Liao, Foreman and Sargeant 2001). Given this challenging fundraising environment, charities are looking for new ways to raise support.

This paper extends the study of charity support behavior (CSB) beyond the extant literature; a body of research that has focused on a narrow set of CSBs (e.g. donations, volunteering) to the exclusion of other more experiential forms of charity consumption (e.g. charity lotteries). For instance, the current literature fails to account for the myriad of purchasing behavior that directly supports charity, namely: CRM (Varadarajan and Menon 1988); charity events (e.g., Farm Aid), charity products (Bennett and Gabriel 2000); and charity gaming (e.g., charity lotteries/raffles, bingos, auctions). Given that consumers have been shown to derive considerable pleasure from shopping and buying (i.e., experiential consumption: Holbrook 2000; Holbrook and Hirschman 1982) it is believed that the failure to study purchasing as charity support behavior is a considerable oversight. Moreover, it is argued that because these charity consumption experiences provide a unique set of consumption values (i.e., pleasure) they represent incremental fundraising opportunities.

The authors first used the five consumption values introduced by Sheth Newman and Gross (1991)—emotional, functional, social, conditional and epistemic—to categorize CSB motives identified in the extant CSB literature. Although most studies were found to contain motives reflecting functional and emotional value, references to fun, play and amusement were noticeably missing from CSB motive typologies. To contrast CSB motives with those of experiential consumption, the authors also applied Sheth et al.'s (1991) five consumption values to the extant literature on gambling motives.

Next, an exploratory qualitative study was undertaken to gain insight into a related form of experiential charity consumption—charity gaming. Specifically, the study focused on the purchase of premium charity lottery tickets (CLTs). This particular type of lottery features much larger prize pools (i.e. thousands of prizes valued at millions of dollars) and higher ticket prices (e.g. \$20-\$100 per ticket) than the typical charity raffle. Given its exploratory nature, a desire for depth of insight and few a priori themes or research questions, this preliminary study employed a long interview methodology (McCracken 1988) were conducted for this exploratory study given research objective focused on s. Although these interviews were focused on CLT purchase behavior, they also examined charity support more generally.

Perhaps the most surprising theme uncovered from the interviews was that the CLT purchase was viewed by study participants as a donation; a finding that supports the authors' position that these lotteries are charity support behavior. In fact, ticket buyers revealed that their main reason for purchasing a ticket was to support the charity or cause. For instance, participants commonly used the words "donation" and "contribution" when talking about their ticket purchases. And, consistent with previous research on CSB motives, altruism—an emotional value—was seen to be the primary motive for the consumption of CLTs.

However, initial insights from CLT buyers also supported the belief that charity gaming is *FUN*draising and that CLTs provide buyers with considerable pleasure. For instance, interviews revealed that these tickets evoke the kinds of fantasies, feelings and fun associated with experiential consumption (Holbrook and Hirschman 1982). Thus, participants indicated that while their CLT purchases were primarily motivated by one emotional value—altruism—their consumption experience was enhanced by the "fun" they received from buying, sharing and thinking about the lottery ticket and its prizing. It is this latter set of functional and emotional values that are not identified in previous typologies of CSB motives.

The interviews also provide evidence to support the authors' contention that these experiential forms of charity support are a distinct form of CSB and that they are an incremental form of support. To this end, several participants remarked if charities they currently support were to introduce a lottery, they would support the lottery "in addition to" current support activities. It is believed that experiential CSBs such as charity lotteries, while primarily motivated by altruism offer hedonic benefits atypical of those offered by traditional fundraising methods. Thus, charity lotteries are not expected to cannibalize other forms of charitable support because they offer supporters with a different set of values.

Although the current study focussed on one form of experiential CSB, the charity lottery—the authors suggest that there are a number of other forms of *FUN*draising, such as charity events (e.g., fun runs) that have been overlooked by the CSB literature. In fact, according to Higgins and Lauzon (2003) many charities have recognized the importance of such events as they try to "put the fun back in fundraising." The authors introduce a more complete typology of CSBs, one that categorizes each CSB according to its ability to provide consumers with the fantasies, feelings and fun associated with experiential consumption. Recommendations for future research into the *FUN*draising phenomenon are derived from this expanded typology of CSB.

Integration of Same And Oppositely Valenced Affective Stimuli Under Simultaneous Presentation Conditions

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EXTENDED ABSTRACT

The distinction between cognitive and affective stimuli has been made repeatedly (see, e.g., Bagozzi, Gopinath and Nyer 1999; Cohen and Areni 1991; Zajonc and Markus 1982). Although considerable effort has been placed on the examination of how cognitive information is integrated (see, e.g., Kardes 2001), research regarding affect integration is still in its infancy.

Where affect integration has been the focus of study, the context is one in which there is strong control of the sequence with which the affective stimuli are presented. Further, prior research directly examining affect integration (e.g., Ariely 1998; Ariely and Carmon 2000; Baumgartner, Sujan and Padgett 1997; Kahneman et al. 1993; Fredrickson and Kahneman 1993; Redelmeier and Kahneman 1996; Varey and Kahneman 1992) has focused exclusively on the integration of affective stimuli of common valence (i.e., the integration of positively valenced stimuli or negatively valenced stimuli, but not both together). This research explores each of these current limitations.

Theory Development In Brief

Previous research examining the sequential presentation of affective stimuli demonstrates support for a "peak-end" rule, whereby the peak affect in the sequence and the affect at the end have a disproportionate contribution to the overall affect experienced. However, in a simultaneous format there is no clear "end" stimulus, as all the affect generating stimuli are presented together. In addition, in cases where oppositely valenced stimuli are present, it is not clear what the "peak" stimulus is.

Let us take the simple case where there are multiple stimuli in a message that are of a common valence (i.e., all negative or all positive, but not a mixture of the two). As noted earlier, while it may be possible to identify the "peak", the "end" point is not evident. Hence, it is anticipated that the global affect generated is a function of the peak value alone.

In a case where both negatively and positively valenced affective stimuli are present, it is no longer clear what the peak is. As such, both touchstones of prior affect integration literature are removed from the equation. It is believed that under these circumstances the affect integration mechanism will be compensatory in nature. This differs considerably from the peak mechanism proposed for univalence integration under simultaneous presentation conditions, as well as for the non-compensatory mechanisms associated with affect integration for mixed valence stimuli under sequential conditions.

Experiment 1

The purpose of this study was to look at the integration of commonly valenced stimuli in a simultaneous presentation context. As such, it permits an examination of the extent to which findings from prior research employing sequential presentation of affective stimuli transfer to a context where multiple affective stimuli are simultaneously presented. Although stimuli of opposite valence were never combined in the same experimental condition, both positively and negatively valenced stimuli were considered in

different conditions. For positively valenced affective stimuli, the following between-subject conditions were employed: High-Positive Alone, Low-Positive Alone and Mixed-Positive (i.e., High-Positive jointly presented with Low-Positive). For the negative affect conditions, a parallel set of stimuli were employed: High-Negative Alone, Low-Negative Alone and Mixed-Negative.

In order to present a context where the simultaneous presentation of different types of affective stimuli seemed credible, an advertisement for a camera noting the use of that particular brand of camera for photo-journalistic purposes was created. Affect was manipulated via the content of images presented in the advertisement. Pre-testing of the images was conducted, examining affective reactions on an 11 point scale, anchored "extremely negative (-5)" and "extremely positive (5)".

Each advertisement was 8.5" X 11", printed on plain white paper. The image(s) were presented in the top portion of the advertisement, with the text and the brand name of the camera presented in the lower portion. Each image was 3.5" X 3.5". In cases where one image was present, it was centered horizontally, and began 5.5" from the bottom of the page. Where two images were present, they were placed side by side, also 5.5" from the bottom (note that in all conditions where two images were present, counterbalancing was employed). Participants viewed the target stimulus for 30 seconds and then responded to a battery of affect measures.

Experiment 2

Whereas the first study held the valence of the integrated affective stimuli constant, this experiment examined the impact of juxtaposing oppositely valenced affective stimuli. The procedure and dependent variables remained identical to the first experiment. The experimental advertisement remained unchanged, with the exception of the images used. The following five between-subject conditions were employed: Positive Alone (Pos), Negative Alone (Neg), Positive-Positive (PosPos), Negative-Negative (NegNeg), and Mixed Valence (i.e., containing both positively and negatively valenced affective stimuli). In all cases, the images used were moderate in intensity.

Results

Results of Experiment 1 indicate that a peak mechanism is operating when affective stimuli of one valence are simultaneously presented. That is, when a moderately positive (negative) and highly positive (negative) stimuli are simultaneously presented, responses were no different from when a highly positive (negative) stimulus was presented alone. It appears, therefore, that affective response to the simultaneous presentation of same valence stimuli is a function of the most extreme stimulus present. This is entirely in line with the findings from the sequential affect integration literature. That is, for same valence simultaneous presentation, a peak mechanism seems to explain the affect integration mechanism.

Experiment 2 replicates the findings of experiment one, in that a peak mechanism is shown to operate when affective stimuli of the same valence are simultaneously presented. When stimuli with

different valences (i.e. one positive and one negative) are simultaneously presented, however, the picture is quite different. Here we find almost a purely compensatory mechanism in place. That is, the mixed valence conditions were more negative than the positive conditions and more positive than the negative conditions. The position of the image on the page was not found to have an impact in either experiment.

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When Do Product Descriptions Stimulate Craving and Desire for Guilty Pleasures?

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EXTENDED ABSTRACT

This study attempted to investigate what takes place when high versus low affect intensity subjects are presented with product descriptions that are either emotionally evocative and richly vivid, versus product descriptions that are dull and information-oriented. The vivid and emotionally evocative description was designed to activate a network of memories of pleasurable indulgence in consuming a product category that is generally considered to be a 'forbidden pleasure'-cookies and pizza.

In their attempt to model the consumer's encounter with the choices and decisions associated with 'guilty pleasures' such as the temptation of chocolate cake versus fruit salad, Shiv and Fedorikhin (2002) proposed and tested the Affective-Cognitive Model of stimulus-based affect. In contrast to the scenario that will be tested in this paper, Shiv and Fedorikhin's model considered choice situations where affect and cognitions are derived from the choice object itself. The Affective-Cognitive Model proposes two routes through which affect and cognitions may influence the choice behavior of the consumer. In the "higher order" route choices are governed by more 'consequence-based' or cognitive related motives. In the "lower order" route choices are influenced by automatic and spontaneous affective processes. Because of the need to limit the scope of this study, only the lower order route will be addressed in this study.

According to the Affective-Cognitive Model, when an individual is confronted with a temptation like the sight of something enticing as chocolate cake, the lower order structures of the brain whose function is to scan the environment for emotionally relevant stimuli receive information (i.e., lower-order cognitions) associated with the chocolate cake. These cognitions (e.g., thoughts or memories of previous pleasant consumption pleasures) activate the release of lower order affective reactions (e.g., cravings and desires). The lower order affective reactions, in turn, are likely to influence action tendencies via the activation of basic appetitive goals (Wyer et al. 1999). This may most likely lead to choosing the chocolate cake rather than some other healthier alternative like a fruit salad (Shiv and Fedorikhin 2002, p. 345).

The current study expands on the processes predicted through the lower route by addressing the following considerations: (a) Sometimes lower order affective processes may be activated not by the visual presence of a choice object, but by various types of product descriptions which may set in motion a series of emotional responses. In this study, the type of product information presented to the consumer will be varied: Product attribute related information versus consumption related information. It is expected that the vividness of the descriptions depicted in the consumption focused descriptions will be more effective than the product attribute description in activating appetitive responses. (b) Instead of focusing on the choice or decision outcome as the dependent measure of interest, this study will focus on the affective, appetitive reactions that are activated through the lower order route-craving (Gendall et al. 1997), desire (Belk, Ger, and Askegaard 2003), and the perceived ability to resist the eating temptation (Bagozzi, Moore and Leone (2004). (c) Because of the powerful nature of emotions such as desire and craving, it is possible that because people do differ in the characteristic strength with which they respond to emotional stimulation (Larsen 1984), the level of craving and desire expressed by participants in this experiment may differ as a function of the type of product information they may be exposed to.

Using the affect intensity construct as an individual difference measure, it was predicted that high affect intensity subjects will report higher levels of craving and desire only when the product description is vivid and emotionally evocative product description.

The study (N=225) featured a 2(Affect Intensity: High vs. Low) x 2(Product Description: Emotionally Evocative vs. Information Oriented) between subjects design.

Results showed that subjects who were high on the affect intensity measure expressed significantly higher levels of craving and desire for cookies and pizza only when exposed to a vivid emotionally evocative description of the product. High affect intensity subjects, compared to their low intensity counterparts, were more likely to express the feeling that they had lost almost all their resistance to the temptation of eating cookies and pizza after reading the product description.

The fascinating aspect of these findings is that the product descriptions presumably created a network of thoughts or cognitive operations which activated the affective responses of craving and desire. As far as is currently known, this is the first study to investigate whether high affect intensity subjects are capable of expressing emotions such craving and desire in the context of yielding to an evocative description of enticing food.

An important theoretical question is whether the product descriptions did, in fact, activate a network of cognitive operations associated with product consumption. In Larsen, Diener and Cropanzano (1987 high affect intensity subjects were shown to be more capable of generating 'fantasy elaborations'-that is, the tendency to produce imaginations beyond what was given or suggested by the stimulus. In the current study, it seems plausible that the reason why high affect intensity subjects reported higher levels of craving and desire than their low intensity counterparts, was that they were more inclined to fantasize and to engage in vivid imaginations about the anticipated pleasures of consuming a delicious food when only a verbal description was provided. Future research should focus on the role of consumer anticipation of consumption-the 'hot cognition'. Is it possible that advertising messages can create to make anticipation just as delicious as consumption? Richer measures of craving and desire should be tested using multiple measures drawn from the literature (Belk et al. 2003). If consumers do employ such a network of stored memories for consumption pleasures, it may be also possible to investigate whether some of these images and memories are associated with strong brands in the product category (e.g., Krispy Kreme Donuts) and whether brand strategy may be benefited by this line of research.

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Mood and Choice: The Influence of Self-Relevance, Need for Cognition and Affective Feelings on Consumption Decisions

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EXTENDED ABSTRACT

Both the affect-priming model and affect-as-information models suggest that compared to those in a negative mood, individuals in a positive mood are less likely to process information as deeply. Recently, research has shown that individuals in a positive mood would process self-relevant information more deeply than those in a negative mood, indicating that self-relevance is the catalyst that directs individuals' cognitive effort. Does this effect translate into choice? Two experiments were conducted to extend mood research into the domain of choice and consumption.

Research

How does mood influence the way people make consumption decisions? Past research has shown that mood can be an end in itself (e.g., Wegener and Petty, 1994; Clark and Isen 1982), serve as information (Schwarz and Clore, 1983, 1988; Pham 1998), determine the selective attention, encoding, and retrieval of information (Adaval 2001; Lee and Sternthal, 1999), and influence the way we make judgments and decisions (Barone, Miniard, and Romeo, 2000; Rajagopal and Trope, 2002; Forgas and Bower 1987). However, these theories are largely silent about how mood influences actual behavior or choice. Such processing consequences of mood have received much less attention than the direct effects of mood in the literature (Forgas, 1995; Isen 1984). More recently, consumer researchers are beginning to examine the consequences of positive mood in brand extension evaluations (Barone, Miniard, and Romeo, 2000), differential weighting of product information (Adaval, 2001), and the interactions between mood states and affective tones of the ads (Gorn, Pham, and Sin, 2001). Nevertheless, much remains to be understood in the process of how mood influences the way we make consumption decisions.

The three major theories on the influence of affect on judgment have focused on either: (1) the affect-priming model (e.g. Bower 1981; Isen 1984) which proposes that our mood influences how deeply we process information, and whether we selectively attend to different types of information; (2) the affect-as-information model (Schwarz and Clore 1983; 1988), which suggests that we directly use our mood to form our judgments or make decisions; or (3) the hedonic-contingency model (Wegener and Petty, 1994), which suggests that people in a positive mood are motivated to process information that is consistent with their positive mood and would avoid information that would affect their feeling states.

All three models share the same underlying assumption that people are cognitive misers when they are in positive moods and when they are not motivated to think about their decisions (Isen, 1987; Wegener, Petty, and Smith, 1995; Schwarz and Clore, 1983). However, there is increasing evidence that people in positive mood will process information deeply rather than heuristically when provided with the motivation (Forgas, 1994; Bless et al., 1996), when it is sufficiently self-relevant (Rajagopal and Trope, 2002), and when it is consistent with their evaluation criteria (Adaval, 2001). Pham (1998) finds that affect only influences judgments of a product when hedonic criteria was given as relevant and Adaval (2001) extends this finding to both utilitarian and hedonic criteria, so long as the product information are consistent with their moods. More recently, Rajagopal and Trope (2002) also show that positive

mood enhances the recall of negative information about caffeine consumption but only when this is a self-relevant issue (i.e. individuals with high caffeine consumption).

Therefore, based on the review of relevant literature, we expect consumption choice to be consistent with evaluative judgment. As a result, we postulate the following:

H1a: Individuals in a situation of negative mood and low self-relevance will be engaged in mood repair, and will be more likely to make a hedonic than a utilitarian choice.

H1b: Individuals in a situation of positive mood and high self-relevance will be engaged in affect-confirmation, and will be more likely to make a hedonic than a utilitarian choice.

In addition, we also postulate that individual difference variables such as need for cognition and the basis of decision (affective reason) (e.g., Shiv and Fedorikhin, 1999) could also moderate the relationships between self-relevance and mood on choice:

H2a: The effect of self-relevance and mood on choice is moderated by need for cognition; the effect of NFC is stronger for higher levels of self-relevance.

H2b: The effect of self-relevance and mood on choice is moderated by affective reason; the effect of affective reason is stronger for lower levels of self-relevance.

Method

Two experiments were conducted to examine the linkage between self-relevance, mood, and choice. The first experiment examines how preexisting moods impact consumers' decision between choices with hedonic appeal (chocolate) and utilitarian appeal (ball pen). The objective is to see if self-relevance moderates the relationship between preexisting moods and choice. The second experiment: (a) replicates the choice findings of Experiment 1, and (b) extends the choice findings by exploring how individual difference variables (i.e., need for cognition and affective reason) influence the relationships between self-relevance and moods on choice.

Findings

The results of experiment 1 indicate that, in a binary choice context where one alternative (a small bag of chocolate) is associated with hedonic appeal compared to the other alternative (a ball pen) associated with utilitarian appeal, choice decisions are not only affected by the valence of preexisting moods but also by self-relevance of the choice alternatives. When self-relevance is low, individuals in a negative mood were more attracted by hedonic appeal and chose chocolate. On the other hand, when self-relevance is high, individuals in a positive mood were more likely to choose the alternative with hedonic appeal. The result of experiment 2 show that, in a binary choice context where one alternative (a small bag of chocolate) is associated with hedonic appeal compared to the other alternative (a ball pen) associated with utilitarian appeal, choices are not only affected by the valence of preexisting moods

but also by self-relevance of the alternative to the subjects and subjects' decision basis (affective reason). When self-relevance is low, individuals in a negative mood are more attracted by hedonic appeal and choose chocolate. On the other hand, when self-relevance is high, individuals in a positive mood are more likely to choose the alternative with hedonic appeal.

The Priming Effects of Counterfactual Thinking

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EXTENDED ABSTRACT

While a large body of literature on counterfactuals has explored the effects of counterfactual thinking on different variables such as affect (e.g. Roesse 1995), judgment (e.g. Miller and McFarland 1986), self-inferencing (e.g. Roesse and Olson 1993) and message scrutiny (e.g. Krishnamurthy and Sivaraman 2002), there has been relatively little research on the priming effects of counterfactuals (e.g. Galinsky and Moscovitz 2000). The present article examines the priming effects of counterfactual thoughts on the evaluation of framed messages. We demonstrate that the mere act of thinking counterfactually primes an alternative-generation mindset that increases the accessibility of alternatives to a given frame, leading to an elimination of framing effects. Our findings contribute to the literature on counterfactual thinking and de-biasing strategies.

We consider the effects of counterfactual thinking on information processing in the context of framed messages since such messages lend themselves to the easy exploration of alternatives to the message arguments. Further, given the robust nature of framing effects in consumer behavior (Levin, Scheider and Gaeth 1998) framed messages would provide a strong test of the strength of counterfactual primes.

If a person indulges in counterfactual thought and is then exposed to a framed message, the alternative of the frame should be more accessible due to the primed mental strategy of alternative generation, leading to a more balanced view of the product and reduced framing effects. Since engaging in counterfactual thinking necessitates considering alternatives to a given outcome, it should reduce focus on just one frame of reference and induce consideration of other frames of reference. Because framing effects are the result of focusing on a particular frame of reference (positive or negative), thinking counterfactually should overcome this effect. We therefore hypothesize that the generation of counterfactual thoughts should result in an elimination of framing effects such that the evaluation of positively framed messages is not significantly different from negatively framed messages. Further, these effects should be due to the increased accessibility of the frame alternative when counterfactual thinking precedes message exposure, rather than any differences in involvement.

Across two studies, we find that counterfactual thinking primes a mental strategy of alternative generation which renders alternatives to message frames more accessible. Study 1 was designed to test for the elimination of goal framing effects under downward counterfactual conditions. We conducted a 2 (counterfactual vs. non-counterfactual) x 2 (positive vs. negative frame) between subjects study and found that goal framing effects are eliminated under when counterfactual thinking precedes message exposure. Thus, negatively framed messages are evaluated more favorably than positively framed messages under non-counterfactual conditions, but not under counterfactual conditions. Further, differences in motivation cannot explain this effect.

We also tested for increased elaboration as an alternative explanation using cognitive responses as our dependent measure and found that differences in the amount of elaboration could not explain these results. The total number of thoughts and number of irrelevant thoughts did not significantly differ between the counterfactual and non-counterfactual conditions, indicating no difference in the amount of elaboration. However the number of net positive thoughts was significantly different between the positive

and negative non-counterfactual conditions. No such difference existed in the counterfactual conditions. This supports our contention that it is not the amount of elaboration but the type of elaboration that differs between counterfactual and non-counterfactual conditions. The act of thinking counterfactually leads to more balanced thoughts about the message and hence more balanced brand evaluations.

Study 2 was designed to be similar to Study 1, but within a attribute framing context and using upward counterfactuals instead of downward counterfactuals. We also directly tested for increased accessibility to the frame alternative under counterfactual conditions using frequency of agreement with the frame alternative and response time as our dependent measures. The results of Study 2 show that accessibility of the frame alternative is significantly higher under counterfactual conditions which leads to a more balanced evaluation of the brand and hence, an elimination of framing effects. A mediation analysis showed that the effects of framing on brand evaluation were mediated by biased cognitive responses under the non-counterfactual conditions, but that framing had no effects on cognitive responses or brand evaluations under counterfactual conditions. Thus, thinking counterfactually prior to message exposure renders alternatives to the message arguments more accessible leading to more balanced brand evaluations.

A key contribution of this article is the insight that it provides with regard to the effect of counterfactual thinking on information processing as well as the processes underlying such effects. We show that the mere process of thinking counterfactually can have effects on information processing. We also directly test for increased accessibility of alternatives by measuring reaction time to respond to the frame alternative and show that accessibility is significantly higher in the counterfactual conditions. This increased accessibility leads to more balanced evaluations and the elimination of framing effects.

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Optimum Stimulation Level Theory and the Differential Impact of Olfactory Stimuli on Consumer Exploratory Tendencies

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ABSTRACT

Consumer response to ambient scent was examined by testing a comprehensive structural equation model derived from optimum stimulation level theory. Pleasantness of ambient scent was manipulated in a laboratory setting, using pre-tested aroma components. Previously suggested direct effects of pleasantness on consumer stimulation could not be confirmed. Instead, the pleasantness of an ambient scent was found to moderate effects of consumer actual stimulation on exploratory tendencies. Effects were stronger in the unpleasantly scented condition, where consumer stimulation affected sensory stimulation-seeking (risk taking, variety-seeking) positively and cognitive stimulation-seeking (curiosity-motivated behavior) negatively. In addition, exploratory tendencies were influenced by consumer optimum stimulation level, regardless of scent pleasantness.

INTRODUCTION

Ambient scent is scent or odor that is not emanating from a particular object but is present in the environment (Spangenberg, Crowley and Henderson 1996). While there is a significant body of research on the effects of odors on human physiology and psychology, research on effects on consumers is more limited (cf. Bone and Ellen 1999 for a review). The process through which olfactory cues are channeled remains largely unclear (Mattila and Wirtz 2001) but there appears to be consensus among researchers that odors are primarily perceived in terms of their pleasantness (Chebat and Michon 2003).

The current study tests a comprehensive optimum stimulation level (OSL) framework for predicting consumer behavioral tendencies, that is, risk taking, variety seeking and curiosity-motivated behavior, in response to the pleasantness of an ambient scent. It extends past research by contrasting different models for the interaction between scent pleasantness and consumer affect. Simultaneously, we clarify past conflicting evidence for both positive and negative effects of consumer actual stimulation on sensory and cognitive stimulation seeking. Finally, we confirm past suggestions indicating a superior performance of models that include consumer actual stimulation as a predictor variable in addition to consumer optimum stimulation.

Employing an OSL framework to atmospherics appears to be particularly useful for reasons that go beyond past suggestions that this theory may be applicable to non-visual marketing stimuli (Steenkamp and Baumgartner 1992; Gierl, Helm, and Stumpff 1999). First, environmental stimuli such as music (Turley and Milliman 2000) or scent (Chebat and Michon 2003) scent have been found to interact with trait and state variables in affecting consumer preferences and behavior (Morrin and Ratneshwar 2000). In particular, the pleasantness of shopping environments has been reported to affect consumer stimulation or arousal levels (Wakefield and Baker 1998) with downstream effects on behavior (Mattila and Wirtz 2001). In addition, such a framework including a consumer state appears to be useful for explaining consumer response to ambient scent considering past evidence on individual differences in scent intensity perception (Doty et al. 1985) and scent pleasantness evaluation (Henion 1971).

Second, a focus on behavioral tendencies rather than actual behavior incorporates past findings that the impact of scents lessens as one moves through the hierarchy of effects (Bone and Ellen 1999). With correlations between exploratory tendencies and actual behavior established through past OSL studies (Baumgartner and Steenkamp 1996), research on effects of olfactory stimuli can focus on exploratory tendencies as previously confirmed antecedents of actual consumer behavior across product categories.

Third, consumer exploratory tendencies encompass both sensory and cognitive stimulation (Zuckerman 1994), a distinction that allows a more detailed study of effects of the affective evaluation of sensory pleasure. By providing insights into the paths through which olfactory cues are processed, the findings extend atmospherics theory and add to the body of knowledge assisting retail managers in stimulating consumer exploratory acquisition of products and information.

THEORETICAL BACKGROUND

Optimum Stimulation Level Theory

Introduced in the psychology literature, OSL theory postulates that individual behavior is influenced by the intrinsically motivated desire to accomplish a specific level of stimulation, termed "optimum stimulation level" (Berlyne 1960). Consumer research established that this level of optimum stimulation varies between individuals (Raju 1980). When the stimulation derived from the environment is too low, individuals will attempt to increase stimulation. When the stimulation is too high, individuals will attempt to decrease stimulation. Psychological pleasantness is highest at the OSL, the level of stimulation at which a person feels most comfortable (Steenkamp and Baumgartner 1992) and behavior, aimed at modifying stimulation from the environment in the general direction towards the optimum level of stimulation, has been termed "exploratory behavior".

Dominating the body of consumer behavioral studies is Raju's (1980) categorization of three general exploratory tendencies: *Risk taking* describes exploratory behavior expressed through choices of innovative and unfamiliar alternatives that are perceived as risky. *Variety seeking* is expressed through an individual's switching within familiar alternatives, including brand switching, and an aversion to habitual behavior. *Curiosity-motivated behavior* involves exploratory information seeking, interpersonal communication and shopping. Downstream effects on actual consumer exploratory behavior have been reported for a number of product categories (Baumgartner and Steenkamp 1996; van Trijp, Hoyer and Inman 1996).

More recently, researchers suggested a more aggregate categorization into two dimensions, that is, sensory and cognitive stimulation seeking (Baumgartner and Steenkamp 1991; Zuckerman 1994). Accordingly, sensory stimulation is associated with the exploratory acquisition of products "through risky and innovative product choices and changing purchase experiences," (risk taking and variety seeking) whereas cognitive stimulation is associated with exploratory information seeking (curiosity-motivated behavior) "through the acquisition of consumption relevant knowledge

out of curiosity” (Baumgartner and Steenkamp 1996). Past research showed OSL to be correlated more strongly with the sensory than the cognitive dimension (Baumgartner and Steenkamp 1996).

Scent Pleasantness as a Primary Cause of Olfactory Effects

Past research in environmental psychology and consumer behavior examined a number of effect paths through which ambient scent could be channeled. After more than three decades of research, there is little evidence for the propositions that the simple presence or the congruity of an odor affects consumer behavior (Spangenberg, Crowley and Henderson 1996; Bone and Ellen 1999). Instead, the recognition is gaining acceptance that odors appear to be primarily perceived in terms of their pleasantness or unpleasantness (Chebat and Michon 2003).

Focusing on antecedents and consequences of (un)pleasant experiences, Fiore and Kimle (1997) distinguish between sensory and affective pleasure which result from positively evaluated 1) stimulation of the senses, and 2) arousal or expression of emotions. Studied individually, both sensory pleasure (Milliman 1982) and affective pleasure (Darden and Babin 1994) have been found to be induced by atmospherics. Studies of non-retail settings suggest that olfactory cues may have a significant impact on both sensory and affective components of pleasure (Gulas and Bloch 1995). While strong, e.g. emotional, responses to olfactory stimuli are relatively rare or idiosyncratic (Ehrlichman and Bastone 1992), researchers suggest that odors affect moods and mild affective states (DeBono 1992; Fiore, Yah and Yoh 2000). Yet, the affective route does not always emerge clearly from studies trying to link scent to affective pleasure (Bone and Ellen 1999).

Mixed results have also been found regarding cognitive processes (Lawless 1991) and studies combining affect and cognition failed to show a shift in affect (Spangenberg, Crowley and Henderson 1996). Testing the proposition that affect is antecedent to cognition versus an influence of cognitive processes on mood, Chebat and Michon (2003) report that positive affect was not due to ambient scent and pleasure does not mediate the effects of environmental cues on perceptions and behaviors. In short, past studies on the impact of ambient scent on consumer affect and cognition provide conflicting evidence for mediating effects of consumers affect. It seems likely that behavioral effects claimed for ambient scents may be based on a different, i.e. moderated interaction between scent pleasantness and affective factors.

HYPOTHESES

Our hypotheses depart from the recognition that olfactory environmental cues are primarily being perceived in terms of their pleasantness (Chebat and Michon 2003). Olfaction research provides further evidence both for (Gulas and Bloch 1995; DeBono 1992; Fiore, Yah and Yoh 2000) and against (Bone and Ellen 1999; Chebat and Michon 2003) the existence of direct effects of scent pleasantness on consumer affect. Considering the use of different constructs and measures of consumer affective response in those studies, we follow non-scent related research from atmospherics indicating that environmental factors are positively related to excitement/ arousal (Mattila and Wirtz 2001; Wakefield and Baker 1998), concepts that are more closely related to consumer stimulation. Accordingly, our first hypothesis is:

H1: The pleasantness of an ambient scent will be positively associated with consumer stimulation, that is, the more pleasant a scent is, the higher consumer actual stimulation will be.

According to optimum stimulation level theory, an individual’s search for stimulation is driven by both an individual’s actual (ASL) and optimum stimulation level (Wahlers and Etzel 1985). The majority of studies, however, has focused on optimum stimulation level as a single antecedent to consumer exploratory tendencies. Only a single study has integrated both consumer actual and optimum stimulation level in a model explaining general exploratory tendencies (Gierl, Helm and Stumpp 1999). The findings seem to indicate that an extended model including both consumer optimum and actual stimulation level performs significantly better than the original model including OSL only. However, some theoretical and methodological shortcomings limit the value of this research.

First, Gierl, Helm and Stumpp (1999) examined the relationship between exploratory constructs and consumer stimulation in a relatively isolated context employing a series of regression analyses. Given the potential of structural equation models to assess a larger number of constructs and their interrelations simultaneously, to control for measurement error, an enhanced ability to assess effects of experimental manipulations, and more powerful ways to assess measure reliability and validity (MacKenzie, 2001; Steenkamp & Baumgartner 2000), we examine the relationships in an as yet untested comprehensive structural equations model.

Second, the use of difference scores for measuring discrepancies between individual optimum and actual stimulation level, as utilized by Gierl, Helm, and Stumpp (1999), has been subject to criticism (Peter, Churchill & Brown, 1993). To accommodate concerns, consumer optimum and actual stimulation level will be treated as two separate variables (Edwards, 2001).

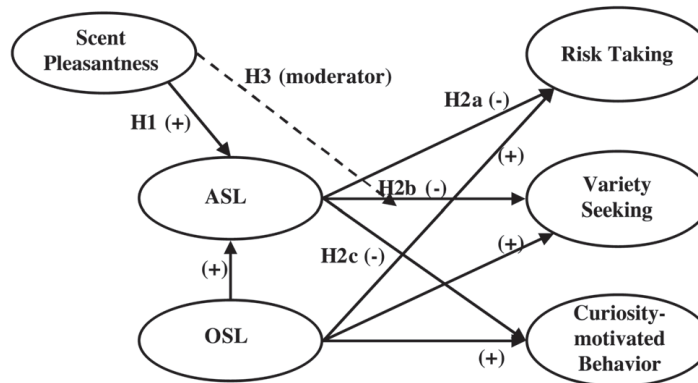
Third, Gierl Helm and Stumpp (1999) used Wahlers and Etzel’s (1985) Lifestyle Stimulation Scale for assessing individual actual stimulation levels. This measure is relatively stable over time (i.e., months, Wahler & Etzel, 1985) and thus does not appear to be suitable for measuring consumer affective response as evoked by such a fleeting state as nostalgic memories. Accordingly, we will improve upon past research by using a short-term actual stimulation measure (Zuckerman 1979).

Finally, inconsistencies emerge concerning downstream effects of consumer actual stimulation on exploratory tendencies, that is, risk taking and variety seeking. Based on the notion that stimulation seeking and stimulation avoidance depend on whether actual stimulation falls short of or exceeds OSL, one would expect negative effects of consumer actual stimulation on stimulation seeking, that is, risk taking, variety seeking and curiosity-motivated behavior. The positive relationships Gierl, Helm and Stumpp (1999) report, between actual stimulation and both sensory stimulation-seeking tendencies contradict not only this notion but also empirical evidence indicating that the relationship is negative (Raghunathan & Pham, 1999; Kahn & Isen, 1993). According to Raghunathan and Pham (1999), individuals who are in positive affective states are less willing to take risks, while risk taking tendencies increase with less positive affect. Similarly, Kahn and Isen (1993) suggest that affect is negatively related to variety seeking. Integrating and substantially improving upon past research, our second set of hypotheses thus is:

H2a: An individual’s actual level of stimulation will affect sensory stimulation seeking (exploratory product acquisition) negatively: Higher (lower) actual stimulation levels will generate lower (higher) levels of risk taking.

H2b: An individual’s actual level of stimulation will affect sensory stimulation seeking (exploratory product acquisition) negatively: Higher (lower) actual stimulation

FIGURE 1
Hypothesized Path Effects Model



levels will generate lower (higher) levels of variety seeking.

H2c: An individual's actual level of stimulation will affect cognitive stimulation seeking (exploratory information search) negatively: Higher (lower) actual stimulation levels will generate lower (higher) levels of curiosity-motivated behavior.

Finally, our study advances past research on olfaction, atmospherics and consumer behavior by testing past suggestions of potentially moderating effects of scent pleasantness (Chebat and Michon 2003). Specifically, it is proposed that consumer evaluation of the pleasantness of an ambient scent, as an affective evaluation of sensory pleasure (Fiore and Kimle 1997), interacts with consumer stimulation (state and trait variable) to influence behavioral tendencies aimed at regulating sensory and cognitive stimulation (Zuckerman 1994). It is argued that when consumers evaluate an ambient scent as pleasant, their actual level of stimulation approximates the level at which this person feels most comfortable, that is their optimum stimulation level (Steenkamp and Baumgartner 1992). Hence, it would appear that the effect of ASL on consumer exploratory tendencies changes relative to the effect of consumer optimum stimulation, most likely lessening. Similarly, when consumers evaluate an ambient scent as unpleasant, their actual level of stimulation will drop below optimum, resulting in a different, most likely stronger, effect of ASL relative to OSL. Due to a lack of empirical evidence, no detailed directional hypotheses are being formulated. Our final hypothesis is:

H3: Scent pleasantness will moderate effects of consumer actual stimulation level on general exploratory tendencies.

Figure 1 summarizes the hypothesized model relationships.

METHOD

Participants

Data was collected in a laboratory setting from a consumer sample at a university located in the Pacific Northwest. Randomly selected from a consumer panel, two hundred forty eight respon-

dents participated in the experiment for a 5\$ gift certificate and were randomly exposed to either a pleasant (N=124) or unpleasant ambient (N=124) scent. The participants represented a broad range of age groups (18-68 years of age, mean age=38.3, SD=8.45). Sixty one percent of the respondents were females.

Stimuli and Pretests

The scent selection was based on past research (Spangenberg, Crowley and Henderson 1996) and supported by sensory science faculty. A pretest (n=19) was conducted to determine scents that were perceived as either pleasant or unpleasant and that could be plausibly used without revealing the real objectives of the study to respondents. Fifty-four aromas identified as potential operationalizations of pleasantness (Moncrief 1970) were included and evaluated on a seven-point semantic differential scale. Student's t-test on mean ratings revealed that some scents were evaluated as more pleasant or unpleasant than others. To account for individual differences in individual evaluations of scent pleasantness (Henion 1971) two scents each were selected to represent the relevant categories unpleasant (Green Pepper, Charcoal) and pleasant (Citrus blossom, Blackberry).

Procedure

Respondents participated in small groups of six. After completing a screener questionnaire that assessed smoking habits and allergies, they entered the scented (pleasantly, unpleasantly) lab where data was collected under the guise of a new product test via an onscreen questionnaire. The scents were emitted into the laboratory room by diffusers invisible to the respondents. Following exposure to the scent, respondents completed questions that established their actual and optimum stimulation level and exploratory tendencies. Manipulation checks for pleasantness were collected at the very end of the data collection process to avoid directing attention to the real purpose of the experiment. Only one scent per day was diffused and the laboratory was ventilated overnight to remove any lingering trace of the previous scent.

Measures

To measure an individual's *optimum level of stimulation*, the current study used Steenkamp and Baumgartner's (1995) Change Seeker Index (CSI) involving seven items derived from past

operationalizations. In addition to being considerably shorter than alternate scales (Gierl, Helm and Stumpp 1999), the item battery has also been shown to be superior to other scales in terms of nomological validity (Steenkamp and Baumgartner 1995).

Only a few concepts are available for measuring an individual's optimum level of stimulation. This study uses Zuckerman's (1979) Sensation Seeking State scale which is considered to be particularly useful for measuring individual short-term actual stimulation level (Gierl, Helm and Stumpp 1999). The state variable encompasses 15 items (adventurous, amused, elated, confident, cooperative, curious, daring, enthusiastic, imaginative, interested, joyful, lucky, playful, pleased, zany) measured on a 7-point Likert type scale.

Consumer exploratory tendencies were measured through the scale introduced by Raju (1980), the instrument most commonly used in this context (Baumgartner and Steenkamp 1996). To alleviate the task load on the respondents, the original number of thirty-nine items was reduced to twelve items (Wahlers, Dunn and Etzel 1986; Gierl, Helm and Stumpp 1999).

RESULTS

Manipulation-Check Results

To check the scent pleasantness manipulation, respondents were asked to evaluate the pleasantness of the present ambient scent on a seven-point semantic differential scale from 1=very unpleasant to 7=very pleasant. Manipulation checks were performed using analyses of variance (ANOVA) with significant differences ($F(3,244)=4.670, p<.01$) for the diffused aroma components ($M_{\text{Green Pepper}}=2.9$, $M_{\text{Charcoal}}=2.5$, $M_{\text{Citrus blossom}}=5.4$, and $M_{\text{Blackberry}}=5.3$). While the resulting mean values do not approximate the extreme poles of the pleasantness scale, they do represent levels that can reasonably be utilized in a retail setting as well as in a laboratory study without revealing the real objectives of the research to participants.

Evaluating the comprehensive optimum stimulation level framework

Hypotheses 1 and 2 suggest that scent pleasantness affects consumer actual stimulation which, jointly with OSL, will influence exploratory tendencies. In keeping with the procedure recommended by Anderson and Gerbing (1988), a comprehensive measurement model was estimated that included all constructs and measures. To evaluate the dimensionality of the variables, a maximum-likelihood estimation procedure was conducted using AMOS 4.0. The overall goodness-of-fit (*GFI*) statistic for this comprehensive measurement model was .87 and the comparative fit index (*CFI*) was .81. Since the model fit statistics showed that the model could be improved, six variables (the actual stimulation level items amused, curious, imaginative, interested, playful, zany) were removed from the model one at a time, based on the size of their residuals from the estimation (Hair et al. 1998). The resulting final (pooled) confirmatory factor model for two hundred and thirty eight respondents had the structural coefficients and fit statistics shown in table 1.

The finding of significant path coefficients for OSL is consistent with prior empirical work (Gierl, Helm and Stumpp 1999; Baumgartner and Steenkamp 1991), and the estimated correlation coefficients are within the range reported in the past (Raju 1980; Steenkamp and Baumgartner 1995). The correlation between optimum and actual stimulation level was significant and within past magnitudes (Zuckerman 1979; Gierl, Helm and Stumpp 1999).

The lack of a significant effect of scent pleasantness on actual stimulation contradicts hypothesis 1 which was rejected. The positive correlations between actual stimulation and consumer

exploratory acquisition of products (risk taking, variety seeking) contradict the results of related studies (Raghunathan and Pham 1990; Kahn and Isen 1993), but are consistent with past OSL research (Gierl, Helm and Stumpp 1999). Hypotheses 2a and 2b were rejected. The finding of a significant negative path ASL → curiosity-motivated behavior is consistent with the previously reviewed literature, and hypothesis 2c was accepted.

Hypothesis 3 suggests that the relationships between consumer actual stimulation and exploratory tendencies are moderated by the pleasantness of an ambient scent. A one-way analysis of variance was used to test whether consumers who perceived a scent similarly in terms of pleasantness exhibited approximately similar levels for each exploratory tendency construct. Significant differences between the pleasant and unpleasant scent condition were obtained for all three constructs, risk taking ($F(1,117)=4.62, p<.01$), variety seeking ($F(1,117)=8.86, p<.01$), and curiosity-motivated behavior ($F(1,117)=10.22, p<.001$).

While these findings provide initial support for hypothesis 3, the model estimated for the pooled sample was then estimated separately for two sub-samples of equal size, split along the scent pleasantness mean, to further assess differences between consumer responses in the pleasant and the unpleasant condition. Although some researchers suggest creating dummy variables for modeling moderating effects (c.f. Netemeyer et al. 2001), analyzing sub-samples is also an accepted approach in atmospheric research, particularly for this type of exploratory analyses when explicit effects cannot be predicted (MacInnis and Park 1991). The structural models for both sub-samples are acceptable (table 2).

In contrast to the results obtained for the baseline model (table 1), there are a number of structural coefficients that are no longer significant at the sub-sample level. Specifically, the paths ASL → risk taking and ASL → variety seeking are not significant in the pleasant condition and the size of the coefficients for the path ASL → curiosity-motivated behavior varies between the conditions. Accordingly, in the pleasantly scented condition, risk taking and variety-seeking were no longer affected by consumer actual stimulation, and its effect on curiosity-motivated behavior was smaller. In unpleasantly scented conditions, ASL affected risk taking, variety seeking and curiosity-motivated behavior more strongly (negatively for cognitive stimulation seeking). Overall, scent pleasantness was found to moderate effects of ASL on sensory stimulation seeking tendencies (risk taking and variety seeking) and to a smaller extent effects on cognitive stimulation (curiosity-motivated behavior). Hypothesis 3 was accepted.

DISCUSSION

This research examined how the pleasantness of an ambient scent affects consumer exploratory tendencies in an optimum stimulation level framework. Theory is advanced through the finding that the pleasantness of an ambient scent does not affect consumer stimulation directly but instead moderates effects of actual stimulation level on consumer risk taking, variety seeking, and curiosity-motivated behavior. Respective results are in line with past studies suggesting that effects of ambient scent may be based on an interaction between affect and cognition rather than on scent exposure itself (Chebat and Michon 2003) and that direct effects of scent pleasantness are weak at best (Bone and Ellen 1999). The importance of adding actual stimulation as an additional predictor variable to a comprehensive OSL framework could also be confirmed. Overall, OSL theory appears to be a suitable framework for studying atmospherics.

The finding that, in addition to consumer optimum stimulation levels, their actual stimulation level affects exploratory tendencies, has also significant practical relevance. Unlike the trait variable

TABLE 1
Summary of standardized structural estimates

Estimated path	Hypothesis	Path coefficients
OSL → risk taking	-	.48**
OSL → variety seeking	-	.49**
OSL → curiosity-motivated behavior	-	.31**
OSL → ASL	-	.27*
Scent pleasantness <input checked="" type="checkbox"/> ASL	H1	.03
ASL → risk taking	H2a	.12*
ASL → variety seeking	H2b	.08*
ASL → curiosity-motivated behavior	H2c	-.26**
<i>Chi-square (d.f.)</i>		916.23 (535)
<i>P</i>		.001
<i>GFI</i>		.91
<i>AGFI</i>		.90
<i>RMSEA</i>		.054

* $p < .05$, ** $p < .01$

TABLE 2
Standardized structural estimates by scent pleasantness

Estimated path	Standardized path coefficients	
	Unpleasant scent	Pleasant scent
OSL → risk taking	.47**	.48**
OSL → variety seeking	.49**	.50**
OSL → curiosity-motivated behavior	.32**	.32**
OSL → ASL	.29**	.27**
ASL → risk taking	.36**	-.07
ASL → variety seeking	.28**	.06
ASL → curiosity-motivated behavior	-.34**	-.18**
<i>Chi-square</i>	916	895
<i>d.f.</i>	535	536
<i>P</i>	.001	.001
<i>GFI</i>	.940	.930
<i>AGFI</i>	.910	.900
<i>CFI</i>	.940	.930
<i>RMSEA</i>	.054	.057

* $p < .05$, ** $p < .01$

OSL, the affective state variable is more open to external influence. Marketers could shape it through e.g. free samples, courteous salespeople or above-average service with more favorable downstream effects on exploratory tendencies. Further relevance lies in the finding that managers could affect consumer exploratory tendencies indirectly by altering the pleasantness of scents diffused into a retail environment. They need to be aware, however, that corresponding manipulations need to be carefully coordinated with supporting influences on consumer actual stimulation levels to avoid undesirable outcomes.

Limitations of the study start with the fact that consumer general exploratory tendencies were examined rather than downstream effects on actual behavior. While past studies reported significant correlations between exploratory tendencies and behavior (Baumgartner and Steenkamp 1996; Gierl, Helm and Stumpp 1999), there is also evidence indicating that respective relations will be moderated by other variables, particularly product category involvement (Van Trijp, Hoyer and Inman 1996). Furthermore, Gierl, Helm and Stumpp (1999) report that, across product categories, the price of a (new) product had a stronger effect on product-

category specific exploratory behavior than consumer general exploratory tendencies. Clearly, more research is needed on examining effects of ambient scent and other environmental stimuli in an optimum stimulation level framework integrating actual behavioral constructs as well as a number of previously suggested moderators and product attributes. More information is also needed on why sensory and cognitive stimulation seeking variables do not act in concert, particularly with respect to the positive effects found for actual stimulation on risk taking and variety seeking, and the negative effect on curiosity-motivated behavior. Finally, future research could examine interactions between a number of environmental stimuli to identify most effective combinations or mutual inhibition (Mattila and Wirtz 2001).

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The Role of Meta-analysis in Marketing and Consumer Behavior Research: Stimulator or Inhibitor?

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EXTENDED ABSTRACT

Several meta-analyses have been carried out in marketing and consumer behavior research, leading to a high acceptance of the method. However, the implications of the implementation of meta-analysis for future research efforts in marketing and consumer behavior research are seldom discussed.

Meta-analysis critically analyzes and integrates empirical research on relevant theories, tries to resolve conflicts in the literature, creates generalizations, seeks the limits and modifiers of those generalizations, and attempts to identify central issues for future research. The identification of future research issues may lead researchers to further research particular topics; journals that publish meta-analytic findings may serve as catalysts for future research efforts. Others argue for a decrease in future research efforts following the implementation of a meta-analysis. If a relationship formerly assumed to be strong is proved by a meta-analysis to be very weak, to be non-significant or to be a methodological artifact, researchers may lose interest in further research on this particular research topic. Also, a high degree of generalization of the results in a meta-analysis may lead to less future research efforts, since proven law-like generalizations may be accepted without the need for further challenges.

In order to investigate assumptions of the role of meta-analysis in marketing and consumer research, we carried out content and citation analysis of 29 meta-analyses that were published in marketing and consumer research journals until 1997. For the citation analysis, we used the science citation index (SCI).

The results of the comparison of the average amount of publications per year for the included studies and the following studies indicated no difference for the sum total of all meta-analyses. At first glance, it seems that meta-analysis in marketing and consumer research serve neither as inhibitor nor stimulator for future research efforts. However, some differences of the ratio of the following to included studies were found for subgroups of meta-analyses, which were developed based on our hypotheses. Significant differences were obtained based on the strength of results and the importance of the journal. For meta-analyses with stronger results, the ratio was higher than for meta-analyses with weak results. Meta-analyses published in top journals were also, on average, followed by more studies than those published in other journals. The degree of generalization and the intention of future research efforts showed no difference for the subgroups of meta-analyses. A regression model indicated that the predictors show obviously interplay in the explanation of the differences in the amount of research efforts.

Dynamic aspects were evaluated through the correlations between the number of studies per year (following or included) and time (year of publication). The comparison between the measures for included studies and following studies indicates more dynamics in the research efforts after a meta-analysis has been implemented. Significant differences for subgroups were obtained only for the importance of the journal.

Our analysis identifies the role of meta-analysis for future research efforts and as such, confirms the necessity of research synthesis provided by meta-analytic approaches, particularly in relation to future research efforts; meta-analyses serve as stimulators for future research. In this sense, meta-analysis serves its

original purpose within science, as first developed by methodologists of meta-analysis. Scientists could influence future research efforts through meta-analysis as well as through publications in top journals. Reviewers of such journals should also take into account that the acceptance or rejection of a meta-analysis might influence future research efforts regarding particular research.

Our study has several limitations, however, which should be taken as motivation for further improvement and refinement. First, our sample is quite small, which limits power. It certainly could be meaningfully enhanced within the next few years by considering further meta-analyses published after 1997. Secondly, as a few meta-analyses from journals were not indexed by the SCI and could therefore not be included, the sample was reduced. Furthermore, moderators such as further meta-analyses on the same or a similar research topic may influence the relationships under investigation. It would also be interesting to focus more on aspects of theory and how scientists respond. In particular, if revolutionary concepts and theories develop, future research may also be inhibited. However, careful consideration of the research topics of the meta-analyses led us to the conclusion that no true revolution occurred, but rather evolutionary development. Finally, a causal link between the meta-analysis and citation patterns, as assumed in our research, cannot accurately be assessed by a regression analysis. As for applications of regression models in general, other relationships are possible and can and should be taken into consideration. Unfortunately, rigorous examination of the causality (as could be provided by experimental designs) is not possible in our study. A possible solution may be a triangulation of methods, such as collecting results of a survey amongst scientists, along with their perception of the impact of meta-analyses.

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How Product Scarcity Impacts on Choice: Snob and Bandwagon Effects

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EXTENDED ABSTRACT

The value of products is not only determined by the utility that consumers derive from the products' attributes and their functional consequences, but has an important social component as well. Specifically, scarce products are generally deemed valuable, independent of the utility that their intrinsic attributes deliver. This effect has been found in several studies and appears robust (Lynn 1991). This paper identifies two distinct routes through which scarcity can increase product choice. These routes are expected to have distinct effects in the product valuation process, which have until now not been examined in detail.

The first route examines scarcity due to excess demand. Consumers see that others have bought the product, and this may induce them to follow that behavior. This effect can occur out of conformity with others. Consumers may also extract information about the value of a product from the buying behavior of others. When consumers are unsure about the value of products, information on the valuation of others can help refine their own valuations. Hence, scarcity due to excess demand increases inferences of product popularity and quality. This is related to the bandwagon effect described in economic literature.

The second route concerns scarcity due to insufficient supply, where product exclusiveness leads to inferences of product quality (snob-effect). Consumers value the exclusivity of possessing rare products, and may see these products as a means to emphasize their uniqueness. Being one of the few who own a particular product may increase the product utility. We examine how scarcity operates in both routes, which theoretically exclude each other. By separating the two routes, we hope to gain new insights into the common situation where product scarcity influences consumer choice, and where less of a product increases sales.

To gain more insight into the two routes, and the dual forces of following others (bandwagon) versus being different from others (snob), our study relates these routes to consumers' need-for-uniqueness (NFU). The ability of scarce products to create a sense of uniqueness has been proposed as a reason for scarcity effects (Fromkin 1970). We propose that NFU only moderates the relation between scarcity and quality when scarcity is due to supply limitations, not when it is due to excess demand. After all, excess demand implies that the product is popular rather than exclusive.

As an application area, this paper examines the influence of product scarcity as communicated by empty shelf space in stores. The visible (lack of) supply of a product is powerful signal of product scarcity (Stiff, Johnson & Tourk 1975). When a product is almost out of stock, this may act as a scarcity cue, and it is a situation that consumers commonly experience during shopping trips. In fact, if our research indeed shows that product scarcity, as expressed through empty shelf space, increases preference and choice of scarce products, this implies, somewhat counter intuitively, that reduced stocks promote increased sales.

Two experiments test our framework. The first experiment examines both scarcity caused by excess demand, and scarcity caused by limited supply in a virtual shopping environment for a sample of the Dutch population. This study confirms that scarcity due to excess demand leads to inferences of product popularity and quality, and thereby increases product choice. In a second experiment, we used a different setting (liquor store). To gain more

insights into the processes underlying the scarcity effects on choice, we also examined the influence of NFU. In this second experiment, the reason for empty shelf space and the degree of empty shelf space were manipulated between-participants. Each participant viewed a shelf with two different wine bottles on the computer screen. One of the wines was scarce, and product evaluations were asked for both products, within-participants. Results show that both scarcity routes exist and increase product choice, while NFU only enhances quality inferences when scarcity is due to limited supply.

Theoretical implications concern the identification of two scarcity routes. While previous scarcity studies have mostly focused on limited supply, we show that excess demand and limited supply promote distinct inference processes. Although both routes lead to increased product choice, the process and moderating variables are different. Practical implications of our study concern sales forecasting, inventory management and the influencing of product preference. The accelerating effect of empty shelf space implies that stock-outs may occur sooner than one expects. Using empty shelf space as an efficient management tool would only be feasible in stores that sell a relatively small amount of products. Especially in combination with a sales pitch, scarcity can increase sales here. The insight that our study provides into the response of consumers to demand versus supply reasons for scarcity has important implications for such a sales pitch. In one case, emphasizing product uniqueness can be advantageous while in the other case it may be detrimental.

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Till Death Us Do Part? Consumption and the Negotiation of Relationships Following a Bereavement

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EXTENDED ABSTRACT

Many studies have focused on the active role of consumers in constructing meaning from encounters with goods, services or advertising (Belk 1988; Mick and Buhl 1992; Elliott and Wattansuwan 1998; Manolis et al 2001). Much of this work has related to self-identity, but there are some indications that consumption also plays a role in negotiating relationships. For example, Ruth et al (1999) examine how the experience of receiving gifts can affirm, strengthen, weaken or even sever a relationship. Recent work in the discipline has extended this focus to relationships between the living and the dead and how they can be modified through disposition or symbolic funerary ritual (Kates 2001; Bonsu and Belk 2003). This latter study examined the ways in which expenditure on such ritual could be managed to enhance the communal identity of the deceased and, by dint of kinship ties, those of bereaved family members. The present study aims to progress this research agenda in two ways. First, it takes a longer term, postmortem perspective extending beyond the short-term funeral period. Second, its focus is on the way in which a particular form of consumption is employed to negotiate an intricate nexus of personal relationships between living and dead, and living and living. In this sense it works on a broader relational canvas than that of communal identity formation.

The consumption activity examined in this study centres on *In Memoriam* verses. These are verses inserted in local newspapers by bereaved relatives and friends on the anniversaries or birthdays of those who have died. Particularly common in Ireland and amongst the Irish Catholic diaspora, they are located within the classified advertising section, and priced accordingly. They usually include the name of the deceased, several lines of verse, and details of those inserting them. The overall impression is of a highly ritualized, conservative discourse, with a sentimental tenor similar to that of greeting cards. Phenomenological interviews (Thompson et al 1989) were undertaken with eighteen bereaved consumers of Irish *In Memoriams*. A variety of relationships to the deceased were represented among informants. Participants were encouraged to tell the story of their bereavement and trace the trajectory of their involvement with placing these verses.

Apart from developments in the consumer behaviour literature, this study also draws inspiration from what has been characterised as a paradigm shift in research on the grieving process. For most of the twentieth century the success of grief intervention was gauged by the speed and efficiency with which those left behind could separate and detach themselves from the dead person. This approach is increasingly being replaced by an alternative approach in which normal grieving should involve living *with* the dead, not without them (Walter 1999); continuing bonds with the deceased are considered healthy and functional. The experiences of the informants in this study resonated markedly with the overall thrust of this second paradigm. Continuing bonds with their departed loved ones were unquestioned and unproblematic. Their engagement in composing and placing IMs was a robust statement in its own right that they neither desired nor required to 'let go' of their departed loved ones.

When participants were asked to discuss 'what was going on' in the insertion of IM verses, it became apparent that the primary focus of their activity was a nexus of relationships. Overall, it seems

that these bereaved consumers saw themselves maintaining, moderating, and modulating an array of relationships, both with the living and with the departed. This relationship work was singularly active and evident in various elements of the process: in the composition phase, the wording of verses, the sequencing and location of verses on the newspaper pages or the listing of placers beneath each verse. So, the operational arena within which this agentic consumer behaviour unfolds was both broad and highly nuanced.

Two broad spheres emerged within which our participants sought to negotiate and develop interpersonal agendas. The first sphere comprised relationships between the living and the living. Here, the emphasis is on how placers utilized *In Memoriams* as an instrument of social engineering to effect personal agendas in either the immediate family or wider communal spheres. Four such 'living-to-living' agendas emerged in our analysis, and from these themes it became evident that *In Memoriams* contributed to family meaning-making after a death (Nadeau 1998) and were implicated in the negotiation of reputations and moral identities of family members (Finch and Mason 1993). 'Living-to-dead' relationships, the second sphere, embraced two subsidiary relational agendas and led us to surmise that the cultivation of communal memory might be central to what *In Memoriams* are about. Public memory is fickle and fallible and needs to be worked on; *In Memoriams* are a vivid example of how this form of consumer behaviour can be marshalled to this end.

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Towards A Better Understanding of the Low-Income Consumer

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ABSTRACT

Research on low-income or poorer consumers and the disadvantages that they encounter in the marketplace is the focus of this paper. A number of commonly held beliefs about low-income consumers need to be challenged but since these consumers are not high priority as target markets there is little investment in the market research that might go some way to dispel them. This paper aims to challenge some of these beliefs and to suggest how this research might be further developed by drawing together research and theories from a range of disciplines including consumer research, psychology and sociological constructs.

INTRODUCTION

Research on low-income or poorer consumers and the disadvantages that they encounter in the marketplace is the focus of this paper. Low-income consumers are defined as individuals whose financial resources or income results in them being unable to obtain the goods and services needed for an "adequate" and "socially acceptable" standard of living (Darley and Johnson 1985). This definition adopts a relative perspective on poverty in that low-income consumers lack the resources necessary to participate in what are perceived as the normal customs of their society. Within the consumer society, normality is equated with the ability to consume. Consumers are expected to respond to the temptations of the marketplace by having the latest and the best consumer goods (Szmigin 2003). The poor, who are limited in their ability to respond to these temptations have been marginalized from mainstream society and described as "unwanted," "abnormal," "non-consumers" and "flawed consumers" (Bauman 1998). Constructing normality in this way focuses only on larger societal influences. However there will also be influences coming from the consumer's own narrow society, that is their own neighborhoods and peer groups which are likely to consist of other low-income consumers. The importance attached to each of these sets of influences will have an impact on the way in which poverty is constructed.

The marginalization of low-income consumers is accentuated by marketers' disinterest in poorer consumers (Winnett and Thomas 2003). A number of commonly held beliefs about low-income consumers need to be challenged but since these consumers are not high priority as target markets (Curtis 2000), marketers invest little in the research that might go some way to challenge them. Furthermore, there has been relatively little sustained academic research on the poor as consumers. This paper reviews the available literature on low-income consumers and goes on to suggest some areas for further research. Hill and Stephens' (1997) model of impoverished consumer behavior identifies three main areas of research interest on low-income consumers, namely exchange restrictions, consequences of disadvantage and strategies for coping with disadvantage. Using this model, the literature relating to each of these areas will be examined. Following this, some of the common assumptions marketers make about low-income consumers are discussed and challenged by drawing together research from a wide range of disciplines. Finally, some avenues for further research are identified.

LITERATURE RELATING TO HILL AND STEPHENS' MODEL

Low-income consumers account for a significant percentage of the population. 32.3 million people in the US are classified as

officially poor (Hill 2002). As such, it would seem logical that they should be a group of interest to marketers and consumer researchers. However, this is not the case as both academic and commercial research on the low-income consumer is underdeveloped. Academic interest began with the pioneering work of Caplovitz (1967) and his influential book *The Poor Pay More*. Research has not been continuous and there have been long periods of silence on the topic. Since the 1990s there has been a slight revival of interest and more recently Ronald Paul Hill (1991, 1997) has been a welcome contributor to this area. The three main areas identified by Hill and Stephens (1997) provide a useful framework for reviewing this available literature.

1. Exchange restrictions

The exchange relationship between marketers and low-income consumers is imbalanced in favor of the marketers (Alwitt and Donley 1996; Hill 2002). Exchange restrictions imposed by the supplier include high prices, low quality goods and small assortments. The poor suffer price discrimination and could face a consumer detriment factor of 11 per cent, meaning that poor families have to spend 11 per cent extra to get equivalent goods and services to average families (Aird 1977). Many studies have investigated the price of food for low-income consumers and evidence has confirmed that supermarket prices are often higher in poor neighborhoods, resulting in the poor paying more for grocery products because the stores that charge the lowest prices are not located in areas convenient to their homes (Chung and Myers 1999). Indirect price discrimination also occurs because lack of capital equipment (Williams 1977: 235) such as cars (for transport) or storage spaces, limits low-income consumers from taking advantage of the range of offerings available to more affluent consumers. An inability to take advantage of bulk buying denies the poor many opportunities for getting good value for money and stocking up on items for future consumption.

Low-income consumers often have to suffice with lower quality goods and services. They may have no choice but to purchase second hand goods, an option that is almost always viewed as second-best (Williams and Windebank 2001). Gregson, Crewe and Brooks (2002) found that charity shopping is a necessity for impoverished consumers, involving a lot of time and effort to find adequate, good quality products.

Limited product availability can be a problem for low-income consumers (Hill and Stephens 1997). This could be partly attributed to access difficulties including both physical access and access to information. For example, in the food retailing industry there has been interest in the concept of food deserts- populated areas with little or no food retail provision (Cummins and Macintyre 1999; Curtis 2000). Further, in the financial sector, low-income consumers under the information shadow are not sent marketing information by financial companies (Kempson et al. 2000).

2. Consequences of disadvantage

Poor dietary habits such as low dietary variety and inadequate nutrient intakes can affect physical health (Kempson 1996). Daly and Leonard (2002) found that in three quarters of low-income households studied, at least 1 family member experienced poor health. There is also potential for psychological health problems as feelings of powerlessness often accompany alienation from the primary consumer culture (Andreassen 1975). Children are also

affected and experiences of poverty affect self-esteem and confidence through the fear of social difference (Ridge 2002). Bullying can also be a problem if children are forced to wear different clothes than their peers (Daly and Leonard 2002).

Kempson (1996) suggested that financial problems lead to stressful personal relationships and in some cases, separation. Further with available resources largely tied up with necessities such as food and rent (Alwitt and Donley 1996), little money remains for socializing.

The literature portrays the consequences of disadvantage as largely negative. However many low-income consumers have never had the taste of money and its associated consumption and thus are happy with their lives. The length of time spent in poverty is important. Those consumers who make the transition into poverty and are used to a higher level of consumption may suffer more than the chronic poor who have not experienced any other lifestyle.

3. Coping strategies

Low-income consumers often show great skills in exploiting their environment to exert some control within their lives (Alwitt and Donley 1996: 93; Hill and Stephens 1997; Hill 2002). Coping has two major functions; regulating stressful emotional situations and altering the troubled person-environment relation causing the distress. These are often referred to as emotion-focused coping and problem-focused coping (Lazarus and Folkman 1984).

Low-income consumers employ various emotional coping strategies including distancing or fantasizing about a better future (Hill and Stephens 1997). Homeless people use distancing to distinguish themselves from others in similar situations (Hill and Stamey 1990) while fantasies about future home lives are used to reduce the stress associated with current circumstances (Hill 1991). Fantasies have the power to replace the threat with a more acceptable form of reality (Breakwell 1986). Kempson, Bryson and Rowlingson (1994) identified a hierarchy of behavioral coping strategies in families with children living on very low incomes. These included finding (better-paid) full-time work, selling non-essential items, delaying paying bills and begging.

Gender differences in coping strategies have been noted. Women tend to focus on emotions and seek social support while men adopt a more rational and stoic style of coping (Carver and Scheier 1989).

Hill and Stephens' (1997) model offers a useful starting point for research on the low-income consumer. However, it is important to point out that the severity of exchange restrictions and negative consequences as well as the need for coping strategies will be dictated by the consumer's position within the continuum of the low-income consumer landscape. There are also other issues that need to be addressed because they involve widespread assumptions about low-income consumers. These are now discussed along with some research that is beginning to challenge them.

ASSUMPTIONS ABOUT LOW-INCOME CONSUMERS

There is a need for consumer researchers to challenge some of marketers' wide-spread beliefs about low-income consumers. It is commonly assumed that low-income consumers are unprofitable and risky (Alwitt and Donley 1996), passively accept their situation and are even responsible for it (Becker 1997). Additionally, low-income consumers are assumed to lead miserable lives. The limited research on these assumptions suggests that they need to be more vigorously challenged.

1. Low-income consumers are unprofitable and risky

One condition for a successful exchange relationship is that "each party believes it is appropriate or desirable to deal with the other party" (Kotler 2000: 12). Marketers do not always regard exchanges with low-income consumers as appropriate or desirable. However it would be an inappropriate generalization to suggest that all marketers neglect low-income consumers. Some marketers actively target low-income consumers because they can make a higher margin through charging higher prices, for example rent-to-own retailers (see Hill, Ramp and Silver 1998) while other companies such as Family Dollar and Aldi target low-income consumers in a more socially responsible manner.

Despite this, in many cases, marketers are not interested in low-income consumers. Relationship Marketing theory encourages companies to target their most profitable customers and ignore their least profitable ones. Customer valuation techniques (Boyce 2000) as well as the increased use of databases (Curtis 2000) have made it easier for marketers to identify their most and least desirable customers. More targeted marketing strategies can lead to the poor being excluded by marketers because they believe it makes more economic sense to provide only for more affluent consumers (Boyce 2000).

As well as being excluded from targeted marketing strategies, low-income consumers also face disadvantage due to marketers treating them differently from other customers. Many companies use Customer Relationship Management (CRM) techniques to distinguish between more important and less important consumers. For example, call centers often use CRM systems to differentiate between poorer and wealthier callers based on geodemographic data, including zip codes. Poorer callers may be held in queues and are then directed to junior members of the sales team who do not have the option of offering discounted products and services (Winnett and Thomas 2003).

This assumption that low-income consumers are unprofitable and risky is open to question. The buying power of low-income consumers may be higher than traditional income measures portray because annual cash incomes are not always consistent with annual purchasing power (Alwitt and Donley 1996). As the majority of poor consumers will only stay in poverty for a limited time, they have the potential to be profitable consumers in the future so should not be ignored (Alwitt and Donley 1996: 40). Estimates of average length of time spent in poverty range from 4 months (O'Boyle 1998) to just over 4 years (Alwitt and Donley 1996:41).

The long-term poor can also be loyal customers. The restricted shopping scope of low-income consumers limits the number of alternative retail spaces available to them (Goldman, 1976). As such, they are more likely to shop in the same locations, thus increasing loyalty. In addition, there are many examples of companies who have been successful in targeting low-income consumers. Take the example of Family Dollar Stores, Inc. who target low and lower middle income consumers through their no-frills, low overhead, self service environment where almost all merchandise is priced under \$10. Family Dollar attracts almost 11 million customers each week and in August 2003 they celebrated the opening of their 5000th store. With a net income of \$247,000,000, Family Dollar provides an example of a company that has succeeded in targeting low-income consumers (www.familydollar.com).

2. Low-income consumers passively accept their situation

A common assumption is that consumers are reactive and control rests with marketers. Indeed marketers are often portrayed as cultural engineers, influencing people's attitudes through their brands (Holt 2002). As a result, marketers and consumer research-

ers are often responsible for denying consumers' agency (Penaloza and Price 1993). This suggests that consumers and perhaps in particular disadvantaged groups of consumers are denied the opportunity of exerting control in the marketplace. The roles that consumers play in the marketplace can be explained by theories of structure and agency. Structure refers to social facts such as race, class, sex, family and culture over which the individual does not have much control and from which he or she cannot escape (Musolf 2003). 'Agency concerns events of which an individual is the perpetrator, in the sense that the individual could, at any phase in a given sequence of conduct, have acted differently' (Giddens 1984: 9).

Traditionally, functionalists viewed structure as external to human action and as a source of constraint on the free initiative of the subject (Giddens 1984: 16). Pre 1960s sociological theory suggested that objective social structures governed human existence and that the future of sociology would follow the example of deterministic natural sciences (Parker 2000: 11). Those who adhere to a deterministic viewpoint tend to diminish the importance of agency arguing that there is no sense in trying to change the status quo.

However, another way of viewing this is to consider the ways that sociological theorists have attempted to transcend the distinction between objective and subjective reality by incorporating both structure and agency within a single scheme. Giddens (1984) was the pioneer of this idea with his theory of structuration. Rather than considering objectivity and subjectivity as logically exclusive of each other, agency cannot exist without structures upon which to base action and structure cannot exist without the knowledge of agents (Giddens 1984: 26).

Applying this theory to consumer action in the marketplace suggests that consumers are capable of demonstrating agency. One way that consumers exert agency is by using products and brands in unexpected and creative ways (Szmigin, 2003). Low-income consumers may be particularly prone to this if financial constraints force them to find unconventional ways of meeting their needs and wants. They may be more likely than affluent consumers to use products and services in innovative and creative ways in efforts to save money.

There has also been a change in what is viewed as acceptable consumption behavior for different groups of consumers. Traditionally, structural constraints imposed uniformity in consumption behavior within particular social groups. However, Warde (1994) pointed out that such constraints are reduced due to increased individualization. Low-income consumers are therefore not constrained to consuming goods and services that were once deemed appropriate for their social class.

Evidence suggests that traditional perspectives and the common assumption that low-income consumers are passive need to be challenged. As mentioned earlier, low-income consumers often face a lack of choice. This results in them placing greater emphasis on attempts to exert some control in their lives. Children are also capable of adapting to their environment, for example, impoverished youths may even resort to crime to obtain their Nike trainers (Goldman and Papson 1998).

3. Low-income consumers are responsible for their situation

Becker (1997:1) highlighted how a longstanding stereotypical view is that the poor consumer is "lazy, criminal and responsible for their circumstances." This implies that people are poor due to personal failings that make them different from the rest of society. As such, they are seen as undeserving because financial difficulties are due to their own actions or inactions. However, there are many reasons why low-income consumers fall into poverty. Figure 1

illustrates reasons for poverty or the transition into poverty. In some cases poverty may be a result of individual personal characteristics. This may be due to differing values, attitudes and goals (Andreassen 1975).

Family circumstances including factors such as family size and family structure may also have an impact. For example, those in large families are more prone to poverty (Darley and Johnson 1985) and many authors have highlighted the plight of poor single mothers (Darley and Johnson 1985; Alwitt and Donley 1996; Hill and Stephens 1997; O'Boyle 1998; Bowring 2000; Hill 2002). Employment status is also important given that the working poor constitute only a small fraction of the poverty population (O'Boyle 1998).

The outer layer includes various macroenvironmental factors over which the individual has little control. In relation to the economy, issues such as the widening income gap between the rich and the poor and market structure may be contributing factors. The market structure often dictates that low-income consumers come in contact with merchants who employ exploitative practices (Andreassen 1975: 7). Low-income consumers may be less business savvy and as Best (1981: 28 cited in Andreassen and Manning 1990) suggested "being poor and subject to stressful financial circumstances can cloud one's judgment, making one far more receptive to disadvantageous business dealings than he or she ordinarily would be"

Furthermore, poverty can also be a consequence of "social barriers" (Becker 1997: 159). These include reactions, attitudes and language as well as various other factors that label the poor as different and marginalize them from mainstream society. In this case it is not the actions of the poor themselves who accentuate poverty but the attitudes of others. Finally, political factors may include such things as inadequate welfare payments and a lack of public policy aimed at helping low-income consumers.

4. Low-income consumers lead miserable lives

Within the consumer society, wealth and material goods are often equated with happiness. As low-income consumers lack the resources necessary to participate fully in the consumer society it is assumed that they do not lead happy lives.

Bowring (2000) argued that low-income consumers, who are not overwhelmed by feelings of deprivation and envy, "possess the personal and cultural predispositions which make possible a potential disengagement from the world of rising consumer aspirations." The suggestion is that not all low-income consumers are discontented with their lives. It may be possible to meet one's needs in unconventional ways or reformulate needs in ways that differ from social expectations.

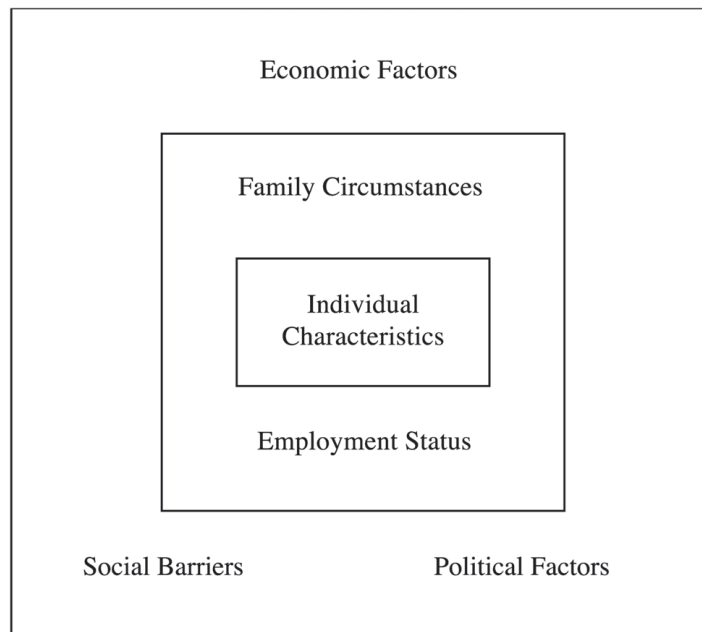
In some cases, low-income consumers may have made an active choice to exclude themselves from mainstream society. For example, Elliott (1995) found that unemployed consumers cope with financial constraints by resisting the appeals of materialism and instead advocating the benefits of voluntary simplicity.

The idea that low-income consumers have resource assets as well as resource deficits at their disposal was introduced by Lee, Ozanne and Hill (1999). In their study of health care delivery to women in an Appalachian Community, it was found that although the women faced extreme shortages of both economic and cultural capital, social capital was very strong as the women had clear social support networks on which they could rely during difficult times.

AREAS FOR FUTURE RESEARCH

The review of literature has revealed several areas that would benefit from the attention of consumer researchers. With reference to Hill and Stephens' model (1997), there has been little research on

FIGURE 1
Reasons for Poverty



consequences of disadvantage in relation to identity formation. Possessions have more than a functional use; they are used as signs and symbols (Baudrillard 1998) and are said to be reflections of consumer identities (Belk 1988). Further research is needed on the effects of reduced consumption on identity formation. In their study of curtailed consumption in a penal environment, Brownlie and Horne (1999) suggested that constrained access to consumption activities results in the restriction of identity formation. Low-income consumers may encounter a similar problem; if self-identities are constructed through consumption and possessions, low-income consumers are denied this opportunity of identity creation as they do not have the resources to 'buy' their identities.

In many models of stress and coping, researchers have presented the subject as a person who individually appraises and copes with stressors (Berg et al. 1998). However, this neglects the fact that individuals experience stressors within a social context and may cope with stressors in a collaborative fashion with other individuals. For instance, within families the stressor will be faced by the social unit and not just the individual. As poverty is likely to affect all family members, coping strategies may be more collaborative in nature.

The ways in which low-income consumers attempt to exert some control in their lives offers further research potential. Studies on strategies of resistance used by low-income consumers would provide a welcome contribution to the literature. For example, studies could focus on the novel ways in which these consumers use their goods and services. An unexplored area is the link between consumer disadvantage and consumer agency. Coping strategies associated with disadvantage and methods of demonstrating agency can both result in the same outcome. To illustrate, second hand products and retail spaces are an important coping strategy for low-income consumers (Williams and Windebank 2001). However, second hand spaces can also form part of resistant shopping

practices through attempts to resist tendencies such as globalization, homogenization and the concentration of retail power (Gregson and Crewe 2003). The relationship between theories of consumer disadvantage and consumer agency may need to be reassessed in light of this.

Research on social capital would go some way to developing the work of Lee, Ozanne and Hill (1999) on resource assets. Potential avenues of inquiry include the interrelationship between low-income families and their neighborhoods (for example, ways in which families, businesses and community groups work together for the mutual benefit of the neighborhood) and the degree to which social capital compensates for a lack of economic and cultural capital.

Increased awareness of the reasons for poverty may help in dispelling the assumption that low-income consumers are responsible for their situation and reduce prejudices and preconceptions often held about the impoverished population. Research on reasons why this assumption is held would also prove useful. For example, studies could focus on the role of the media in contributing to this assumption.

At present low-income consumers are, in many instances, neglected consumers. Fischer (2001) suggested that it was debatable whether consumers marginalized by the market were better or worse off in not attracting the attention of marketers. As companies are increasingly expected to fulfill social responsibility aims, perhaps marketers should not be permitted to deliberately neglect and abdicate responsibility for meeting the needs of vulnerable consumers. Information on the consumer loyalty, lifetime value and bad debts of low-income consumers as well as studies of businesses that have profitably targeted low-income consumers may go some way to dispel the assumption that poor consumers are risky and unprofitable. Such research may encourage businesses to be more creative and innovative in relation to target marketing and

the development and promotion of products/services aimed at low-income consumers (see Curtis, 2000).

CONCLUSION

To conclude, there are many gaps in the literature on the low-income consumer. Further research is needed on the three main areas of research identified by Hill and Stephens' (1997) as well as on the widely held and probably erroneous assumptions that marketers' hold about low-income consumers. It is time for consumer researchers to work towards raising the profile of this disadvantaged group.

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Consumers' Demographic Characteristics, Cognitive Ages, and Innovativeness

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ABSTRACT

The purpose of this study is to investigate the role of cognitive age in relation to demographics and innovativeness. Results of this study suggest the mediational role of cognitive age. It signals not only the message of chronological age, but also the information of other demographic characteristics. Furthermore, it directly determines consumers' adoption behaviors of high-tech products. Focusing on cognitive age, therefore, marketers can both efficiently and effectively segment their markets. Finally, marketers can create a younger cognitive age in consumers through enhanced communication marketing efforts. In this way, cognitive age can be transformed into a controllable strategic variable.

INTRODUCTION

Chronological age is commonly used in marketing and consumer behavior research. It is easily measured and is an objective and universal attribute (Settersten and Mayer 1997) that is used frequently (Barak and Schiffman 1981). Although chronological age exerts important influences on consumer behaviors, when used in age related research, it does not function well as a dependent variable (Barak and Schiffman 1981). People frequently perceive themselves to be younger or older than their chronological age and this "self-perceived or cognitive age" seems to influence people's daily behaviors (Barak and Schiffman 1981). For this reason, chronological age is meaningless unless a specific social meaning to it is attached (Neugarten and Hagestad 1976). This leads to the suggestion of broadening the concept of age (Roscoe, LeClaire, and Schiffman 1977), and other age related concepts suggested in literatures. Examples include subjective age (Blau 1956; Peters 1971), personal age (Kastenbaum, Derbin, Sabatini, and Artt 1972), biological age (Jarvik 1975), social age (Rose 1972), projected age (Puglesi 1983), and cognitive age (Barak and Schiffman 1981). Cognitive, rather than chronological age, directly influences one's attitude and behaviors. Wilkes (1992) found cognitive age to be associated with self-confidence, work-orientation, fashion interest, entertainment, and cultural activities.

Adopters of innovative products are usually younger and have higher educational and income levels (Rogers 1962). Innovation (Schiffman and Sherman 1991), younger age, higher income (Underhill and Cadwell 1983; Wilkes 1992) and education (Underhill and Cadwell 1983) are all related to cognitive age and it may play an important role. The purpose of this study is to investigate the role of cognitive age to demographics and innovativeness.

Concept and Measurement of Cognitive Age

Cognitive age refers to one's perceived age (Barak and Schiffman 1981). It differs from chronological age in that a person may cognitively feel younger or older than s/he actually is. According to Stephens (1991), there are three different measures of cognitive age: single-item measure (simple categorical adjectives; e.g., Blau 1956; Underhill and Cadwell 1983), four-dimension

measure (i.e., feel-age, look-age, do-age, and interest-age; Kastenbaum et al. 1972), and semantic differential measure (Guptill 1969; George, Mutran, and Pennybacker 1980). Of the three, four-dimension measure is the most straightforward to administer, analyze, and interpret (Stephens 1991). Although the term "cognitive age" was first used by Barak and Schiffman (1981), its operational definition came from the four dimensions of personal age used in Kastenbaum et al. (1972). Kastenbaum et al. (1972) asked respondents to give a precise age figure for each age dimension (Goldsmith and Heiens 1992). Barak and Schiffman (1981) revised Kastenbaum et al.'s (1972) measures into a decade matching format. Their sample was limited to age 55 and over, while Kastenbaum et al.'s (1972) sample spanned from 20 to 69 years of age. In this study, Kastenbaum et al.'s (1972) measure is used because the age range of our sample is consistent with theirs.

Studies about cognitive age have emerged since the early 1980s by Barak and his colleagues (e.g., Barak and Gould 1985; Barak and Schiffman 1981), although cognitive concepts of age can be traced back to the mid 1950's in a study by Tuckman and Lorge (1954) (Underhill and Cadwell 1983). Related issues studied include construct assessment (e.g., Barak and Schiffman 1981), measure comparisons (e.g., Stephens 1991), comparisons with other age concepts (e.g., Barak and Gould 1985), antecedent variables of cognitive age (e.g., Chua, Cote, and Leong 1990), and the antecedent and consequence of cognitive age (e.g., Gwinner and Stephens 2001; Wilkes 1992). Demographic variables (Gwinner and Stephens 2001; Wilkes 1992), life satisfaction, activity level, family life, health, culture (Chua et al. 1990), social support, and attitude toward the elderly (Gwinner and Stephens 2001) had all been treated as antecedent variables affecting cognitive age. Consequence variables include fashion interest, social involvement, self-confidence, work orientation (Wilkes 1992), information-seeking behavior, caution in purchases, and exploratory shopping behavior (Gwinner and Stephens 2001). The current study is devoted to exploring the role of cognitive age in relation to demographic characteristics and innovativeness, as innovative products play a key role in building and promoting the quality of consumers' lives.

Two concepts concerning the adoption behavior of innovative products should be noted: (1) anxiety (2) information-seeking behavior. Innovation is uncertain and involves risks (Gatignon and Robertson 1985). Consumers may search for information about innovative products in order to reduce their risk anxiety (Taylor 1974). It is therefore necessary to include anxiety and its resulting information-seeking behavior in order to understand the relationship of cognitive age to the adoption behavior of innovative products. Our focus is on technological products, such as PCs, notebooks, mobile phones, Internet services and other related products, etc. We will, hereafter, use the more specific terms "technology anxiety" and "information-seeking behavior of high-tech products."

Demographic Characteristics and Cognitive Age

Self-perceived ages vary. Teens tend to perceive themselves as older; young adults perceive themselves accurately; older people perceive themselves as younger (Montepare and Lachman 1989). Younger age identification among the elderly is even more obvious (Blau 1956; Peters 1971). The empirical findings of Bei and Chiao (2003) showed similar patterns in the gap between chronological

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age and cognitive age. On average, cognitive corresponds to chronological age. The cognitive age of an older person will be higher than that of a younger person (Bei and Chiao 2003; Blau 1956; Peters 1971; Underhill and Cadwell 1983; Wilkes 1992).

H1: Consumers' chronological age is positively related to cognitive age.

Men and women the same age may differ in cognitive age due to different psychological traits. Women are more sensitive to aging than men (Peters 1971), and thus tend to feel cognitively younger than their male counterparts.

H2: Cognitive age of female consumers is younger than that of males.

Education not only makes people more competent in the workplace, but also more self-confident and cognitively younger than the less educated (Bei and Chiao 2003; Underhill and Cadwell 1983).

H3: Consumers' level of education is negatively related to cognitive age.

Cognitive age between singles and married was found to be contradictory in literatures at first glance. According to Underhill and Cadwell (1983) and Wilkes (1992), cognitive age of the married is younger than the single (or non-married), contrary to Bei and Chiao's (2003) finding that the single feels cognitively younger than the married. The different findings may be attributed to the different categorization of the divorced or separated into separate levels or the single level. Bei and Chiao (2003) treated the divorced or separated as a distinct level of marital status, resulting in three levels, that is, the single, the divorced or separated, and the married. Other researches (Underhill and Cadwell 1983; Wilkes 1992) distinguished marital status into only two levels, that is, the single (or non-married) and the married, with the divorced or separated incorporated into the single level as arranged by Barak and Stern (1985), in which the non-married group included both never-married and formerly married.

Bei and Chiao (2003) found that the cognitive age of the single is younger than that of the married, and the cognitive age of the married is in turn younger than that of the divorced or separated. If this finding is true, then it is reasonable that Underhill and Cadwell (1983) and Wilkes (1992) both found the married cognitively younger than the single as a result of categorizing the divorced or separated into the single level, making the single cognitively older than the married. This article adopts the two-level categorization method, that is, the married and non-married with the latter including both the single and the divorced or separated. According to Bei and Chiao's (2003) findings and considering the fact that the divorce rate in Taiwan is lower than the West, we hypothesize that the non-married, dominated by the single, is cognitively younger than the married.

H4: Non-married consumers' cognitive age is younger than that of the married.

Individuals with a higher income enjoy higher socioeconomic status and higher life satisfaction and tend to feel younger. Previous studies show a similar viewpoint (Gwinner and Stephens 2001; Underhill and Cadwell 1983; Wilkes 1992).

H5: Consumers' level of income is negatively related to their cognitive age.

Employed consumers reported feeling younger than retired ones (Underhill and Cadwell 1983), expressing more youthful vitality, as contrasted with the unemployed.

H6: Employed consumers' cognitive age is younger than the unemployed.

Cognitive Age and the Adoption Behavior of Innovative Products

Technology anxiety comes from two sources: the risky nature of innovative products (Gatignon and Robertson 1985; Taylor 1974), and "macro consumer behavior" concern (termed by Belk and Pollay 1985; hereafter referred to as macro effect) about the negative side effect of innovative products on people and society. Regarding the latter, Belk and Pollay (1985) concluded that advertising has changed consumption values from "doing" (or instrumental materialism) to "having" (or terminal materialism) by "increasingly portray[ing] consumption as an end in itself rather than as a means to consumer well-being" (p. 887). This concern becomes more serious in the Internet era today. High-tech products, such as Internet service, speed up the macro effects of advertising and deteriorate consumption values from utilitarian values to hedonistic values; pleasure-seeking rather than deprivation avoidance (Tse, Belk, and Zhou 1989). The short life cycle of high-tech products makes the situation more serious. Concern about the negative side effect of innovative products on people and society becomes a more important source of anxiety when using high-tech products.

In regard to risks and the macro effect in the use of high-tech products, technology anxiety will incur in the consumers' mind (Taylor 1974), and younger persons will suffer greater anxiety (Drentea 2000). Although the age used in Drentea (2000) is chronological age, it should be noted that the linkage between cognitive age and anxiety could be stronger and more direct than that between chronological age and anxiety, because cognitive age and anxiety are both psychological states. This provides indirect evidence for the negative relationship of cognitive age and technology anxiety.

H7: Consumers' cognitive age is negatively related to technology anxiety.

Focusing on new brand trial behavior, Gwinner and Stephens (2001) found that cognitive age is negatively associated with information-seeking behavior, that is, the cognitively younger person conducts more information searching behaviors.

H8: Consumers' cognitive age is negatively correlated with their information-seeking behavior of high-tech products.

Finally, those with a younger cognitive age tend to be more innovative (Schiffman and Sherman 1991), and will exhibit a higher degree of adopting high-tech products (Rogers 1962).

H9: Consumers' cognitive age is negatively related to their adoption behavior of high-tech products.

Related Variables of the Adoption Behavior of Innovative Products

The uncertainty and macro effect of purchasing decisions may cause consumers to feel anxious about their choices (Taylor 1974). They will seek information to release anxiety (Roselius 1971). Because innovation per se brings about uncertainty (Gatignon and Robertson 1985), the adoption behavior of high-tech products is relatively risky. Therefore, consumers must search for more information to decide whether to adopt high-tech products or not.

H10: Consumers' technology anxiety is positively related to their information-seeking behavior of high-tech products.

Anxiety is a psychological state of negative affect, whereas technology anxiety is a negative attitude towards high-tech products. Because consumer behavior can be directly influenced by attitudes (Bentler and Speckart 1979), the greater the technology anxiety, the lower the degree of adoption behavior of high-tech products.

H11: Consumers' technology anxiety is negatively related to their adoption behavior of high-tech products.

Gwinner and Stephens (2001) showed that information-seeking behavior is one of the determinants of consumers' new brand trial behavior. New brand trial, in nature, is one kind of risky behavior, and interest in new brand trial means a higher degree of innovativeness. Therefore, the more the information-seeking behavior, the greater will be the degree of adoption behavior of high-tech products (Rogers 1962).

H12: Consumers' information-seeking behavior of high-tech products is positively related to their adoption behavior of high-tech products.

METHODOLOGY

Data Set and Sample

The data is from the database of the 2003 Eastern Integrated Consumer Profile (hereinafter referred to as E-ICP) set up by the Eastern Advertising Company. The Eastern Advertising Company has conducted a consumer survey in Taiwan every year since 1986 by means of a face-to-face in-house interview plus a self-entry form. The target age group in the E-ICP is between 13 and 64, with a sample size of 1344. Because large differences may exist between teens younger than 20 and adults over 20 in regard to cognitive age (Bei and Chiao 2003) and opinions about high-tech products, the sample used in this study is limited to adults over 20 years old. The data was analyzed using LISREL VIII (Jöreskog and Sörbom 1993). Chronological age, gender, educational level, marital status, income level, and employment status are not abstract concepts, are easy to measure, and are commonly used like an ID number. The measurement error of each demographic variable is nearly zero and thus it is reasonable to constrain their error terms to zero in the full model. Given that some exogenous variables are measured at nominal levels and the test of multivariate normality shows that the data are not multivariate normal, a WLS (Weighted Least Squares) estimation method was employed. Bollen (1989) accentuated the importance of cross-validation whenever the sample was sufficiently large. Following Bollen's suggestion, this study randomly split the sample of 1119 data with an age over 20 into two subsamples of 560 and 559 data. The first one was used as a calibration sample for exploratory CFA, and the second as a validation sample.

Measurements

Multiple items were employed to measure all constructs, except for demographic variables. Cognitive age was measured by four dimensions suggested by Kastenbaum et al. (1972): feel-age, look-age, do-age, and interest-age in the form of open-ended questions. Respondents directly provided their perceptions of these four items of cognitive age. A set of seventeen items related to consumers' technological lifestyles in the E-ICP. These items were first categorized into three constructs: technology anxiety, information-seeking behavior, and the adoption behavior of high-tech products, based on the meaning of each item and the outcome of EFA. Then, CFA was conducted using the calibration sample. In this stage, we deleted one item a time with the most serious cross-loadings based on the modification indices, while maintaining the content validity of each construct. After the most undesirable item was deleted, CFA and the deleting procedure were conducted again. The above screening procedure ran repeatedly until all modification indices and fit indices of the CFA model were satisfactory. The final items for each construct are listed in table 1, and the fit indices of the CFA model are referred in the calibration sample row of table 2.

The Measurement Model

The two-stage approach proposed by Anderson and Gerbing (1988) was adopted in this study. First, a CFA using the validation sample was conducted to validate the measurement model resulting from the calibration sample. Then, a full model was run to test the hypotheses. The fit indices of the CFA model using a validation sample were all acceptable and better than the generally accepted standards (see the validation sample row in table 2). As for reliability (see table 1), the composite reliabilities of constructs were all larger or equal to 0.77, better than the standard of 0.6 suggested by Bagozzi and Yi (1988). Furthermore, the variances extracted from the constructs (Fornell and Larcker 1981) were also acceptable; the extracted variances were all larger or equal to 0.53, better than the standard of 0.5 suggested by Bagozzi and Yi (1988). All loadings of variables (see table 3) were larger or equal to 0.67 with the significance level of $p < .001$, indicating the existence of convergent validity. Furthermore, the squared multiple correlations of variables (see table 1) were all larger or equal to 0.50 with the exception of the one for TA1. The average SMCs of each construct were all larger or equal to 0.54, indicating that most of the variances of variables can be explained by the latent constructs. With respect to discriminant validity, the most used criterion is to see whether the confidence interval of the correlation coefficient of two constructs includes 1. If the interval does not include 1, discriminant validity exists between the two constructs (Smith and Barclay 1997). Anderson (1987) suggested the range of correlation coefficient plus and minus 2 standard errors as the confidence interval. According to table 4, all the correlation coefficients between any two constructs plus and minus 2 standard errors do not include 1, indicating the existence of discriminant validity.

RESULTS

Testing the Mediation of Cognitive Age

A full model analysis was conducted in the second stage after assurance that the evaluation criteria of the measurement model were satisfactory. Dummy variable was used respectively for gender (1=female, 0=male), marital status (1=married, 0=single or divorced/separated), and employment status (1=employed, 0=unemployed). Following Garbarino and Johnson (1999), we tested for the mediational role of cognitive age by comparing the hypothesized mediating model with a less parsimonious nonmediational

TABLE 1
Measurements of Variables

Constructs	Variables	Items ^a	CR ^b	VE ^b	SMC ^b
Cognitive age (CA)	CA1	How old do I feel like?	0.99	0.96	0.97
	CA2	How old am I based on my ability to take action?			0.96
	CA3	How old do I look like?			0.97
	CA4	I am interested in things that are usually for people of what age?			0.95
Technology anxiety (TA)	TA1	The development of technology makes people more and more alienated from each other.	0.77	0.53	0.46
	TA2	The newly developed high-tech products cause excessive material wants of people.			0.65
	TA3	Depending on high-tech products too much is the main reason for weakness and over-pressure of modern people.			0.50
Information-Seeking behavior of high-tech products (IS)	IS1	I often discuss and exchange information of newly developed high-tech products with my relatives and friends.	0.79	0.66	0.65
	IS2	I often read reports on the news and in magazines about the information of newly developed technology.			0.66
Adoption behavior of high-tech products (AP)	AP1	I often search for information on the Internet.	0.88	0.79	0.82
	AP2	It provides me with many opportunities to make friends on the Internet.			0.75

^a: All the items except for cognitive age are 6-point Likert scale.

^b: Composite Reliability (CR), Variance Extracted (VE), and Squared Multiple Correlation (SMC) for validation sample.

TABLE 2
Fit Indices for CFA Models and Structural Models

Models		χ^2	<i>df</i>	<i>p</i>	RMSEA	CFI	IFI	GFI	AGFI	PGFI	NFI	NNFI	PNFI
CFA	Calibration sample	68.77	38	0.0016	0.038	1.00	1.00	1.00	1.00	Na.	1.00	1.00	Na.
Models	Validation sample	46.40	38	0.16	0.020	1.00	1.00	1.00	1.00	Na.	1.00	1.00	Na.
Structural	Hypothesized Model	212.52	98	0.00	0.046	0.95	0.95	1.00	1.00	0.64	0.91	0.93	0.65
Models	Rival Model	254.13	86	0.00	0.059	0.92	0.92	1.00	1.00	0.56	0.89	0.87	0.56

Na.: Not applicable. The measure is used in comparing alternative models.

rival model. In the rival model, all demographic variables (exogenous variables) directly affect cognitive age and the three variables of the adoption behavior of high-tech products (endogenous variables) with no paths between the various endogenous variables. To find out which model is better, following Garbarino and Johnson (1999), we compared their fit to the following features: (1) overall fit statistics, (2) percentage of significant paths, and (3) parsimony

of the model. First, the hypothesized model is better on all measures than the rival model (see table 2). Second, the percentage of the significant paths in the hypothesized model (see table 5) is larger than that of the rival model (83% versus 4%; the only significant path in the rival model is the one from chronological age to cognitive age [$\gamma=0.88, t=25.47$]). Finally, the hypothesized model is more parsimonious than the rival model (12 paths versus 24

TABLE 3
Validation CFA Model: Construct Loadings^a

Variables	Constructs			
	CA	TA	IS	AP
CA1	0.98 (536.69)			
CA2	0.98 (464.66)			
CA3	0.99 (573.10)			
CA4	0.98 (387.69)			
TA1		0.67 (21.91)		
TA2		0.81 (28.80)		
TA3		0.70 (23.30)		
IS1			0.81 (39.56)	
IS2			0.82 (39.95)	
AP1				0.91 (65.48)
AP2				0.87 (57.24)

^a: *T*-values are in parentheses and all are significant at $p < .001$ levels.

TABLE 4
Correlation / Covariance Matrix^a

	Mean	SD	CA	TA	IS	AP
CA	35.45	10.82	116.80	-1.07	-5.05	-7.53
TA	3.85	1.14	-0.15 (0.05)	0.84	0.35	0.46
IS	2.88	1.17	-0.43 (0.04)	0.48 (0.04)	0.93	1.14
AP	2.63	1.32	-0.48 (0.04)	0.43 (0.04)	0.89 (0.02)	1.72

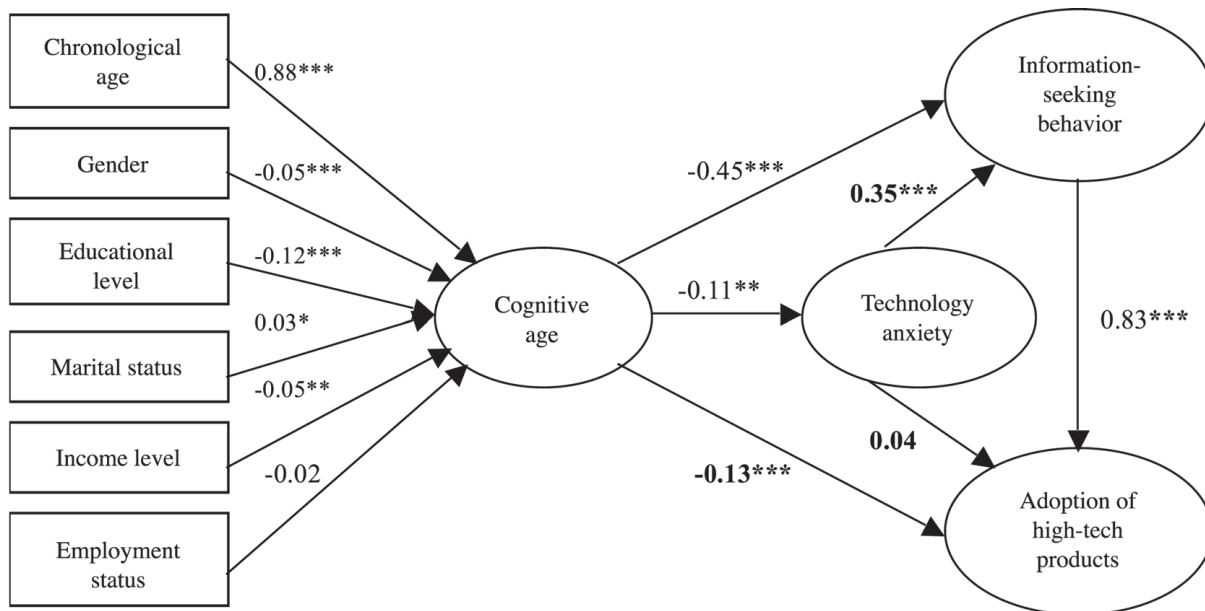
^a: Correlations are below the diagonal (standard errors are in parentheses), variances on the diagonal, and co-variances above the diagonal. *T*-values of correlations are all significant at $p < .001$ levels.

TABLE 5
Estimates of the Hypothesized Model

Paths	Parameter Estimates	Standardized Parameter Estimates	<i>T</i> -values	Hypotheses Tested
Chronological age → CA	0.83	0.88	44.11***	H1 supported
Gender → CA	-1.09	-0.05	-4.01***	H2 supported
Educational level → CA	-1.18	-0.12	-7.60***	H3 supported
Marital status → CA	0.80	0.03	2.23*	H4 supported
Income level → CA	-0.26	-0.05	-2.52**	H5 supported
Employment status → CA	-0.49	-0.02	-1.13	H6 not supported
CA → TA	-0.01	-0.11	-2.40**	H7 supported
CA → IS	-0.04	-0.45	-11.28***	H8 supported
CA → AP	-0.02	-0.13	-3.76***	H9 supported
TA → IS	0.37	0.35	8.11***	H10 supported
TA → AP	0.06	0.04	1.14	H11 not supported
IS → AP	1.12	0.83	15.53***	H12 supported

Note: * denotes $p < .05$, ** denotes $p < .01$, *** denotes $p < .001$. Fit indices see table 2.

FIGURE 1
Hypothesized Model



Note: All estimates are standardized and * denotes $p < .05$, ** denotes $p < .01$, *** denotes $p < .001$ (t values see table 5).

paths). In summary, the hypothesized model fits the data better than the rival model. We can reject the nonmediational rival model in favor of the mediational hypothesized model and conclude that cognitive age does mediate the relationships between demographic variables and the related variables of the adoption behavior of high-tech products.

Testing the Hypothesized Structural Model

The hypothesized model describes the relationships of cognitive age to consumers' demographic characteristics and innovativeness well. Ten of the twelve hypothesized paths are significant (see Figure 1). Hypotheses for chronological age, gender, educational level, marital status, and income level are all supported by the data, confirming the findings reported in the literature, whereas the hypothesis for employment status is not supported. Because the unemployed consumers consist of students, housewives, and the retired in this study, it is possible that students and/or housewives may have equal or younger cognitive age than the employed consumers causing a non-significant outcome. Hypotheses about the consequence variables of cognitive age are all supported by the data. It seems that cognitive age is a key factor in explaining consumers' behaviors under uncertainty in innovative-product adoption context. Furthermore, the hypothesized relationships among the related variables of the adoption behavior of high-tech products are all supported with only one exception of the relationship between technology anxiety and adoption behavior of high-tech products. In summary, the way that cognitive age exerts its influence on the adoption behavior of high-tech products has three paths: (1) the direct impact of cognitive age on the adoption behavior; (2) the indirect impact through information-seeking behavior; and (3) the indirect impact through information-seeking behavior via technology anxiety.

Technology anxiety influences adoption behavior only indirectly through its impact on information-seeking behavior. This

mediation situation agrees with Taylor's (1974) theory that consumers will not give up choice immediately when facing risk and anxiety. Instead, most of the time, they tend to reduce risk and anxiety by seeking information about that purchasing decision (Roselius 1971). Another possibility is that attitudes may not directly influence behavior; they influence behavior only through their impact on intentions (Bagozzi 1981; Fishbein and Ajzen 1975). The other case is that attitudes have a direct effect on behavior only when intentions are poorly formed (Bagozzi 1989). Because the measure of technology anxiety in this study is restricted to the macro effect subject to the items available developed by the E-ICP, the final possible case is that the risky nature of high-tech products exerts more impact over the macro effect on the adoption behavior of high-tech products, but this impact does not reflect in such a measure that the impact of technology anxiety is not significant.

CONCLUSIONS AND IMPLICATIONS

Results of this study suggest the mediational role of cognitive age between consumers' demographic characteristics and their innovativeness. Cognitive age does lend itself to functioning as a mediator in the adoption context of high-tech products, and thus becomes a more capable predictor of the consuming behavior of innovative products. Cognitive age is a composite psychological variable with profound meanings; it signals not only the message of chronological age, but also the information of other consumer demographic characteristics. By focusing on cognitive age, marketers can survey consumers' cognitive age instead of surveying all the demographic variables. Therefore, it is more efficient to focus on cognitive age as a key segmentation variable. Furthermore, cognitive age directly determines consumers' adoption behaviors in the high-tech product context. For a high-tech product company, target customers are the cognitively younger dispersed throughout various age groups, not just the chronologically younger. In this

sense, cognitive age is a more effective segmentation variable than demographic variables. In summary, marketers can both efficiently and effectively segment their markets based on consumers' cognitive ages.

To go a step further, marketers can create a younger cognitive age in consumers through enhanced communication marketing efforts. Cognitive age is a kind of self-concept that contains two parts: individualistic and social self-concepts. Intrinsic desires are at the core of the individualistic self-concept and are more fundamental and long lasting, while mimetic desires are important to the social self-concept and are inherently unstable (Bagozzi 1995). Intrinsic desires cannot be changed by short-lived external stimuli like ads, but mimetic desires may be. Marketers can thus influence consumers' cognitive age by means of changing mimetic desires towards being young. In this way, cognitive age can be transformed into a controllable strategic variable, which can then broaden the potential market for high-tech products.

The findings of this study differ from Gwinner and Stephens (2001) in the mediational role of cognitive age in relation to educational and income levels and innovativeness. There exists a possible culture difference between cognitive age and the consuming behavior of education and income-related innovative products. Cognitive age may implicitly reflect some meanings of a particular culture or social norm. In the case of culture difference, multinational company marketers may simply segment the market based on consumers' demographic characteristics in Western countries when their products are education or income-related; but, in Eastern countries, they need to target data about consumers' cognitive age to achieve the same effective segmentations.

Finally, because high-tech products are usually more complex, sophisticated, expensive, and require more effort to work well, consumers need more knowledge about products to ensure they are worth buying. It would be worthwhile to offer product related information to consumers about the value of their products. Moreover, the macro effect of high-tech products may hinder consumers from buying products even if they are worth buying. Information should be provided as well to justify purchase of the product by showing the positive benefits of the product, such as healthy benefits, recyclable material used, no side effects, etc, or show a copy of inspection or patent certificates.

LIMITATIONS

Because the sample used in this study is the E-ICP database, the measure of constructs are selected from and restricted to the extant questionnaire items. Although the screening process is stringent and evaluations of the CFA model are satisfactory, it still has some measurement limitations. The content domain of technology anxiety and adoption behavior of high-tech products is not fully inclusive. Technology anxiety, in our view, comes from two sources: the risky nature and the macro effect of innovative products. But the measure of technology anxiety in this study seems to include only the macro effect section, and thus cannot cover the risky nature of high-tech products. Although it may reflect the present situation of technological lifestyle in Taiwan, it is worth mentioning for improvement purposes what measure of adoption behavior of high-tech products focus on Internet service. Except for the four-dimension measures of cognitive age, the measure of other constructs (TA, IS, and AP) in table 1 serves as a beginning. In searching for a full content domain of each construct, it is recommended that future researches about adoption behavior of innovative products should more fully develop a richer set of items of these constructs based on theories. Finally, the adoption behavior of high-tech products is only one type of consumer innovativeness. Future

studies may expand the scope of consumer innovativeness to other aspects, such as adoption of fashion products, novelty seeking, and risk-taking behaviors.

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The Effect of Gay Identity, Gender, and Gay Imagery on Gay Consumers' Attitude Towards Advertising

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EXTENDED ABSTRACT

Background

Despite the vast amount of attention that has been paid to the gay market in the popular press, there appear to be few attempts to apply what is theoretically known about gay consumers to the development of effective advertising strategies to target this group. Advertising research based on Identity Theory has suggested that consumers respond best to advertising that provides content that reflects the consumer's identity (Jaffe, 1991). However, to date, marketers' have primarily used a single notion of gay identity in their advertising. In a content analysis of advertising in gay and lesbian media, Oakenfull and Greenlee (working paper) found that most advertising targeting gay consumers tends to use a depiction of intimacy between two members of the same sex, usually male, to communicate its fit with gay consumers. If identity theory is correct, this limited view of gay identity has the potential to miss the mark for many gay consumers who identify themselves beyond just their sexual orientation.

Past research on subcultures and social movements suggests that gays represent a distinct subculture, rather than just a consumer segment within the main culture (Fugate, 1993; Peñaloza 1996; Bhat, 1996). Accordingly, gay consumers may differ in the degree to which they identify with gay group norms and values (Hebdige, 1979; Leigh et al, 1987; Williams and Qualls 1989; Shouten and McAlexander 1995; Kates 2002). Additionally, the gay identity is one of several identities incorporated into a person's self-concept. Feminist theorists have shown significant gender differences in the way gay individuals identify as gay, such that an individual with a strongly held gay male identity may identify with different advertising imagery than an individual with a strongly held lesbian identity (Ponse, 1978; Rich, 1980; Rust, 1992).

The present research draws from literature in psychology and sociology, relating to gay identity, and feminist theory to consider the effect of gay identity and gender on gays' and lesbians' attitudes towards various types of advertising content most commonly used to target gay consumers. As such, this study empirically tests whether gay males' and lesbians' responses to gay-oriented advertising content is moderated by individual characteristics: (i) the degree to which they identify as gay, and (ii) their sex, and by the explicitness and gender of the gay-oriented advertising imagery.

Procedure

A snowball sampling procedure yielded self-identified gays and lesbians in five geographic regions of the United States. Participants in the study included 68 self-identified gay males and 44 self-identified lesbians from five geographic regions of the United States. The participants' ages ranged from 18 to 68 years old with a mean age of 34 years old. Each participant was presented with all of three advertising stimuli, depicting implicit gay imagery, explicit gay male imagery or explicit lesbian imagery. Participants were asked to review each advertisement in the randomized order presented and to answer a three-item attitude toward the advertisement (good/bad, like/dislike, favorable/unfavorable) measure accompanying each advertisement. Level of gay identity was mea-

sured using a modification of Vanable et al's (1994) *Identification and Involvement with the Gay Community* scale.

Results

The results of the study are consistent with the theoretical perspectives offered and advance prior research in an important direction. Simply grouping gay and lesbian consumers of all types into a single market defies traditional segmentation practices by ignoring individual differences among members of the group that may affect responses to marketing actions (Bhat, 1996). A three way interaction effect of sex, gay identity and ad content on attitude towards the ad was found which was driven by both gender and gay identity effects for the ads that featured gay male imagery and implicit gay imagery. These ads appeared to tap into the difference in the way males and females identify as gay (Ponse, 1978; Rich, 1980; Eliason, 1996), which is closely tied to how they *experience* gayness (Warren, 1974). These gender differences are moderated by an individual's level of gay identity, such that the more strongly an individual identifies as gay, the more salient the effect of gender becomes on responses to gay-oriented ad imagery.

From a managerial perspective, clearly the current practice of using a predominance of gay male imagery in advertising to gay consumers provides an effective means of targeting gay males, especially those who are highly identified as gay. However, such a practice is likely to alienate lesbians, who fail to identify with both the gender of the couple in the ad and the sexual nature of the imagery. Despite, this need for lesbian-oriented ad imagery, a content analysis of advertising in *The Advocate*, one of the leading gay and lesbian magazines with a circulation of 88,000, found that lesbian targeted imagery accounted for only three percent of advertising content in 1999 (Oakenfull and Greenlee, working paper). However, lesbian readers of gay and lesbian media represent a niche that appears to be demographically attractive. According to a survey by *Girlfriends*, a lesbian magazine with a circulation of 32,000, its readers have a median household income of \$47,700, with 54% having professional or managerial jobs, 77% having college degrees, 57% having partners, and 22% having children (Alsop, 1999).

Hence, markets that attempt to tap into this market must be aware of the impact of gender on the gay identity. While depictions of lesbian couples that mimic gay male advertising imagery will appeal to lesbians who do not hold a strong gay identity, highly identified lesbians consider this type of advertising to be no more desirable than explicit gay male imagery. The use of implicit gay imagery, in the form of gay symbolism that represents the socio-political nature of lesbian identity should be utilized to target all lesbians. Additionally, it is as effective in targeting low identity gay males as is explicit gay male imagery.

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The Legitimate Brand

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EXTENDED ABSTRACT

Certain brands attain legitimacy—that is, social fitness—through dynamic framing processes described in this article. Drawing on qualitative data collected from gay consumers, this article explores the ways brands are co-created in a gay men’s community community. Collective action frames, the shared ways of interpreting meanings within social interaction, provide the connection between a community and its socially legitimate brands. Informants routinely inscribe some brands with the frames of the gay community, and—when applying brand litmus tests, bridging, and delegitimizing a brand—assess whether other brands share a fit with the sociocultural meanings of the gay community.

A brand’s legitimacy—the “generalized perception or assumption that the actions of an entity [a brand, in the present context] are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs, and definitions” (Suchman 1995, p. 574)—may be negotiated among consumers, affecting its cultural meanings. Yet, the question of how, whether, and when consumers co-create the brand and exercise some agency (or control) in non-brand-focused contexts is still open for further research. This study draws on ethnographic, qualitative data to understand the ways consumers co-create certain brands’ sociocultural meanings when the brand is not the community’s central focus.

Cognitive legitimacy occurs when consumers routinely inscribe frames on a brand with little reflective or critical thought. Yet, in other instances of brand consumption, there are potentially transformational and critical processes that occur—reassessments of a brand’s moral legitimacy. This article reports three collective action frames—(1) camp interpretations of brands, (2) rewarding legitimate brands, and (3) punishing illegitimate brands that characterize cognitive legitimacy. It also reports three dynamic framing processes that change brands meanings over time or that actually change the community’s frames themselves over time—(1) applying brand litmus tests, (2) bridging, and (3) delegitimizing a brand—that characterize moral legitimacy. Findings include brand stories that illustrate each of these instances.

Legitimacy highlights the notion that brands are much more than the sum total of their product attributes. They are vital social and cultural entities that represent important sociocultural meanings related to social justice. Recently, a global anti-brand backlash has reminded us of brands’ political and sociocultural aspects (Klein 1999), highlighting the darkest meanings of our humanity. Yet, despite the recognition that brands have vital and complex social connotations, current thinking still conceptualizes brand equity—particularly that dimension comprised of brand associations (Aaker 1996)—as uniform and fairly stable across markets (see Keller 1993). No allowance is made for the fact that pluralistic concerns, cultural fragmentation, and diverse consumers’ efforts at negotiating legitimacy (or illegitimacy) are meaningfully altering the landscape where brands reside. Yet, current understandings and measurements of brand equity do not take into account the dramatically negative meanings and effects of these cultural particularities. This is fertile territory for future research.

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Analysis of an Advertising Text: Discourse and Emotion

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EXTENDED ABSTRACT

By using discourse analysis as a means of examining the social processes that create ads, this paper contributes to Scott's (1994) call for a better understanding of both the forms that ads take and the way they might be read. Discourse analysis emphasises language, through texts and talk, as a constructive tool. Rather than using language to imply the presence of underlying psychological constructs, discourse analysis focuses on how people *use* language to construct versions of their worlds and what they might gain from these constructions. Instead of looking at an emotion (such as sadness) as being an internal, mental state, discourse analysts are more concerned with studying what people are doing when they are talking, or making claims about their emotions or thoughts.

The context for this research is provided by an advertising campaign for Xenical, a prescription only medication for weight loss. Critics of this ad campaign suggested that it was negative in that it created feelings of shame and sadness.

Based upon the same interview data that inspired the ad campaign, analysis within this paper explores the 'emotional' talk used by both the interviewer and participants, how this might have informed the construction of the ads themselves, and how in turn the ads might then be read.

Findings suggest that the interview data contained three dominant themes or discourses: 'restriction', 'feelings' and 'dreams'. When examined within the specific interpretative context, these three themes combine to construct 'negative' feelings, including feelings of sadness and shame for the participants.

These same themes provide important insights into the construction of the final television ads. A brief analysis of each of the Xenical ads within the campaign demonstrates that these three dominant themes are also present, intertwined and central to the sadness that the ads portray.

By privileging texts and talk as social practices, this paper demonstrates that discourse analysis is able to provide an important contribution to the study of advertisements. But a much wider implication is that discourse analysis can greatly impact upon the way we do consumer research.

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Advertising Ideology and the Encoding of Advertising Meaning: An Ethnographic and Discursive Approach

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EXTENDED ABSTRACT

Advertising Ideology and the Role of Advertising Agencies as Cultural Intermediaries

Advertising has a pivotal role in ascribing symbolic meaning to consumer goods, and forms an integral part of the textual tapestry of social and cultural life. The pervasive influence of advertising within society has drawn many researchers to the view that advertising constitutes a powerful ideological force within consumer culture (Elliott and Ritson 1997; Ewen 2001; Hackley 2002; Jhally 1987; Wernick 1991; Williamson 1978). The discourse of advertising has a dialogic and reciprocal relationship to other cultural institutions and social systems such as family, religion, arts, literature and music (Cook 1992; Tharp and Scott 1990), and through this interactive and fluid relationship advertising has developed into a potent "cultural system" which shapes and reflects consumers' sense of social reality (Sherry 1987).

Advertising agencies mediate the communicative exchange between consumers and marketing institutions as "cultural intermediaries" who generate symbolic meanings for commodities (Featherstone 1991), and they provide a critical link between these institutions and culturally based consumption meanings (Thompson and Haytko 1997). However the process through which advertising agencies encode meanings and the work practices of agency practitioners remain under-explored within marketing and consumer research literature. Studies that have adopted an agency and production perspective have often relied on interview-based approaches to understand the work of advertising practitioners (Cronin 2004; Hackley 2000; Hirschman 1989; Kover 1995; Nixon 2003; Soar 2000). Most recently the use of ethnographic methodologies within advertising research has proved insightful in providing interpretive accounts of the internal workings of advertising agencies (Alvesson 1994; Dewaal Malefyt and Morean 2003; Hirota 1995; Miller 1997). This study is positioned within a similar interpretive framework to develop theoretically and critically informed insights into intra-advertising agency processes and practices.

Research Methodology

An ethnographic research approach was adopted during which time the researcher spent a period of six weeks immersed within an Irish advertising agency as a non-participant observer. A number of data sources were accessed and generated during the ethnography including internal strategy and creative meetings, agency documentation, personal interviews with advertising planners, copywriters and art directors and personal notes and observations which were recorded in a methodological diary (Hirschman 1986). Hackley (2001, p. 44) has noted how advertising is socially constructed through the discourse of clients, advertising practitioners, and consumers, which makes the advertising process ripe for discourse analytic exploration. This study adopts a discursive framework to talk and text generated during the ethnography to identify common "interpretive repertoires" from the data (Edley 2001; Potter and Wetherell 1987; Wood and Kroger 2000). Interpretive repertoires are the metaphors, tropes and resources that are drawn upon by advertising practitioners in interviews, meetings

and documents which characterise the processes and practices they engage in to produce advertisements. These discursive interpretations are enriched and combined with contextual ethnographic insights to develop a reflexive account of intra-agency advertising production (Alvesson and Skoldberg 2000).

Main Findings

A number of common interpretive repertoires and patterns emerged from the analysis. The knowledge of culture that advertising agencies and practitioners have was a central resource that was drawn upon in the encoding of advertising meaning. Advertising copywriters and art directors described in interviews how they would develop idiosyncratic advertising ideas through their knowledge of other discourses and areas of culture such as art, music, movies, books, newspapers, films and other advertisements, which they used as reference points for the development of their own material. Planners and creatives also discussed how they drew upon their own life experiences and experiences and stories of other friends and family members in developing campaigns which influenced their work.

These interviews and observations illustrated how advertising practitioners utilise embedded cultural knowledge as consumers in the development of advertising (Soar 2000), and how discourses and narratives within cultural and social life become an encoded component of advertisements' ideological structures. Consumer knowledge in the form of research also had a central role in the development of advertising ideas and campaigns. Codified knowledge was fed into the advertising process through qualitative and quantitative consumer research which was used by advertising planners to write creative briefs, and this knowledge was often filtered from the research departments and structured systems of larger clients. However, un-codified knowledge such as informal research conducted by creatives and planners in the form of informal conversations with consumers and observations of consumption situations also had an integral role within the advertising development process. The "panoptic" metaphor which Hackley (2002) has applied to the role of advertising agencies was found to be particularly appropriate within this context, as agency practitioners valorised formal and informal cultural consumer knowledge to develop strategies of power for large corporate clients (Foucault 1980). Large clients had a particularly dominant role within the campaign development process, and the power relationship between agency and client was particularly evident in everyday practices. As the Irish market is relatively small, the agency was extremely economically dependent upon larger clients.

The strategic processes of larger clients such as idea screening and campaign development checklists were often the mechanisms through which campaigns were produced, and client discourses and ideologies permeated through these processes. In interviews, practitioners acknowledged there was a "client way" of developing advertising which was dominant within the process, and this relationship had to be accepted by the agency as it was the client who "paid the bills", as one planner explained. These processes were often viewed as rigid and inflexible by creative teams, particularly when it came to evaluation practices such as copytesting advertisements with audiences. Some of the teams drew from the

analogy in interviews that advertising was intrinsically of the art world, and clients sought to rationalise the creative process through the application of science. One copywriter described how the process of audience copy testing reduced advertisements to the “lowest common denominator”, and some of the creative teams drew upon the metaphor of how they had to “do battle” and “fight” hard for their work through the evaluation process. This was interpreted as a clash of managerial and creative ideologies within the advertising process, and the struggle between creative integrity and commercial imperatives was evident in interviews with creative teams.

Conclusion

While the findings of this study are based upon one advertising agency within one context, they illustrate how cultural meanings are filtered and encoded through the advertising process, which is structured through corporate strategic goals, and how this process is a central dynamic in the construction of advertising’s ideological power. Advertising agencies are institutions where cultural creativity and commercial business objectives co-exist and collide and the discourses of capitalism and culture become enmeshed and intertwined. The findings in this study provide some insights into how this process takes place and the role of advertising agencies and practitioners within it.

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Structural Constraints in Mixed Language Ads: A Psycholinguistic Analysis of the Persuasiveness of Codeswitching

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EXTENDED ABSTRACT

Codeswitching refers to mixing languages within an utterance. Bilingual individuals use this linguistic practice frequently in their everyday lives to communicate certain meanings coded in the act of switching itself or in the language that is made salient by the codeswitch. Because of the ubiquitous nature of codeswitching among certain populations like Hispanics in the U.S. or French speakers in Switzerland, advertisers targeting those populations have also adopted this practice. For example, *Latina* is a magazine targeting young Hispanic women that is well known for its frequent use of codeswitching. The following two ads recently appeared in that magazine: "Redefine fuerza. Presentamos el totalmente nuevo Chevy Trail Blazer" (Redefine power. We present the totally new Chevy Trail Blazer); and "Sweet sonrisa: We found four ways to brighten your teeth and make the most of your radiant smile" (*sonrisa* means smile). The first ad differs from the second in the language that serves as a frame for the codeswitch.

Linguistic Constraints in Codeswitching

This paper examines the linguistic structural constraints in the practice of codeswitching in advertising. That is, it examines the rules that make a particular code switch correct or incorrect linguistically. We extend a linguistic model, the Matrix Language Frame, or MLF, model (Myers-Scotton 1995). The MLF model specifies certain structural rules that govern the production of codeswitched speech, in a sense laying out a grammar of codeswitching. The MLF model emerged through the analysis of extensive corpora of interactional speech and was developed to understand how codeswitched speech is produced. The present research tests the rules delineated by the MLF model in an experimental setting, applying them to speech perception, not speech production, since language perception is crucial for ad processing.

We expect that codeswitched ads that do not follow the linguistic rules of the MLF model (i.e., ungrammatical ads) will be less persuasive than ads that follow them (i.e., grammatical ads). That effect, however, should be moderated by the type of processing in which consumers engage.

Type of Processing as a Moderator

Roediger (1990) distinguishes between data-driven and conceptually driven tasks. Data-driven processes (e.g., reading each of a list of words) involve processing of perceptual cues. These processes are triggered directly by external stimuli and engage individuals in mostly bottom-up processing. On the other hand, conceptually driven processes (e.g., imagining the content of an expression or generating associates) involve semantic elaboration and are initiated by the subject. This type of processing generally leads to top-down processing.

From a linguistic standpoint, the question to be addressed in our research is whether individuals will overlook grammatically incorrect codeswitching when they process a slogan conceptually. Previous research has examined the possibility that individuals may not notice a codeswitched element. For example, Altarriba, Kroll, Sholl, and Rayner (1996) show that high semantic constraint sentences make people "skip" a codeswitched word. That is, if the

codeswitched word is primed through the use of a semantically relevant context, individuals may not notice it is in another language. This is a very similar task to conceptual or schema-based processing because it directs attention to semantic features and away from the surface characteristics of the language.

Type of processing could be considered a continuum with two anchors: extreme conceptually driven processing and extreme data-driven processing. Intermediate points are likely to include different mixes of conceptually driven and data-driven processing, depending on their position along the continuum. In our empirical studies, we elicit different types of processing through the manipulation of different variables: processing instructions, rhyme, the design of the experiment itself, and whether respondents evaluate slogan grammaticality on-line or not.

We hypothesize that if individuals are in the extreme data-driven mode, they will pay more attention to the language of the ads, notice the codeswitched elements to a greater degree, and will be affected by structural constraints. However, if individuals are in any other processing mode along the continuum, their processing is likely to include some degree of conceptually driven processing. Therefore, they will not pay as much attention to the language of the slogan and they may ignore or not pay attention to the codeswitched word and they not be affected by structural constraints. This type of processing effect should be manifested in a greater likelihood of language effects on evaluations in the extreme data-driven condition (Chaffin 1997; Elias and Perfetti 1973). Therefore, incorrect codeswitches should not feel "natural" and consequently should lead to lower evaluations than correct codeswitches, but only in the extreme data-driven condition.

Studies 1 and 2 show that structural constraints only influence ad persuasiveness under extreme data-driven processing conditions. Study 3 suggests that even under conceptually driven processing instructions, structural constraints can influence persuasiveness if other ad features direct attention to codeswitching.

Contributions to Theory

We contribute to the area of psycholinguistics providing an extension and empirical validation of the MLF model, and to the area of consumer research in that we outline a series of structural constraints that moderate the impact of codeswitching on persuasion. We also underscore the relevance of linguistic analysis in advertising by showing how structural constraints, or grammar, influence the cognitive processing of advertising text. To date, no consumer research studies have investigated the role of grammar in advertising to bilinguals, and very few studies have acknowledged the general role of grammar in advertising (e.g., Bradley and Meeds 2002).

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Determinants for Consumption Materialism among Late Adolescents in China

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EXTENDED ABSTRACT

Past research examining materialism and adolescence has often focused on investigating the relationship between materialism and the adolescent's personality traits and consumption patterns (Achenreiner 1997; Goldberg et al. 2003). Further, researchers found that, from a developmental perspective, parental values are the primary means of socializing adolescents to specific values (Kilby 1993). For example, adolescents that value material possessions more than they value self-acceptance, affiliation, or community feelings are associated with more materialistic and less supportive parents (Kasser, Ryan and Zax 1995). In this study, we aim to build on this line of research by exploring historical/environmental factors that could influence the adolescent's development of materialist value. We investigated this issue in the context of China for two reasons. First, past research has seldom explored these issues in non-Western countries. Also, the dramatic economic and social changes in contemporary China provide us with a unique opportunity to understand the extent societal forces could help shape teenagers' values.

We use the historical generation approach as our theoretical foundation to examine the shift in materialistic values from one generation to another in China. Rogler (2002) postulates that cataclysmic events could cast strong imprints on the "coming of age" group and give birth to a brand-new historical generation. We hypothesize that the late adolescents in China, who were born under the One-Child policy and exposed to the global culture that embraces individualism, consumerism, free market, and openness to changes (Arnett 2002) would be more materialistic. In contrast, we hypothesize that the parent generation who endured much misery and hardship during Cultural Revolution during their adolescent years would be less materialistic.

Our study also examined the driving forces underlying the development of materialistic values, especially among adolescents. Based on a survey of 43 societies in 1990-1993, Inglehart and Carballo (1997) found a very strong correlation between economic development and values. Other research suggests that working-class people prefer instrumental and recreational possessions to solve short-term problems, while middle-class people value possessions that serve symbolic needs in terms of status, personal history and self-expression, thereby showing a longer-term perspective (Dittmar 1991). While the aforementioned studies were conducted on adults, studies involving young people seemed to show a different pattern. For example, youths that were more materialistic were likely to have come from socio-economically disadvantaged backgrounds (Kasser et al. 1995; Goldberg et al. 2003). As well, research on perceptions revealed that in spite of their differential socio-economic backgrounds, adolescents formed similar impressions, favoring the person that owns, rather than lacks, expensive possessions (Dittmar and Pepper 1994). Given the sociocultural force in China that is very child-centered (McNeal and Yeh 1997) exacerbated by the one-child policy, we hypothesize that family income would have significant impact on the parent generation's level of materialism but no impact on the adolescents in China.

Instead of their socio-economic background, we hypothesize that what drives the Chinese adolescents' materialistic values is the extent of globalization they are exposed to. Meanwhile, the media

is the channel through which people in developing countries are exposed to global culture (Arnett 2002). Therefore, we propose that the extent of media exposure would exert significant impacts on the adolescents' orientation towards materialism. Since the parent generation has formed relatively stable values, we propose no parallel effects for the adult group.

The survey data for this study was collected between 1999 and 2001 in 15 major cities in China. It covers 2,860 adolescents age 15-19 and 11,920 adults age 40-49. We confine our subjects to urban dwellers, because demographers and psychologists have pointed out that the "spoiling" trend is a distinctly urban phenomenon in China (Cutler 1987). As well, globalization tends to reach urban dwellers with much greater intensity (Arnett 2002). Controlling for the effects of other demographic variables, we use family income as the proxy for the subjects' family background. The media exposure measure includes the exposure to TV as well as the Internet. Drawing on the literature on materialism, we focused on examining three dimensions of consumption materialism: Acquisition Centrality, Novelty, and Susceptibility to Social Influence.

Results of the study provided strong support for the hypotheses outlined earlier. Adolescents in China were more centrality-oriented in their purchase, more novelty-seeking in new product adoption, and more susceptible to the influence of peers and marketing promotions, thus resulting in an overall higher tendency for consumption materialism. In contrast, the parent generation displayed significantly lower levels of materialistic values. The result is evidenced by controlling various demographic variables including gender, age, education, family income and city tier. Most importantly, in a series of regressions on three dimensions of consumption materialism, media exposure emerged as a consistently significant factor in shaping adolescents' materialistic values, while family income is only significant for the adult group and is statistically indifferent on all three dimensions of materialism for the teenagers. Implications for the developmental research on adolescents' consumption materialism are discussed.

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Religious Influence on Consumer Behavior: Classification and Measurement

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EXTENDED ABSTRACT

An overview of published writings on religion and consumption led to the identification of a few dimensions of religious influence on consumer behavior. At the grossest level of partitioning, religious influence on consumer behavior can be broken into positive (approach) and negative (avoidance). At a general level, such positive and negative influences may surround the very notion of the acquisition of material goods. Religion has also been associated with some distinct motivations leading to more specific consumption activities. Perhaps the most obvious and overt influences are those arising from particular dogmas or doctrines. A complex value structure, rooted at least partially in one's religious orientation, may cast a net that takes in multiple consumption activities not specifically addressed by a church's doctrinal teachings. In the pursuit of personal devotion, products from an array of religious orientations, not just one's own, may yield satisfaction. Social influence on consumer behavior, deriving from both informational and normative motivations, may take on the added weight in a religious context.

To gauge more systematically whether these represent meaningful religious influences to specific consumers in a contemporary consumption environment, and to allow for the emergence of other as-yet-unpredicted categories, focus groups and depth interviews were conducted among a total of 71 consumers of varied demographic characteristics, religious affiliations and levels of commitment in a major Southern metropolitan area. Identification and examples of the types of influence observed follows: *Doctrinal* (influence stemming from specific formal doctrines or teachings of a religious organization or the direct recommendation of a pastor or other church official to buy or not to buy); *Personal Devotion* (items purchased or consumption activities engaged in to facilitate, or avoided out of a concern that they may hinder, private worship or meditation); *Value* (influence stemming from values that are at least partially derived from or associated with the consumer's religious affiliation but not from formally stated rules or doctrines); *Social* (purchase or consumption occurs with or for other members of a consumer's religious organization or reflects influence stemming from a desire to conform to or dissociate from the consumption behaviors of others in a religious group motivated by interpersonal perceptions, acceptance or relationships). In addition to evidence of the above categories, consistent with the suggestions of earlier writers, a distinct *aesthetic* influence of religion emerged in multiple responses, reflecting a desire to enjoy the aesthetic or cultural properties associated with religious products or artifacts.

Further understanding of the level of such influence in the population, its variability across religious and demographic groups, and its relationship with other constructs requires the development of scale items to tap the various categories. With this in mind, a Likert-scale development procedure constituted the next stage of the research. A total of 350 statements was generated (35 in each of the ten categories derived from the five motivational and two valence conditions). Forty-nine undergraduate business students completed the 350 statements. Data were then factor analyzed via principal-components analysis. A ten-factor solution explained 65.37 percent of the variance across the 350 items. For each of the ten factors, the highest loadings were associated with one of the ten categories, affording preliminary evidence that consumers are able to make meaningful distinctions across the categories. The five

items in each category that had the highest loadings but no large cross-loadings were retained for the final scale. Retained items had loadings on the relevant factors ranging from .50 to .92, with no cross-loadings higher than .40. In each category the five items yielded adequate reliability (Cronbach alpha values from .72 to .95). Thus the items retained as measures of the ten categories of religious influence appear, in this sample, to be valid and reliable indicators of the relevant constructs.

In the final stage of the research, the scale was administered to a demographically and religiously heterogeneous sample of 444 consumers. Religious affiliations included 18 distinct Christian denominations, Jewish, Muslim, Hindu, "none," "agnostic," and some who used more generic terms such as "Christian," "Protestant" or "nondenominational." Reliability was adequate (.65 to .86). The greatest level of religious influence arose in the value-positive category (mean 5.26), with the value-negative and personal-devotion-positive results also falling slightly on the "agree" side of the scale (4.63 and 4.59, respectively). The lowest result arose for doctrinal-negative influence (2.93). Other influence categories scored in the 3-4 range. The difference between positive and negative was significant in each motivational category, with the difference favoring positive influence in all categories except aesthetic. Gender differences arose in six categories, with females experiencing more personal-devotion-positive, value positive, value negative and aesthetic-positive influence, and males showing higher levels of personal-devotion-negative and social-negative influence. Marital status led to significant differences in all categories, with the means higher for married than for single respondents except in the personal-devotion-negative category. Age was positively correlated with religious influence in seven of the ten categories. Income was positively correlated with only value-positive influence. Ethnic groups differed significantly in four categories. Religious groups differed significantly across nine of the ten categories (all except value positive). The level of religious activity (number of services attended) was significantly positively correlated with eight of the categories.

Results confirm that religious influence is a multidimensional construct. In both qualitative and empirical results, support is found for the existence of positive and negative influences spanning five distinct motivations: doctrinal, personal devotion, value, social and aesthetic. Scales are developed and validated that provide a basis for the future measurement of these constructs. The levels of influence are shown to vary across demographic and religious groups in ways that warrant further consideration among those within religious or marketing organizations whose efforts are affected by the relationship between religion and consumption.

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Creative Cyborgs: How Consumers Use the Internet for Self-realization

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ABSTRACT

This article advances the perspective that consumers who engage in online collaboration construct, re-present, and create their Net self not primarily for others to view, but also for self-realization. A review of different ontological realities of the Net as a space for consumer activity provides the contextual framework from where possible forms and expressions of consumer self-realization on the Net become apparent. Empirical evidence is based on an online questionnaire and netnographic observation of the free/open-source movement. The findings reveal that consumers' various forms of self-realization on the Net are characterized by 'materialization of mind' and 'passionate work', 'gift-giving' and 'the communal self', 'tech-culture' and 'revolution'. The achievement of a digital Higher self is accompanied by a 'sense of immortality' and 'merging with the Other'.

INTRODUCTION

Postmodernism is taking shape. Early postmodern critique on the separation of the spheres of consumption and production (Firat and Venkatesh, 1995) has been rendered obsolete since consumers actively engage in the production of goods that were formerly-and still are-produced by capitalist enterprises. The best known technological symbols of our time-the Net, and software such as the Linux operating system-were actually developed not by enterprises or the governments but were created primarily by some enthusiastic individuals who realized their ideas with other like-minded individuals (Himanen, 2001). Digital technology and the "network society" (Rheingold, 2000; Himanen, 2001) brought forward this radical change in late capitalism. It moved individuals from a life of a "consumer" to a life where one can individually and collectively participate in making something new. Technology could enable a whole generation to create and then, through the infrastructure of the Internet, share it with others (Giesler and Pohlmann, 2003a, 2003b), or engage in processes of co-creation (Hemetsberger, 2002; Lessig, 2002). But why should they do that?

This article promotes the view that by taking a creative and active role in the online production of common goods and in the construction of technology, consumers contribute to their self-realization. Consumers undertake those innovative collective efforts and creative activities for various reasons. Consumer research informs us that consumers strive to emancipate themselves from the 'dark side of the market' (Kozinets, 2002b), to give their lives meaning (Schouten and McAlexander, 1995), and to construct different aspects of self and identity (McKenna and Bargh, 2000; Kozinets, 2001). Individuals also have an inner need to present their true or inner self to the outside world and to have others know them as they know themselves (McKenna and Bargh, 2000; Schau and Gilly, 2003). By throwing a different glance on the Net (including the Internet and the World Wide Web) as a 'living space' this article seeks to contribute to the question in what ways this space helps individuals to become active and creative and to achieve a self-determined self. Moreover, the virtual space is not context-free, nor do individuals 'inhabit' them alone. Hence, the self in the digital realm is genuinely dependent on others mirroring its digital portrayal and performance. Therefore, the main questions the present research wants to clarify are: How do consumers construct (realize)

their human selves in the virtual realm? How do they make use of online technology, what parts, representations, or extensions of themselves do they exhibit for self-realization (or -virtualization) to occur that transcends their real world existence? In what way do other digital selves contribute to that process?

The empirical investigation is based on an online semi-structured questionnaire and many years of intense observation of the biggest online consumer innovation network that is independent from a single corporation. The free software (<http://www.fsf.org/>) and the open-source (OS) network (<http://www.opensource.org/>) consists of millions of software enthusiasts, from top programming experts to users, most of whom contribute to the common effort on a voluntary basis.

THEORY

The Net as a space for consumer activity

When we ask how consumers use, experience, live in the virtual realm, and how they perceive themselves in it, the answers to these questions will strongly depend on the ontological reality we ascribe to the virtual space. At one level, the computer is a tool and the Internet an interlinked transportation system consisting of glass-fiber wires, computers, backbones, gateways, and servers. The Net can be thought of and used as a physical space of tangible tools, wires, electricity, magnetism where data are exchanged. Hence consumers may view and alter the virtual reality in a physical sense; they add data and put it away, they extensively utilize information sources, store and exchange it. Yet, this modernist view of the computer as a machine, and the Internet as a mere system of data transportation and exchange, of course, is vulnerable to accusations of reductionism. Where are the consumer fantasies, feelings, and fun (Holbrook and Hirschman, 1982)?

Net users interact with this space also in more personal and symbolic ways (Tambyah, 1996). In her book 'life on the screen' Turkle (1995) tells us the story of the changing impact of the computer on our psychological lives. When we immerse in the virtual world of a MUD, a new sense of identity is emerging, she argues, one which is de-centered, multiple and fluid (Turkle, 1995). Cyberspaces are also imaginary and constructed; products of science fiction (Venkatesh, Meamber and Firat, 1997). They are full of paradoxes and techno-fantasies, both real and unreal. What characterizes these cyberspaces is the physical location of the subject independent of the body, embedded in a system of symbolic forms and information nodes (Turkle, 1995). Davis (1998) and Wertheim put these posthuman fantasies of cyberspaces even further into a futurist discussion of the transhuman, transcendental, and even immortal facet of the Net self. Margaret Wertheim's (1999) philosophical and historical-spiritual analysis of cyberspace, or Eric Davis' (1998) 'magical mystery tour' through the technomind and the spiritual life of the 'cyborg' focus on the potential of digital environments to free cyber participants from their corporeal selves and the confines of their material worlds. This techno-transcendental and spiritual ontology of 'cyberspace' has major implications for the construction of the Net self. When an individual's mind can be uploaded on a server (Goertzel, 1998), we become part of the physical Net, become immortal, immerse in technology. In a psychological sense, Walsh and Vaughan's (1993) refer to this phenomenon as transpersonal experience in which the sense of self extends beyond the individual or personal to encompass wider aspects of humankind, life, psyche, and cosmos.

¹The author would like to thank the millions of volunteer programmers for their wonderful creations, and especially Ken Coar for making his survey publicly available on which the empirical analysis is partly based. "May the Source be with you!"

The Internet has transpersonal but also *interpersonal* implications. Originally thought of and carefully crafted as a free, liberal, and democratic space committed to community values, the Internet has also been adopted by the corporate world for transaction purposes. However, the Net is also a space of human interaction that finds its expression in peer-to-peer exchange, online communities, and communal global networks that have their own cultural composition. The first Net anthropologists (Rheingold, 1993) very early began to worship the communal character of the Internet, its community life, and its impact on personality and identity construction (McKenna and Bargh, 2000). The new/old communal reality brought forward enthusiasm for the new forms of communal life, and fears of collective loneliness at the same time. Consumer research today provides a rich basis of ethnographic insights into online brand, entertainment, and emancipatory consumption cultures (Granitz and Ward, 1996; Tambyah, 1996; Smith and Kollock, 1998; Muniz and O'Guinn, 2000; Kozinets, 2002b; Giesler and Pohlmann, 2003b) to start from. The communal spaces described are, of course, symbolic in nature; full of substance and meaning yet, less physical (Fernback, 1999).

The Internet constitutes also an idealist and political space, a fertile ground for consumer resistance (Penaloza and Price, 1993; Kozinets and Handelman, 1998; Muniz and Hamer, 2001) and protest systems to evolve (Davis, 1998; Giesler, 2004). Shaped by its pioneers typical sixties values, like democracy, empowerment, consumer emancipation, a decentralized society of free-flowing data (Davis, 1998), are still prevailing on the Net. Ideologies mobilize consumer activists (Kozinets and Handelman, 1998; Melucci, 1996) and the Internet provides a fertile ground for propagation of libertarian values (Wayner, 2000). This ideoscape (Venkatesh, Meamber, and Firat, 1997) is the 'room to move' for the emancipated, activist self.

In sum, investigating the Net imposes a great responsibility on researchers, because our findings will depend on how we as researchers construct its ontology. When we want to gain deep insight into new phenomena, applying a multifaceted view could be helpful to fully exploit the ways in which consumers use the Net for enriching their lives and finding their selves. The following section elaborates on the meaning of self-realization and why consumers would strive for an enriched self on the Net.

The self in cyberspace

Technological conditions, amongst economic, social and political forces, shape our approach to the self. Today many philosophers, sociologists, and anthropologists, speak of postmodern conditions that shape our lives, resulting in what Gergen called the saturated self (Gergen, 1991), and the consumer society (Baudrillard, 1998). The true and unique personality, *the self*, is in trouble, yet how could and how do consumers cope with the challenge of the postmodern conditions? Gergen (1991) maintains that as the question shifts from the world as it is to the world as represented, we begin doubting reality. Hence, we engage in self-reflectivity, self-awareness rises, and we start questioning who we are and who we want to be.

On a psychological level, self-realization implies becoming one's own self, or to speak with Jung, a process of individuation (Jung, 1990). Individuation must not be confused with individualism, which overlooks collective factors and seeks some peculiarity valued by the ego. Individuation is a never-ending process which aims to bring the conscious and unconscious, the individual and collective together into unity on a higher level of self. According to HUNA philosophy, for instance, three selves make up the man, the subconscious, the conscious, and the superconscious, which basically reflect our heart, brain, and spirit. Our selves are forever linked

in a Universal Oversoul, their separation is an illusion (Bray and Low, 1980; Kumar, 1999). The search for the self is also a common philosophical issue in theology. Christianity proclaims that our true home and happiness lies within our soul. The search for our souls is a long-lasting process from materialism and egoism to spiritualism and self, which is our oversoul and akin to God. Yet, in our civilized world, we are so entangled with our material affairs that it is very difficult for the message of our self to come through (Kumar, 1999).

Consumer society (Baudrillard, 1998) leaves us with an abundance of material wealth and social signs of our ego, yet it is mirrored in an unsatisfied, alienated self. The instrumentality of consumption for self-definition in our society is not enough. We long for autotelic actions, experiences and play (Holt, 1995), we risk our lives in order to intensify our lives, transform our selves, and return to romanticized beliefs (Celsi et al., 1993; Belk and Costa, 1998). As individuals become increasingly concerned about their spiritual well-being, their moral values, and their emotional capacities, they strive to locate a solid, objective basis for centering themselves and giving direction to the future (Gergen, 1991). The more fragmented our lives become, the more we feel the urge to commit ourselves again to people, places, objects, and activities that create identity, contribute to a sense of wholeness. Cyberspace has become a romantic site of vision and experience, and all the suppressed emotional areas of life are blossoming here anew (Venkatesh, Karababa, and Ger, 2002). The liberatory quality of the Internet is an invitation to many consumers to engage in contemplation, play, collective action, and communion. They try out different personae, externalize their selves into avatars and other objects (Belk, 1988; Turkle, 1995), and transform it so as to construct their self.

This article advances the perspective that consumers construct their Net self (Tambyah, 1996) through becoming creative and productive *and* contributing their (art)work to the digital commons. They do that not primarily for a favorable social identity and for others to view (Schau and Gilly, 2003), but also to become their own self in a Jungian sense. The aim of this research is to demonstrate how consumers creatively use Internet technology to realize and materialize their own self, regain a communal form of self, and eventually contribute to a better world.

METHODOLOGY

At the initial stage of this research stood a huge community of fascinating and creative individuals who voluntarily contribute to the development of software of all kind. I deemed this community to be appropriate for investigating self-realization on the Net, because this movement represents a proliferation of the early communities that reflect the Internet tech-culture as originally intended, and that live on in the open-source network. Actually, its most prominent members carefully 'crafted' the Web as it is today, hence they are real "Net citizens" (Rheingold, 1993). Their extensive life on the screen was a second reason for choosing the open-source movement as a research site.

The free and open-source community

"The free and open-source movement is about nerds building software and letting other nerds see how cool their code is. It's about empowerment in the world of programmers and cutting out the corporate suits. It's about spending all night coding on wonderful, magnificent software... without asking a boss. It's very individualistic and peaceful." (Wayner, 2000). Thousands of expert programmers and millions of users worldwide voluntarily work that way and hope to improve their skills, enrich their lives and selves. They can do this because other nerds distribute their source code on the

Internet for free and for others to improve and extend it. Today a huge amount of developers constantly work on the creation of technically excellent software with millions of users worldwide. Free and open-source software, like Linux, KDE, Gnome, the Apache Webserver, has achieved an enormous popularity and is distributed all over the Globe. It is such a great success that most of the projects also have a group of industry partners focused on facilitating the promotion, distribution and development of open-source software. Among the cooperating corporations are leaders from a cross-section of the computer industries, for instance Compaq, Corel, Fujitsu-Siemens, Hewlett-Packard, IBM.

Research method

The data used for this study was gathered during a period from 1997 up to now with varying intensity. During that period the community was constantly observed in order to gain a deep understanding of their activity and culture. In addition, I made myself familiar with open-source software, and tried to grasp the 'work philosophy' of its creators. I chose a research approach similar to, but not as participatory as Kozinet's (2002a) netnography (Fetterman, 1989; Hammerslay and Atkinson, 1995), and Glaser and Strauss' (Glaser, 1978; Goulding, 2002) grounded theory approach.

For gaining insights into individual reflections about the community and themselves, an online questionnaire was used that was distributed among community members. The survey was designed and administered by a core member of the community. It was posted at the most frequented community site-<http://slashdot.com>-which ensured that every community member had a chance to know about the online survey. Respondents were asked to report freely about their involvement with open-source. Out of the 1486 submitted questionnaires 1139 were completed and on topic, hence could be content-analyzed. Those answers were then confronted and meshed with the other secondary and observational data.

In an attempt to further comprehend how individuals co-create and construct their digital selves, I gathered data from members' official and personal Websites and from their most important discussion site, <http://slashdot.org>. During the observation phase memos were written, categories were developed and coded, and regularly discussed with other researchers and members of the community. At different stages of the research project a team of 2 to 3 researchers worked on the data. Several books, online magazines, and interviews about the open-source community were used to cross-check and challenge the interpretation of the data. Visits to open-source and free software conferences were helpful so as to understand the tech-culture, and to be able to grasp the meaning of the tech jargon. When theoretical saturation (Goulding, 2002) was achieved the findings were integrated into coherent themes. The empirical findings are organized around the 'brain', 'heart', and 'soul' metaphor so as to reflect the tripartite view of the self. Within that metaphor the findings proceed along the individual, the peer-to-peer, to the collective level of analysis. All quotes in the findings represent verbatim accounts from the survey among the members of the OS community, unless indicated otherwise.

FINDINGS

The thinking self

Coding as materialization of knowledge and thoughts. The art of programming constitutes a highly elegant and subtle way of exhibiting ones intellectual capital. The pure language individuals talk with the product of their work, the software code, is freed from every emotion that originally accompanied its creation. Code, viewed in the purest sense is nothing but the materialization of an

individual's thoughts. Yet, even if we dismantle an individual's creations from any romanticism, we can see the power of Internet technology for the self-realization of individuals. It is not the fact that, all of a sudden, we are able to materialize what was not materializable before; it always had been that way. It is that, now that we are interconnected, those materializations become digitalized and thus, visible to the online public. Moreover, they become extended by the materializations of like-minded others, become used by potentially every Net citizen, and merge with other products of mind.

"it's a passion, *and a discipline.* being able to write code and show people the end result is satisfying in one way, being able to *show the world how you did it* is another. *you open your self up to criticism* of how you write code and it takes a lot to swallow that personal pride and learn from the mistakes you have made that everyone can see."

It is this potential of extending the mind and self beyond its original boundaries that individuals look for in the Net. One's work in the Net then, is a mirror used for contemplation and self-reflection. Opening oneself up for criticism, as described in the verbatim account above, forces individuals to think about what they do and contributes to the striving for personal betterment.

"Anything you code inside a conventional company remains buried forever, best you'll get is your names on CVS logs than no-one outside the company ever reads. Make even a small contribution to open source and *you can point to the code for years and say *I* did that."*

With their research into deep meaning of possessions, Belk, Sherry and Wallendorf (1988) described similar phenomena in the non-virtual realm. Here, too, individuals use the Net to physically extend their contributions and weave their thoughts into the global network of thoughts. This extension beyond the physical brain is a way to exhibit and construct a particular part of self we probably want to become the most. However, this is only possible with the help of others. Although individuals strive to point out their contribution, its value is determined by the adjacent work.

Peer-to-peer exchange and the power of openness

Internet technology adds an important component to self extension. Apart from exhibiting ones multiple constructed and extended "me's" (Belk, 1988, Schau and Gilly, 2003), the Internet allows a more subtle variant of self-presentation and self-realization, which is the giving of gifts to others (Giesler and Pohlmann, 2003a). Exchanging one's creative work with peers serves various psychological functions. It frees the self and the others from the constraints of the materialistic world, it liberates the self from hoarding, and from work alienation, because others can see their work. The Net adds freedom.

"I feel like a beneficiary of the hacker gift-culture, and as a result, have wished to give back to the institution that *gave me that freedom.*"

"Free software and the bazaar development model are not the answer to all the problems in software development; but *I believe in the free exchange of ideas*, and free-source software is exactly that."

Giving away software seems an entirely altruistic act however the 'egoless hacker' is partly a myth and exaggeration (Wayner, 2000). Individuals like to give and to give back, because via our

actions we become part of the Net. It is also an important part of the culture and the revolutionary background of the OS movement which will be discussed later. The community freely exchanges source code in order to exploit the power of openness on the Net.

“free source-it can't be bought, stopped or controlled by anyone but the participants,....”

The phenomenon described here is an inherent characteristic of the Net. The Net as it is today follows a fascinating logic. Things are not there, are not existing, unless they are made visible and shown to others. Giving things away is one way to exhibit and gain social and intellectual capital. However, it is only yours if you show it and if you give it away to others. It grows when others can use and improve on it, and this process cannot be stopped by anyone, cannot be altered by any single individual, but only by the collective.

Towards a collective brain

The metaphor of the collective brain is a powerful one in the OS community, because it promises a transformation of one's conscious, cognitive self into a globally unique and grand innovation. People are working together because the outcomes of their collective effort exceed an individual's abilities by far, whereas their own contributions, in concert with others, lead to amazing results.

“Open source software has created not only great commercial grade products, but a *rich community of people with similar interests* who are *creating excellent software* not because of any monetary pursuit, but because it is a labor of love. And that is the real strength of open source software.”

As reported here by an open-source contributor, the concept of community comes into play as the unquestioned concept of how to achieve a grand goal. Only a critical mass of people with the same interests, a global superorganism (Russell, 1995), is able to realize that grand goal. Within a culture of continual interaction and discourse, the global brain works, thinks and grows. Even more important than the final results of this thinking process is the chain of arguments that has produced the solution (Himanen, 2001). By means of co-constructing ideas and problems, and by assembling pieces of software, the community constantly creates and disseminates knowledge, also for future generations. The self is powerfully interlinked with others through various tools and becomes part of the global memory (Goertzel, 1998). Clever insights, brilliant new software features appear out of it as human curiosity is amplified by human generosity “in a grand explosion of intellectual synergy.” (Wayner, 2000, p106). And although the extended self becomes enmeshed with the group-work, it is always visible in the Change Log (a change log is keeping track of the changes of something) of the software code.

The emotional self

Labor of love, joy and passion. Consumer research for a very long time has overemphasized the meaning of objects for consumers' lives and selves. However, a considerable amount of research today reveals the role of passionate activities and experiences in the lives of consumers (Csikszentmihalyi, 1997; Celsi et al., 1993; Schouten and McAlexander, 1995; Belk, Ger and Askegaard, 2000; 2003). For programmers, passion describes the general tenor of their activity, though its fulfillment may not be sheer joyful play in all its aspects (Himanen, 2001). Finally, the ‘alienated worker’ found a fascinating and exciting challenge, something he can

immediately check out whether it works or not, after s/he has carefully crafted the piece.

“Aside from the obvious benefits of free-source development, it also allows engineers a way to satisfy their deep and primordial urges to take things apart and see how they work; tinker with things; develop an understanding; grok it.”
“free/open source is driven by passion”

Although, from a realist perspective, we all know that, in the end, everything boils down to ‘a piece of work’, our passionate self makes it part of ourselves, a creation, a masterpiece that makes the world go round. We are proud of it when it works but we also know that the brilliance of our creations is a mental construction, which the OS community humorously admits (Picture 1).

High quality and serious work is done by passionate individuals within a challenging and yet, playful culture full of ethical norms and rules, playful symbols, signs, and humorous word art.

Tech-culture: the communal self

Members of the OS network and computer programmers in general, love Star Wars, freedom, source code they can tinker with, and communicating with their fellow ‘hackers’. That's about all what they have in common, because they also share a strong ethic of free and self-determined human beings. The desire for sociality (Belk, Ger and Askegaard, 2003) and the need to compare our self with relevant others drives our constant search for relationships. Finding one's own role and self in a community strongly depends on whether we feel comfortable within a group and whether we think our communal self will be accepted.

“*I feel very much at home* in the free software community. “
“I have finally found a place and community where I feel I belong. My contributing has not only boosted my self esteem but has also *helped me gain a self identity*, where before I had a big identity crisis. I also find it easier to talk to people and am bolder.”

The Internet is an important space for finding and exhibiting one's self, because it is freed from the corporeal self and other non-virtual cues (McKenna and Bargh, 2000). This is the self that probably comes nearest to self-presentation on the Net as described by Schau and Gilly (2003). The Net is a place where individuals can collectively create imaginative other worlds and try out other roles and personalities. Individuals split their self into various real, imaginary, and humorous selves in an attempt to find and construct their own self. The most wanted self people strive to achieve in the OS community, is the ‘hacker self’, representing the personification of the cultural ethic and is, of course, expressed in a code. It reveals one's values, attitudes toward different software, TV shows, dress code, one's age, and marital status. This is the digital DNS, these are the genes of a ‘hacker self’. It is, of course, also a very communal self, because it is primarily thought of as a social sign, representing one's social identity and ascribed role within the OS community.

——BEGIN GEEK CODE BLOCK——

Version: 3.1.2

GCS/M/P/MU/TW !d s: a+ C++(++) UVBL++++ P-(—)
L++++ E++ W++ N+ o+ K+++ w— !O M V- PS+++ PE++ Y+

PGP>+ t+@ 5? X R !tv b+++ DI+++ D—(D)

G++ e h— r+++ y++

ma++ k F3+/++

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(source: <http://www.catb.org/~esr/personal.html>)

PICTURE 1

User Friendly Cartoon ‘Zock and Stef playing Quake’

USER FRIENDLY by Illiad



(source: <http://ars.userfriendly.org/cartoons/?id=19980211>)

Freed from the corporeal self, individuals also use various symbols, language, humor, and word art for self-construction. Being a real hacker means being familiar with ‘the hacker jargon’, of course. However, this is not a jargon in the common sense. Dry humor, irony, puns, and a mildly flippant attitude are highly valued—but an underlying seriousness and intelligence are essential.

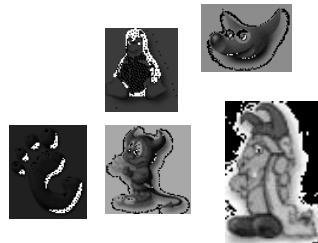
“hacker n.

[originally, someone who makes furniture with an axe] 1. A person who enjoys exploring the details of programmable systems and how to stretch their capabilities, as opposed to most users, who prefer to learn only the minimum necessary. 2. One who programs enthusiastically (even obsessively) or who enjoys programming rather than just theorizing about programming.....

(source: <http://www.hack.gr/jargon/html/lexicon.html>)

However, apart from cultural conformism, individuals construct their own digital ‘hacker self’ through their contributions to the community discourse, through the use of symbols and signs, through nick names, ASCII and word art, for instance the use of recursive acronyms:

Rodent of Unusual Size <Kxx.xxx@xxxxx.Com>
The Apache Software Foundation
(nick name e-mail address of a high status community member)



GNU is Not Unix
(recursive acronym)

(‘brand marks’ of open-source software)

The community has clear rituals for ‘newbies’, norms and sanctions, status rules, its own religious value systems. Culture defines the possibilities and the boundaries of self-construction within an online community. Its functional role for the construction and realization of the self lies in the individual striving for belongingness. Its language, rituals, symbols, and signs provide the tools for the construction of the communal self. In the virtual realm, community culture also defines the public positioning of its members.

children of the revolution: emancipatory activism.

“Redmond has screwed up badly, alienating an entire generation of computer Nerds, once you have experienced the thrills of working with a opensource project, you never want to go back into the *straight-jacket of proprietary software*, where you can’t fix any bugs you come across.”

They revolt; not against the Western economic system per se but against its extreme manifestations as power-exerting entities which cut off individuals from a self-determined life. Hence, individuals homestead the Internet as an open space or ‘room to move’—establish a contradiction to the closed-ness of economic institutions and corporations, of corporate thinking and acting, of narrow-mindedness. Activism is their way to escape and surpass the limitations of modernist Western thought. As such, it has significant political *and* economic impact. Within a pluralist culture they fight for liberty, anarchy, communism, and capitalism, whatever it needs to maintain an outsider status (Giesler, 2004) and break the old paradigms of corporate thinking. Similar to the Napster community, they oppose commodification, corporations and copyright (Giesler and Pohlmann, 2003b), however, in a highly reflective way.

“We are currently *at war with a threat* as great as any other that Western civilization has faced before. The success of free-source software (or whatever anyone wants to call it) *is vital to human progress.*”

Similar to Kozinet’s observations at Burning Man (2000), the open-source movement is a successful movement because it never

PICTURE 2

Richard M. Stallman: founder of the Free Software Foundation; founder of the 'GNU is Not Unix' project and free source ideologist



(source: <http://www.stallman.org/saint.html>)

St IGNUcius

Stallman is a saint in the Church of Emacs—Saint IGNUcius.

Saint IGNUcius says: Some people don't realize that Saint IGNUcius is Saint IGNUcius's way of not taking himself too seriously. Therefore,

Warning: taking the Church of Emacs (or any church) too seriously may be hazardous to your health.

I bless your computer, my child! (photo by Wouter van Oortmerssen)

put itself outside of the market. For the success of its distinction, a protest system depends on everything it excludes (Giesler, 2004). Hence, for the definition of the digital self it is vital to emphasize the distinctions from "the evil empire" and to fight "the holy war". A protest system is only successful as long as it is able to reproduce itself, reflects on its environment and on its actions. The free / open-source movement is characterized by an idealist-pragmatist dualism portrayed in person by its two, probably most famous evangelists and founders of the Free Software Foundation and the Open-Source Initiative. Its success is partly based on that dialectic as it constantly forces communicative interaction and discourse, reflection and contemplation on: 'Who are We?' However, even the most controversial issues are subject to the community's playful and humorous attitude. It is a form of self reflection in a public space.

The spiritual self

Sense of immortality and the networked Other. Cyberspace is a shared interactive environment, an electronic soul-space that invites the postmodern psyche to both find and remake itself (Davis, 1998). Margaret Wertheim (1999) argues that by creating a space that follows the virtual laws of thought rather the concrete laws of matter, cyberspace provides a cosmos where the psyche can once again live and breathe. Caught in our fragmented, postmodern self that tries to resist modernist norms and traditions we are in constant search for a renewed, re-unified, and authentic self. Cyberspace becomes the sacred place for contemplation and self-construction, and the space where our digitalized minds, freed from the corporeal mortality, become eternal. As long as the physical backbones of the Net are "alive" our contributions, our materialized thoughts, our digital selves, will also live on forever.

"I always think that there is a little angel on my shoulder saying that contributing to open source is *your way to be remembered, well past my time...*"

"Even though we are a University project, all the code we produce is GPL'd so that other people can take whatever we have done and move it on. ie *all our intellectual property can live on.*"

see also Eric S. Raymond's online legacy at : <http://www.catb.org/~esr/continuity.html>

Spiritual reality is something we make for ourselves, through our symbols and rituals and communicative interaction. "Because cyberspace embodies and extends our symbol-making minds, it can mediate these sacred communications with each other, as well as with the entities—the divine parts of ourselves—that we invoke in that space." (Davis, 1998, 193). Spirituality is not a lonesome exercise. We also do it in order to achieve togetherness, something that outreaches the sum of the parts, 'being one of', merge into the grand creation of the commons.

"The only real reward provided to the people who are actually writing the code is to be recognized as one of "The People That Make Things Happen"."

"The knowledge that I can make an impact, participating in something bigger than I am."

Digital association with others is vital for an understanding of the Net self (Schau and Gilly, 2003). We want to be linked with others, hence cyberspace is full of 'links' that link us to other selves who are a constituent part of our own self. Hawaiian HUNA philosophy maintains that all life expressions remain forever linked with each other as the Universal Oversoul. Creative Kahuna (a Kahuna is a Hawaiian shaman) work must be related to the totality. Abuse of Kahuna power relies on the illusion of separation (Bray and Low, 1980). Finally, in cyberspace our selves have found, and merged into, the Oversoul, the networked Other (Lacan, 1970; Belk, Ger and Askegaard, 2000; 2003), and can live on forever.

DISCUSSION

The many ways of self-realization on the Net presented are not meant to be fully applicable to each and every Net self. Self-realization is itself a mental construction. The findings presented above, however, give reason to assume that consumers do become creative and innovative together with like-minded others in order to achieve a sense of *being* (Heidegger, 1986). Individuals immerse in the networked world, become a constituent part of it and derive much of their identity from being 'linked' to others in a hypertextual and a relational sense. Individuals feel 'interconnected', being weirdly wired with everyone, share the physical and spiritual vibes of the global Network. The Net provides a whole new way of

thinking about Jung's concept of the collective unconscious—a realm of abstract mental, emotional and spiritual forms, living outside of physical space and time, accessible by all human beings, and guiding our thoughts and feelings.

Apart from this grand unification of the world population, and the possibility to take part in it, consumers also carefully construct their individual personality and identity. Whereas in real life, identity construction demands real-time performance of one's various social roles, identities in the Internet can be exactly planned, refined and re-constructed (Schau and Gilly, 2003). Each and every single link demonstrates and reveals how we want to be seen and what we want to achieve in life and even further on, how we want to take part in shaping the world, at least the online world. People think carefully about their giveaways to the global public. Hence, they engage in contemplation and reflect upon their digital being, which potentially leads them to a more spiritual self and a life beyond their physical existence.

Individuals not only use new technologies to move beyond the limits of their corporeal self, transgress time and space, and construct a common realm for self- and group-realization. They also use Internet technology to materialize their thoughts and feelings, and transform them to a collective but still personalized net self. People do not lose their individuality when they immerse in the networked world. Together they co-construct common virtual realities and yet, hypertext technology protects the uniqueness and individuality of the Net self. A person keyword search on a major search engine makes apparent the various forms of representation of the individual self, links the world back to the elements of the 'digital individual'.

The aim of this research was to reveal new facets of possible selves and new forms of self-realization on the Net. Internet technology allows us to engage in self-reflective discourse and construction of our self as we think ourselves. However, it presupposes that we are actively co-constructing the social and technological context which we are in, and that we actively *do* something in it. Consumers who become creative and innovative together with others in order to shape the economic and social fabrics of our lives are the ones who truly envision the chances of technology in order to contribute to a more liberated, self-determined life for themselves and for others. They are 'creative cyborgs', individuals who are weaving their creative self into the online web of creative others so as to give birth to a collective, yet coherent masterpiece of work. They are the ones who think their selves and the world differently, hence opening up new ontological realities and spaces of culture and consumer activity. Using their wonderful creations is a passion, exploring the richness of their digital selves is a privilege.

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Reframing the Embodied Consumer as Cyborg A Posthumanist Epistemology of Consumption

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ABSTRACT

The two-fold purpose of this research is to introduce a posthumanist epistemology of technology consumption and to illustrate the usefulness of this epistemology in the study of consumption as a whole. Combining recent Anglo-American theories of consumer behavior and European systems theory, we first introduce the *tetralemma of the system*, an analytical framework for the systemic structuration of consumer behavior, which is then used to explore and develop three posthumanist systems on the rise and of interest in the marketplace matrix: (1) cyborg consumers (2) brand systems and (3) protest systems. The cyborg is the prototypical posthumanist consumer, a cybernetic organism that signifies the symbiosis between animal and machine, but also reflects the transformative union between economic priority and insatiable desire, living being and observing system. A brand system embeds consumers' and marketers' brand related social communication to establish control over consumption. A protest system is concerned with the ongoing social process of ensuring outsider status from the market dominated social environment through consumption. Finally, we conclude that our posthumanist epistemology of consumption and the notion of systems provide important new insights into the posthumanist understanding of the consumer as well as the cultural structuring of posthuman consumer culture.

INTRODUCTION

Among the most important business phenomena of our generation is the way in which entire categories of products and services are based or dependent on technology that has not been existent only a few years prior to their introduction. By the early part of the twenty-first century, those of us who live in the industrially developed part of the Northern Hemisphere live and move and have our being in the midst of our technologies. Following Ihde (1990), we might even say that our existence is *technologically textured*, not only with respect to the large dramatic and critical issues which arise in a high-technological civilization [—] such as the threat of a nuclear war or the worry over global pollution and different forms of terrorism [—] but also with respect to the rhythms and spaces of daily life and consumption. All around us, high-technological products and networks change not only the electronic infrastructure within the marketplace, but also the social fabrics of consumers' lives. Our consumer culture is driven, shaped and constrained by technocultural and technopolitical considerations.

Yet, as Glazer (1995) laments, "most of our understanding of consumer behavior is at best technology neutral, and at worst rooted in both theoretical and empirical work with product categories that have remained unchanged for many years with respect to their underlying technologies." Following Mick and Fournier (1998) "studies of technology consumption are limited in number and focus." While the consumer literatures have occasionally probed the nature of technology consumption (e.g. Giesler and Pohlmann 2003a, 2003b; Schroeder and Borgerson 2002; Sherry 2000; Venkatesh and Nicosia 1997, Firat and Venkatesh 1995; Thompson 1994), they have remained silent about the deep impact of consumer technology on the transnational connections in economic, political, and cultural domains.

Recently, Giesler and Venkatesh (2004) have further developed Venkatesh, Karababa, and Ger's (2002) foundational theoriz-

ing of posthumanism in marketing and argued that these technocultural and technopolitical transformations must be conceived of in the context of *posthuman consumer culture*, employing a "posthumanist epistemology of consumption." Posthuman consumer culture refers to the symbiotic relationship between (1) the structural frameworks that orient how consumers interact with commodities, (2) the economic priorities of the market and (3) the "heteroglossia of voices" on how, through the excessive consumption of high-technological products and networks, to alter our notions of what it means to be human in the Cartesian sense. Following these authors, the Cartesian dualism, which dominates contemporary marketing and consumer research, is responsible for our inability to understand the nature of technology consumption because it prioritizes the *Human Mind* and leaves the technological product to the material world of bodies and objects. Whether our consumers are theorized as information processors, cognitive subjects or cultural subject is derived from systems of humanistic epistemologies. In our march through history, we have been careful not to tamper with this epistemic monopoly. Because we have epistemized technology as an external object of tool, many impulses behind our obsession with information and communication technologies remain poorly understood. To improve the discipline's instruments of analysis and to build a greater amount of complexity into the self-description of our networked consumer culture, Giesler and Venkatesh argue, consumer culture should be epistemized as posthuman, a "hybrid marketplace matrix" that no longer distinguishes between humans and technologies and instead embeds a plethora of nature-cultures and body-minds.

Although Giesler and Venkatesh (2004), echoing Venkatesh, Karababa, and Ger (2002), call for a posthumanist consumer epistemology and encourage consumer researchers to move beyond existing disciplinary boundaries in search of its theoretical sources, they remain relatively abstract about how such an epistemology could materialize. The goal of this research then is to develop one possible posthuman epistemology of consumption by linking two research traditions previously held separate: Anglo-American anthropological theories of consumer behavior and European (Luhmannian) systems theory.

Epistemizing how consumer perception, acculturation and politics play themselves out in situations that are invaded by consumer technology, offers researchers important new insights into contemporary consumer culture by (1) exploring the processes by which consumers construct, elaborate and interpret their own social reality using consumer technology, (2) understanding the social context(s) in which these processes occur and (3) identifying the role of these processes in the overall construction, maintenance and description of posthuman consumer culture as a whole. Because of its focus on posthuman consumer culture, the focal research question of this study is "How can a posthumanist epistemology of consumption look like and how will it expand and inform our understanding of contemporary consumer behavior as a whole?"

We will proceed as follows. First we will discuss the current representationalist view that organizes contemporary humanistic inquiries into the culture of consumption and then contrast the Cartesian perspective of 'system as unity' with the post-Cartesian notion of 'system as distinction.' Then we will introduce the tetralemma of the system, an analytical framework for the systemic

structuration of posthuman consumer culture, which we use to discuss three systems on the rise and of interest to consumer researchers: cyborgs, brand systems and protest systems. Implications for marketing and consumer research are discussed in a concluding section.

REPRESENTATIONALISM AND BEYOND

A questionable pragmatic Cartesian metaphysics organizes current humanistic inquiry in marketing and consumer research (Giesler and Venkatesh 2004; Lincoln and Denzin 1994; Brown 1995). As the past three ACR/JCR/JMR decades clearly evidence, the vast majority of marketing scholars have embraced the Cartesian logic of *representation* where “‘making true’ and ‘representing’ are reciprocal relations” (Rorty 1991, p.4). Since René Descartes, the condition of being is fulfilled with the ability to think (‘Cogito ergo sum’); hence the famous distinction between the realm of the “Human Mind” and the external “material world” of bodies and objects. According to Descartes (and implicit in the majority of marketing and consumer research), the Human Mind is “sacrosanct” or “essential” and exactly defines what it means to be human. The material world, in contrast, remains external and somewhat secondary since it can only be epistemized via “Mind-centered” representation techniques. Whether, for instance, consumers are information processors, cultural subjects, or cognitive subjects always depends on systems of humanistic epistemologies. In their march through history, consumer researchers have been careful not to tamper with this epistemic monopoly. Contemporary humanistic inquiry is conducted under realistic and relativistic ontological and epistemological assumptions (e.g. Brown 1995, p. 171-172). Like the modernist novel, positivist consumer research text presumes a stable external social reality that can be “recorded” by a stable, objective, scientific Mind (e.g. Hunt 1989; 1993; 1994). Like its postmodern counterpart, post-positivist consumer research text attempts to connect mobile, moving, shifting Minds (and their research representations) to a shifting, external world (e.g. Hirschman 1986; Holbrook 1992; Sherry 1991; Sherry and Schouten 2002). While this external world may yield to multiple interpretations, the interpretive, mobile consciousness of the consumer researcher-as-relativist is able to form certain and conclusive representations about it (Denzin 1991a, 1991b, 1997, forthcoming; McHale 1992).

Outside of the marketing world, the metaphysics of Cartesian representationalism have been widely criticized because they fail to let us account for the idea that, as Richard Rorty (1991) laments, “it is no truer that ‘atoms are what they are because we use “atom” as we do’ than that ‘we use “atom” as we do because atoms are as they are’” (p. 5). Neither does thought determine reality nor, in the sense intended by the realist, does reality determine thought. Following Rorty (1991), the history of philosophy rather showed, that there are no final answers to the traditional questions about “knowledge,” “truth” and “representation.” Consequently, they should be rejected. In a similar fashion, Rasch and Wolfe (2000) have demonstrated how the limitations of the Cartesian representationalist framework for dealing with the problems of knowledge are especially clear in the ongoing debates over the status of postmodernity. On the one hand, there are critics of diverse political stripe who lament that with the breakdown of the realist worldview, we experience what Foucault (1969; 1972, p. 387) calls the “death of the subject” and that the loss of meaning that undermines the philosophical, ethical, and political promises of the project of modernity. On the other side, we find proponents of postmodernism who accept or even celebrate this very loss of representational veracity as a liberation of philosophical, social and cultural analysis from what Derrida (1967, see also Rosenau 1992) has termed “logocentrism.” Most researchers in marketing have today settled

for an uneasy position somewhere in the middle of the continuum between realism and relativism: there is indeed a preexistent, finite social reality with its own objective nature, but one that is viewed differently by different “Marketing Minds” according to the cultural and social determinations that shape their particular view of things (e.g. Brown 1996, p. 179; Scott 1992; Sherry 1991; Thompson 1993). Yet, as Rasch and Wolfe (2000) passionately advocate, such a position is “purchased at the expense of incoherence, since it simultaneously endorses and disavows the very representationalism that it bridles against” (p. 16). This momentum, after all, may be not be the *crisis of representation* that is challenging marketing and consumer behavior research (e.g. Denzin 1997; Sherry and Kozinets 2000) but a *crisis of representationalism*: the urgent suspicion that marketing and consumer research have a Cartesian center from which they prefer to operate, leads to the even stronger suspicion that, if realism is lost, so is relativism.

What does this hold for consumer technology? The crisis of representationalism leaves consumer technology as an open question because Cartesian metaphysics are unable to frame the “technological texturedness” of our being-in-the-world (Davis 1998; Heidegger 1977). In a representationalist world, we can come to grips with technology only as an external means or human activity but not as a “being” that, as Sherry (2000) points out, “transcends its material existence as an object or tool by virtue of its ability to encode and transmit political meaning and mind, spirit and soul.” As it currently stands, marketing and consumer research are blind for the complex cultural and political properties of consumer technology beyond the well-established Cartesian anthropologies of the tool.

To better understand technology consumption on the epistemological level of analysis beyond the problems of the Cartesian legacy, Giesler and Venkatesh (2004) therefore propose the replacement of the Mind by the cyborg, “a cybernetic organism, a fusion of the organic and the technical forged in particular, historical, cultural practices” (Haraway 1995, p. 51). Yet they do not explain how the cyborg epistemizes, socializes and sociologizes. Addressing this conceptual indeficiency, we propose a posthumanist epistemology of consumption. We link a posthumanist (post-Cartesian) theory of social systems to recent findings from the anthropological marketing literature. To pursue this goal, we will (1) distinguish between a ‘system as unity’ and a ‘system as distinction’ perspective; (2) develop the tripartite posthumanist notion of systems, control and communication; (3) introduce the cyborg as a cybernetic system; (4) present the tetralemma of the system, an analytical framework for the systemic structuration of posthuman consumer culture; and (5) explore two different social systems on the rise and of interest to recent consumer literatures: brand systems and protest systems. In a concluding section we will sum up the implications of this research for our understanding of posthuman consumer culture and the relations between consumption, culture and technology.

SYSTEMS, CONTROL AND COMMUNICATION

‘System’ is a complex and many-sided notion in social thought. Its intellectual history is lengthy and abundant. Systems were a prominent concern of the great social theorists of the nineteenth and early twentieth centuries (e.g. Durkheim [1893] 1933; Hegel 1830; Marx [1867] 1946) and have continued to be so among contemporary contributors (e.g. Ashby 1956, 1961; Bateson 1972, 1979; Baudrillard 1968; Bourguine and Varela 1999; Glanville 1979, 1982; Günther 1962; Habermas 1984; Lévi-Strauss 1966; Löfgren 1977; Luhmann 1984; Maffesoli 1996; McCarthy 1991; Parsons and Shils 1951; von Foerster 1981; Wiener 1948). In what follows, we will explore two different systems perspectives: the traditional

Cartesian representationalist notion of 'system as unity' and the post-Cartesian/ posthumanist European (Luhmannian) notion of 'system as distinction.'

System as Unity

Inspired by structural functionalist thought of the Fifties and Sixties (e.g. Radcliffe-Brown 1952) and the famous work of Talcott Parsons (Parsons and Shils 1951), the notion of 'system' to epistemize the structural unity of marketing and consumption has been frequently probed in marketing and sociology (e.g. Baudrillard 1968, 'system of objects'; Douglas and Isherwood 1979, 'goods as information system'; Moyer 1967, 'changing marketing systems'; Arndt 1981, 'the political economy of marketing systems'; Savitt 1984, 'comparative marketing systems'). Here a system is defined in a representationalist fashion as, for instance, "a relation between structure and process" (Douglas and Isherwood 1979) or "a marketing system that structurally governs itself within its own social mechanisms to maintain its boundary" (Savitt 1984). Terms like mechanisms, structure, element, boundary or relation indicate a strongly representationalist perspective on social systems as "ontic units" (von Foerster 1981): the functionality of a certain pre-existent, finite marketplace reality is epistemized by representing it as a system. Researchers within the 'system as unity' tradition have worked ontologically with systems as stable, orderly, mechanic units that represent certain stable or shifting external social marketing realities. Yet, the 'system as unity' view has been widely criticized for being unable to deal with social conflict and social change (e.g. Giddens 1977; Edgar and Sedgwick 1999). In a Cartesian universe, in which social practice is "systematized" in such a way, there is also little scope for a theory of meaning and ideology (Lyotard 1979). While the representationalist framework offers to us palette of rich and well-established concepts for the representation of consumer behavior, markets and culture, the humanistic (Cartesian) social systems theories have proven their inability to deal with ideology, meaning, conflict and change within everyday social reality and consumption. In the crisis of representationalism, the perspective of 'system as unity' has failed to let us account for the social complexity of posthuman consumer culture. Is the systems approach then lost? Instead of rejecting the systems approach as a whole, we propose a different notion of social systems that takes into consideration, as McCracken (1998) did, that "we need a theory that shows how the system remains a system even as systemness is challenged." In other words, we need a theory that explains: (1) what constitutes a system "as distinguished from" its social environment (Baecker 2002), and (2) who draws the distinction between system and environment (Fuchs 2001)?

System as Distinction

The notions of 'system as distinction' and the 'observer' who draws the distinction beyond the realms of Cartesian representationalism are central to European (Luhmannian) systems theory (e.g. Luhmann 1984, 1997; Baecker 1999a, 1999b, 1999c, 2001, 2002; Fuchs 2001). Yet this post-Cartesian (constructivist) version of systems theory has not been explicitly theorized in marketing and consumer research. The purpose of this study is to develop a posthumanist epistemology of consumption using formerly neglected insights from European (Luhmannian) systems theory and linking them to recent anthropological marketing literatures. By exploring the notion of 'system as distinction,' this paper helps expand our understanding of the cultural structuring of posthuman consumer culture and society.

For the purpose of this study, we rely on the post-Cartesian notion of systems, control and communication, the tenets of which we will briefly review. The posthumanist concept of systems is

historically situated in modern society's attempt to monitor and control itself (e.g. Wiener 1948; Hayles 1999). Control means to establish causality ensured by communication (Baecker 2001), i.e. control presupposes communication. It implies a negotiation, a kind of contract to be concluded. This contract is not based on ideal speech, historically grounded reason or ontological unity (e.g. Habermas 1984; Bannet 1993; Ray 1993). It is rather grounded in a specific relation between causes and effects. This specific relation can be referred to as the system (and its environment), emergent from communication and self-selected by an observer who distinguishes it from the universe of causes and effects all around him. But why the observer and not Mind? This issue is explicitly addressed by Varela (1979) who discusses the fundamental cognitive act of distinction:

"...[T]he establishment of system boundaries is inescapably associated with what I shall call a cognitive point of view, that is, a particular set of presuppositions and attitudes, a perspective, or a frame in the sense of [Gregory] Bateson ... or [Erving] Goffman...; in particular, it is associated with some notion of value, or interest. It is also linked up with the cognitive capacities ... of the distincting. Conversely, the distinctions made reveal the cognitive capabilities of the distincting" (p. 85).

In other words, the demarcation of a system is contextualized with respect to the observer effecting the demarcation. After all, the fundamental epistemological tenet of the posthumanist systemic perspective is that: 'Everything said is said by an observer' (Maturana and Varela 1980, p. xix). In contrast to the representationalist view, reality is therefore not external and preexistent independently from the Mind's attention (and later represented by the Mind), but actively constructed by the observer in the permanent process of drawing distinctions. For an observer, then, a system is a way "to communicate control if there is no other way to control but to communicate" (Baecker 2001). Communication can therefore be understood as the concatenation of selections, i.e. operations of drawing distinctions and observations of these operations performed by drawing other distinctions (e.g. Shannon and Weaver 1949). This posthumanist idea of systems reveals two insights about communication. As Baecker (2001) notes, "systems first of all explain that there are sets of possibilities before any specific possibility can be selected at all. And secondly, they explain that the set of possibilities is not a given one but is reproduced by the very selections being feasible which recursively constitute (by being remembered, forgotten and re-invented) that set of possibilities." Communication therefore guarantees the production of redundancy (Bateson 1972). It marks both the message being selected and the set of possibilities from which it is selected. Communication consists in checking out that redundancy, and that is why it is stimulated both by non-knowledge *and* by knowledge, by what has been said *and* by what has not been said, by the determinate *and* by the indeterminate, by the meaning included *and* by the meaning excluded *and* by the system *and* its environment (Luhmann 1997a, pp. 37-8; Baecker 2001).

THE CYBORG AS EMBODIED CONSUMER

Acknowledging "distinction" as "the most fundamental cognitive act" (Maturana and Varela 1980), the posthumanist notion of systems resolves Descartes's dualistic domination of the *res cogitans*, the realm of the mind, over the *res extensa*, the spatial world of bodies and objects, and instead epistemizes social reality as a "field of forces and relations" (Fuchs 2001) constructed by an observer. In doing so, Luhmannian systems theory provides the core logic not


only for a posthumanist epistemology of consumption but also for a post-Cartesian “cyborg anthropology” of consumption in the sense of Giesler and Venkatesh (2004). The cyborg “observer,” a post-Cartesian, “re-embodied” cybernetic organism, includes both natural and cultural components. It treats cognition not as something that happens in the brain. Instead, it analyzes meaning and identity in terms of the relation between itself and its environment, integrating mind and biosphere. The relationship between the cognizer and its phenomenal world is determined by the bodily and cultural distinctions it draws. The cyborg epistemizes, socializes and sociologizes in the permanent process of drawing distinctions and observations of these operations performed by drawing other distinctions. The cyborg is defined by its ability to connect and reconnect itself, that is, to permanently set itself in relation to its environment. It is the prototypical posthumanist consumer, a cybernetic system that signifies the symbiosis between animal and machine, but also reflects the transformative union between economic priority and insatiable desire, living being and observing system.

For the re-connected self of the cyborg consumer, technology consumption is, with Heidegger (1962), a fundamental “mode of revealing,” that determines its “being-in-the-world” rather than mere “tool consumption” or “human interaction” with the external world of bodies and objects. Technology is implicit in all being, so fundamentally determining our existence, that it becomes an epistemic device for the cyborg consumer.

The marketplace can therefore be defined as a hybrid “matrix that embeds” (von Foerster 1997) or a “pattern that connects” (Bateson 1972) a plethora of social, economic and technological systems of control established through consumption. In such a posthuman consumer culture, both consumers and consumer researchers are cyborg consumers, “decoding” the marketplace matrix and observing its various social forms and their relations. How do cyborg consumers decode the marketplace matrix? In what follows, we will introduce an analytical framework that will help consumer researchers (and consumers) better understand the systemic structuration of posthuman consumer culture. We will then explore and develop two social systems of interest to the recent marketing literatures: brand systems and protest systems.

The Tetralemma of the System

In the previous section, we have explored and developed a posthuman perspective on systems as being emergent from social communication, understood as the concatenation of operations of drawing distinctions and observations of these operations performed by drawing other distinctions. Systems present, for an observer, (1) the possibility of drawing a distinction, (2) the environment as distinguished from the system, and (3) the distinction itself as the relation between the system and its environment. Systems organize the relation between freedom, blindness and dependence: a system is free in the way of drawing its distinction, it is blind for the consequences; and for the success of its distinction dependent on everything it excludes (environment).

To further explore these insights, we introduce the *tetralemma of the system* (cf. Varga von Kibéd 2000; Baecker 2002), an analytical framework for the systemic structuration of posthuman consumer culture. The tetralemma of the system is a cycle diagram that shows how a system (e.g. a cyborg or a social system) is emergent from and brought forth by communication. The Spencer-Brownian (1969) mark  indicates “is distinguished from” (see Figure 1). The arrows demonstrate the recursive movement of the reflection and, finally, the re-entry of all single elements into the social system.

Let us briefly go through each position of the tetralemma of the system: (1) A system is emergent from communication (as was discussed in the last section). As Davis (1998) points out, “all that remains is the possibility of communication.” (2) A system is a system within its environment. It is distinguished from its environment. (3) In the ways of negotiating inside and outside state, a system is intelligent if and as long it is able to reproduce itself. Intelligence is the system’s ability to “reflect on an environment” (Günther 1962, p. 318; see also Baecker 1994; Lacan 1949; Wiener 1948, p. 162), i.e. to substitute its own knowledge with the non-knowledge of its environment. (4) Both the system and its environment are set in the implicit context, a causally non-related social realm. (5.1) In the medium of meaning, the system does not communicate with but about its environment. (5.2) In the medium of rationality, the system reflects the distinction that it draws. The idea of rationality in position 5 formulates that the re-entry of a distinction into the realm of the distinction (Spencer-Brown 1972) does not claim Truth but rather another distinction—a position of reflection—that sets itself in relation to the “freedom, caprice and imagination” of position 1. The tetralemma of the system expresses the permanent oscillation of an observer between five analytical positions that help us explore and develop some of the key features of two important social systems on the rise and of interest in posthuman consumer culture.

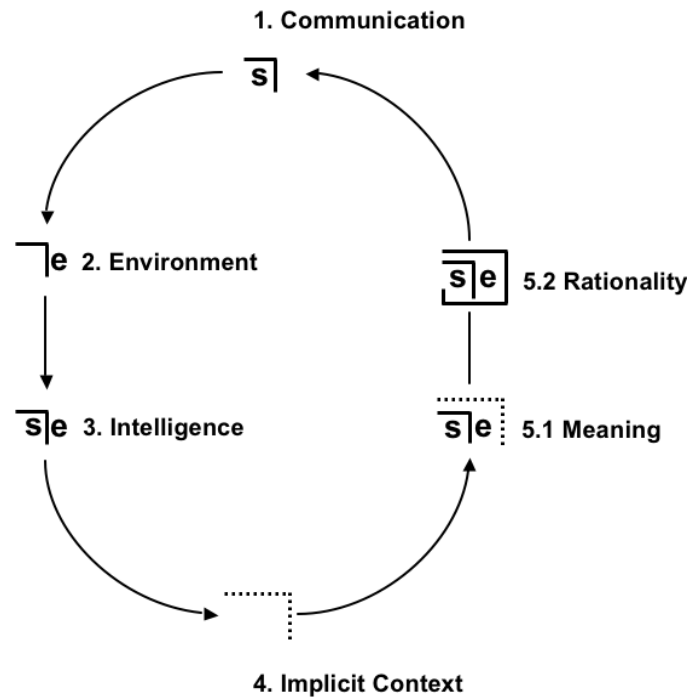
So far, we have offered (1) an epistemological critique of Cartesian representationalist approaches in marketing and identified the crisis of representationalism, discussed (2) the posthumanist notion of systems, control and communication, and introduced (3) the tetralemma of the system, a novel analytical framework for the systemic structuration of posthuman consumer culture. We are now equipped to delve into the substance of two social systems that have been of interest to recent consumer literatures: brand systems and protest systems. To prove the usefulness of our posthuman epistemology of consumption we have selected two examples from outside of the technology consumption literatures. This is done in order to demonstrate the value of the tetralemma of the system and our posthumanist epistemology beyond the traditional confines of technology consumption. In the concluding section we will develop the implications of this research for our understanding of posthuman consumer culture and the relations between consumption, culture and technology.

BRAND SYSTEMS

Brands are central to marketing. Yet despite almost universal experience with brands (e.g. Aaker and Joachimsthaler 2000; Biel 1992; De Chernatony 1993; De Chernatony & Dall’Omo Riley 1998; Gordon 1991; Kapferer 1994; Keller 1993; Keller 1998; Marder 1997), they remain poorly understood. Conventional concepts of branding are ill-equipped to guide the creation of brand leadership when consumers socialize. Therefore scholars have recently begun to move thinking away from the traditional consumer-brand dyad to the consumer-brand-consumer triad (e.g. Muniz and O’Guinn 2001; Holt 2002). Yet much more theorizing remains to be done in order to thoroughly understand brands on the cultural level of analysis. While current research provides a useful insight into the complex cultural processes underlying the construction of brands, it remains silent about the dialectical interplay between agency and structure. Marketing theory is unequipped to answer questions about what Murray (2002) recently described as “the tension between sign experimentation and sign domination” (p. 42) involved in the cultural construction of brand meaning.

We propose to theorize brands as social systems. Contrasting Douglas and Isherwood (1979, p. 38), who ‘systematize’ the entire

FIGURE 1
The Tetralemma of the System



world of goods as an information system making visible and stable the categories of culture, we ‘systemize’ brand specific communication (position 1) as a brand system. A brand system is the “matrix that embeds” (von Foerster 1994) consumers’ and producers’ brand specific communication to establish control over consumption. A brand system organizes, for an observer, the relation between freedom, blindness and dependence: a brand system is free in the way of drawing its distinction (position 2), it is blind for the consequences (position 4); and for the success of its distinction dependent on everything it excludes (position 3). As Muniz and O’Guinn (2001) report:

“...[M]any members of the Macintosh brand community derived an important aspect of their community experience from their opposition to PCs, PC users, and PC software giant Microsoft. This opposition to Microsoft is an important source of unity among Macintosh brand community members. Evidence for this assertion comes from both the face-to-face data, as well as the computer-mediated communication data. The existence of a common enemy against whom to unite makes this brand community particularly strong. The threat from this enemy is made all the more real by the fact that it had succeeded in displacing the Macintosh and assimilating many former Macintosh users by appropriating aspects of the Macintosh operating system.” (p. 420)

As the above statement amply illustrates, a great deal of understanding of brand systems can be derived from looking at what they exclude. “The existence of a common enemy against whom to unite” makes not only this particular Macintosh brand community strong, but also hints at the intelligence of the larger

Apple brand system in which it is set. Brand systems distinguish between brand system and brand environment states and formulate the ongoing oscillation between them. Brand systems are *different*. Understanding the brand system’s intelligence means to understand the relationship between what the brand system communicates to be and what it rejects (position 3). Consumer researchers have been slow to see this relationship and slower still to take stock of its significance. Understanding brands means, first of all, looking at what they are not.

Brand systems do not only explain the brand’s social constructedness (e.g. Muniz and O’Guinn 2001; Schouten and McAlexander 1995). They also serve as a cultural resource. In his dialectical theory of consumer culture and branding, Holt (2002), for instance, concludes that, “brands will become another form of expressive culture, no different in principle from films or television programs or rock bands. Brands that create worlds that strike consumers’ imaginations, that inspire and provoke and stimulate” (p. 87). In the idea of the brand system we find articulated Holt’s (2002) dialectical relationship between consumer culture and branding. Brand systems are a cultural resource, when they formulate a difference, which they do, to argue with Murray (2002), if and as long as they articulate the tension between sign experimentation and sign domination (position 5.2). Quite literally, brands are alive when they communicate.

Conventional marketing wisdom holds that image brands succeed when “they make an emotional connection with consumers” (e.g. Tybout and Carpenter 2000, p. 88). But how is this emotional connection achieved? Brand systems reflect the tension between how brands are communicated and how an observer sets himself or herself into relation to this communication. Brand systems are, for an observer, “pregnant with meaning” (Turner

1967, p. 44, position 5.1) because they make a difference (Bateson 1972). Yet this difference is subject to a constant shift of attributions (e.g. Heider 1958). As the tetralemma of the system clearly illustrates, the recursive construction of a brand system through communication brings time into play. Brand meaning, therefore, is highly unstable and merely predictable in its effect and associability. Once the emotional connection with the consumer is subject to such dynamism, the concept of brand image turns out to be impoverished. The insight that ontology conceives the static duality of all being (something either *is* or *is not*), leads to the even stronger insight that, if representationalism is lost, so is the idea of brand image. A brand is a *mobile* army of meanings. Instead of residing in the Cartesian realms of brand image, consumer researchers can now strive for a posthumanist vision of, what we call, brand flow. How do brand systems evolve over time? How are brand systems created, maintained and eventually destroyed through communication? And consequently, how does the brand system's social environment evolve over time? In this way, understanding brand systems and their flow is a critical step in truly actualizing the idea of dynamic brand leadership.

PROTEST SYSTEMS

Another remarkable phenomenon currently of interest to consumer researchers can be summarized like this: some consumers protest. They engage in consumer boycotts and resistance (Friedman 1985, 1995, 1999; Kozinets and Handelman 1998), different forms of market subversion (Penaloza and Price 1993; Dobscha 1998; Firat and Venkatesh 1995; Thompson and Haytko 1997; Kates and Belk 2000), and ultimately emancipate themselves from the restrictive influences of the dominant market culture (e.g. Firat and Dholokia 1998; Firat and Venkatesh 1995; Giesler and Pohlmann 2003a, 2003b; Kozinets 2002, 1999; Murray and Ozanne 1991). Investigating the complex processes involved in the struggle for marketplace empowerment, consumer agency and consumer emancipation, consumer researchers have provided a useful, yet incomplete picture of communally enacted protest behavior.

To distance themselves from the marketplace matrix within the marketplace matrix, in other words, to productively "rewire" the marketplace matrix and "re-connect" themselves to it rather than leaving it, we propose, consumers construct protest systems. A protest system is understood as an ongoing process of ensuring "outsider status" (Schouten and McAlexander 1995, p. 58; Hebdige 1979) through social communication (see Figure 1). Similar to Victor Turner's (1978, p. 250) notion of *communitas*, a protest system is of antistructural character but not necessarily "full of unmediated communication, even communion, between definite and determinate identities, which arises spontaneously in all kinds of groups, situations, and circumstances."

For the success of its distinction, a protest system simply depends on everything it excludes. In his investigation of consumer emancipation at Burning Man, Kozinets (2000) observes that, "it is as if by keeping the market centered in the cultural crosshairs, its alleged evils will be exorcised" (p. 26). Giesler and Pohlmann (2003b; see also Luhmann 1999) theorize a similar observation at the music file-sharing community Napster as the "paradox of consumer emancipation." Although (or especially because) the protest system offers an alternative protocol to the mainstream market environment (e.g. through consuming music at Napster as a gift and NOT (distinction) as a commodity), it *paradoxically* re-imports the social relation between itself and the rejected social entities into the system's "cultural crosshairs" (position 5.2). Hence Kozinets (2002) suggests that, "the urge to differentiate from other consumers drives participation at Burning Man, and does not

release them from grip of the market's sign game and social logics" (p. 36). Yet, Kozinets goes on to theorize consumer emancipation in a *hypercommunity* context and suggests that consumer emancipation, if possible at all, must be perceived of as temporary and local. In contrast to this observation, the tetralemma of the system rather shows that a protest system can be successful not necessarily if it is temporary and local but if and as long it is able to reproduce itself, i.e. to "reflect on an environment" that is different (position 3, Günther 1962, p.318; see also Baecker 1994; Lacan 1949; Wiener 1948). Although the Burning Man *festival* is temporary and locally bound, Burning Man's protest system and its potential for consumer emancipation are not, as long as communication takes place (e.g. on the Burning Man Website, the Burning Man Newsletter or in this paper). Consumers do not have to leave the marketplace matrix to resist. They actively use the resources provided by the marketplace matrix to productively rewire the rhizomatic patterns of authority and meaning, and thus drive, shape, and constrain their own identity positions. The marketplace is thus used as a cultural resource, the feedstock to belabor. In this way, understanding protest systems is a critical step in truly actualizing the idea of consumer emancipation away from the impossibilities of an all-consuming postmodern paradox to the possibilities of active cyborg agency within and fueled by the marketplace matrix.

CONCLUSION

Studying ideological and consumption related social discourse and practice employing a posthumanist consumer epistemology holds several important insights into contemporary consumer behavior (Venkatesh, Karababa, and Ger 2002). Four principal conclusions can be derived from this investigation. First, the *crisis of representationalism* limits consumer researchers' ability to frame the meanings and experiences of contemporary technology consumption because Cartesian metaphysics are generally unable to go beyond the Mind-centered representations of technology as an external object or tool. Second, and therefore, a posthumanist epistemology of consumption empowers *researchers as cyborg consumers* to observe and decode the hybrid constructedness of posthuman consumer culture as a matrix that embeds a plethora of social, economic and technological systems of control established through consumption. Third, post-Cartesian Luhmannian social systems theory provides an excellent "core logic" for a *posthumanist cyborg anthropology* that significantly extends our understanding of technology consumption and consumer behavior as a whole. Forth and finally, the *tetralemma of the system* is a powerful analytical framework that helps explore and develop especially various social systems on the rise and of interest to cyborg consumer researchers. It illustrates that social systems are fundamentally social entities, created as much by consumers as by marketers in an effort to reduce marketplace complexity through deciding self-referentially over outside reference.

Our posthumanist consumer epistemology further develops Venkatesh, Karababa, and Ger's (2002) foundational theorizing and addresses the socially constructed nature of marketing and consumption as something more than just the summation of images, meanings, norms and values. It generally demonstrates that consumer culture is not given and marketing knowledge not constituted [—] as in the traditional, representationalist worldview [—] but rather brought forth in the dynamic interaction of observer and observed, system and environment, human and technology. It is important to note that the discussion of brand systems and protest systems in this paper illustrate the value of a posthumanist epistemology of consumption beyond the traditional confines of contemporary technology consumption—it presents a holistic, organic per-

spective on the interfaces of relationships between the social, economic, and technological domains in consumption, markets and culture.

During the past thirty years, most consumer research has operated within the Cartesian logic of representation. And of course, the import of emphasizing especially the humanistic, phenomenological, textual and rhetorical generation of marketing knowledge is indisputable. However, thematic imbalance can also reinforce disciplinary boundaries rather than encourage vigorous interdisciplinary dialogue about the nature of knowledge and the problem of interpretation (Sherry 2000). At this very moment, the social sciences and the studies in new consumer behavior (Belk 1995) share a common set of fundamental epistemological problems: the question concerning technology, paradoxical self-reference, resistance and protest, to name just a few (e.g. Davis 1998; Haraway 1991; Hayles 1999; Latour 1993; Serres 1981). Our posthumanist epistemology based on the post-Cartesian logic of social systems demonstrates the cross-fertilization of contemporary consumer and social-scientific theories; it is "the white box emerging from two interacting black boxes" (Glanville 1979, 1982) C.P. Snow (1959) once called "the two cultures" on general epistemological questions of interpretation.

Once thoroughly implemented in our research agenda, a posthumanist consumer epistemology enables us to relate to methodological concerns new epistemological questions of the social distinction between actor and observer, of the ecological distinction between social system and its environment, and of the temporal distinction between past, present, and future. Further attention must be devoted in this context to (1) recent advances in posthumanist social research on gender, race or class (e.g. Halberstam and Livingston 1995; Haraway 1989), (2) identity and self (e.g. Hayles 1999), (3) posthuman (techno)politics (e.g. Gray 1999 'cyborg citizen') and (4) the methodological premise and promise of netnography (Sherry and Kozinets 2000) as to capture "the profound experiencing of digital sociality." If netnography wants to be more than an "on-the-screen-ethnography" (Turkle 1997) we need to carefully decode the consequences of our posthumanist epistemology in the context of methodology (e.g. cyborg anthropology, cyborg ethnography). Doing so will improve our instruments of analysis and build a greater amount of complexity into the self-description of consumption. As a discipline we must learn to act like the two-faced Roman god Janus, the guardian of entrances and exits, the opener of all things who looks inward as well as outward. With one face we must observe the meanings of consumption. With the other face we must remember that, as Gregory Bateson (1988) reminds us, mind and nature are a necessary unit. As if by itself, more precision and rigor in one's own communication makes visible what it excludes.

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Consumers' View of Food Biotechnology: A Proactive Approach to Marketing and Public Policy

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INTRODUCTION

The broad objective of the paper is take a proactive approach to consumer oriented policy making and investigate consumers' views of and expectations from various key social institutions of the food system with respect to food safety and food biotechnologies (a.k.a. Genetically Modified Foods). These social institutions include regulatory agencies, food manufacturers, farmers, the scientific community, consumer activist groups, and media. Trust in institutions is considered to be a central issue for the public policy debates of food biotechnologies; however, we do not know the nature and components of this trust and how it affects consumers' view of the food biotechnologies. From the theoretical point of view, this study aims to answer questions such as can the social institutions of the food system be trusted/distrusted and what does that trust/distrust mean. From the practical (public policy) point of view, our study reports informants' view of the GMF policy debates, and seeks answers to the question: what does our understanding of consumer trust and distrust in social institutions contribute to public debates on the future of biotechnology and genetically modified foods?

Consumer researchers note that public policy research has largely adopted a reactive approach toward policy-making process, and as a result, has little impact on policy decisions. For example, Hastak, Mazis and Morris (2001) argue that academic research (in marketing) does not play a major role in policy-making process. For various reasons, many academicians "tend to favor policy evaluation research" (p. 181). However, the authors also argue that academicians can meaningfully contribute to other (prior) stages of the policy making process. This way, academicians can potentially influence the nature and direction of a policy initiative instead of passively evaluating it, after the policy has been implemented. Stewart and Martin (1994) make a similar argument and point out the importance of research before policy decisions. The authors argue that most policy research that has been carried out has been after policies have been implemented. As Stewart and Martin (1994) indicate, such reactive research has serious limitations because "it focuses on the effects of what has been implemented rather than what might have been the optimal" (p.14). Unfortunately, in spite of these calls, not many studies follow the proactive policy research approach. As mentioned earlier it is now an accepted view that the future of food biotechnologies depends upon consumer trust and distrust in social institution. As a result, we argue, a proactive policy research that examines the structure of the main issues of trust and distrust has a greater chance for incorporating consumer voices into policy decisions regarding GMF.

REVIEW OF RELEVANT LITERATURE AND OBJECTIVES OF THE STUDY

In this section we summarize the existing literature on GMF policy and institutional trust and then state the specific objectives of our study.

GMF Policy Issues: The main biotechnology debates are over the novelty of modern genetic engineering, over pre-release testing, over labeling, constitutional debate, and over transparency (public information). In addition, there are two fundamental debates that shape the current regulatory regimes on agriculture biotechnology applications: debate over substantial equivalence doctrine and debate over the precautionary principle. Among these debates,

researchers, so far, have dealt mainly with one: labeling of GMF. Specifically, studies so far have focused on 1- voluntary versus mandatory labeling, 2- positive versus negative labeling, and 3- process-based versus product-based labeling.

Phillips and Isaac (1998) provided a conceptual assessment of the potential threats and/or opportunities (for producer) of mandatory and voluntary labeling. They argue that mandatory labeling of both process-based and product-based genetically modified organisms (GMOs) could pose as threat to the producers: the producers would likely suffer a discount for their good in the market, would dampen the production and consumption of this products, could seriously disrupt domestic and international food markets. Caswell (1998) argues that from a regulator's point of view, mandatory labeling has the advantage of giving consumers full information.

Although many scholars indicate that consumers have the "final word" on the acceptance of these products, most studies excluded actual views of consumers. Instead, most studies make implicit assumptions as to how consumer would see labeling alternatives. Further, most studies see genetically modified foods (GMF) as regular credence products. Credence products represent some degree of consumer uncertainty that cannot be quantified and factored into purchasing decision. In other words, a credence product is one that may have harmful (or beneficial) effects that are not noticeable at the point of consumption. However, the assumption with regular credence products is that the discovery of the harm or benefit is a matter of time. Even if they cannot be quantified by the time of consumption, as science progresses these harmful/beneficial aspects can be quantified. Therefore, in the meantime, the consumption behavior can be explained through risk-accepting tendencies of consumers. With respect to GMF products and consumption, there may be issues that cannot be quantified or resolved over time (e.g. consumer perceptions regarding the abilities of regulatory bodies and the philosophy of production and consumption of the society, including the meaning and role of food, production, farming, breeding, science, technology, and religion in people's everyday lives). More specifically, one can argue that it may be misleading and potentially dangerous to design policies by simply asking consumers how they react to GMO without having adequate understanding of consumer motives for labeling issues.

Trust and Distrust in Social Institutions: Even though the concept of trust has been studied frequently by marketing scholars, no study has focused on consumer trust in social institutions. In fact, the only relevant article we found was published more than 25 years ago in *Journal of Retailing*. In their short essay, MacLachlan and Spence (1976) indicated that public trust in retailers (specifically supermarkets) was higher than most institutions (e.g. police, public schools, labor unions, state legislatures, media, etc.) investigated in the study. No attempt was made to understand the sources of or to discuss the consequences of consumer trust in supermarkets.

Most studies on institutional trust exist in sociology and political science. These studies deal with either citizens views of a particular institution (e.g. Abbott and Dalton 1999; Lazarus 1991; McGarity 1986; Renn and Levine 1991) or with multiple institutions (in isolation), with no specific attempt to understand citizens' perceptions of the interactions between trust and distrust in institutions. (see Rose and Mishler 1997; World Values Survey 1984, 1993). Even though these studies provide in-depth understanding of the views about one particular institution, they fail to account for the

complexities and the challenges that are associated with social systems. For example, McGarity's (1986) study on public views of environmental policy would be more complete if the study included public views about other groups (e.g. environmental groups and chemical companies) instead of focusing only on the public view of the Environmental Protection Agency.

Other studies examine citizen views of various institutions within a country (e.g. Rose et al. 1997; World Values Survey 1984, 1993). The main objective in these studies is to monitor the changes in public confidence in various public and private institutions (e.g. police, legal system, armed forces, parliament, civil service, the church, major companies, and press). They provide detailed understanding about the impact of these changes on the overall performance of the studied countries. However, these studies reveal little information regarding how individuals' views of various institutions may vary since they assume a same (uniform) domain of trust and distrust for all institutions.

Based on these points, in summary, the broad objectives of this study are to understand consumers' trust and distrust in various key social institutions in the food system, and (through these understandings) to contribute to the public debate on the future of biotechnology and genetically modified foods. In order to fill the knowledge gaps in the literature and to provide more realistic recommendations for GMF policy, our analysis of trust deals with the source of public trust in social institutions and our analysis of distrust particularly deals with the consequences of such distrust.

METHODOLOGY AND METHODS

Our research design involved a two-stage data collection process. The first stage involved seven depth-interviews with consumers in a Midwestern state on their knowledge, beliefs and attitudes toward issues surrounding GMF. For the first study conducted in 2000, we sampled relatively educated consumers because at this time both academic and popular press noted consumers' awareness of GMF was very limited (Kilman 1999). By 2002 consumer awareness of GMF had increased from 12% in 2000 to over 70% largely due to the Starlink^R-corn fiasco and debates on stem-cell research. Therefore, our emergent theoretical perspective on factors that influence beliefs and behaviors related to GMF drove sampling decisions for the second stage. We sought to include informants with diverse orientations to GMF based around underlying differences in family stage, health concerns, social and political beliefs.¹ The second stage involved 10 depth interviews focused on uncovering consumers' trust in the quality and safety of their food and whether and how that is related to GMF and institutions they identify as playing a role in food safety.

Data analysis was a process of gradual induction. Analysis of textual data proceeded through two distinct stages of iteration: intra-text and inter-text (Arnold and Fischer 1994; Thompson 1997). Intra-text analysis asks a set of questions to identify the codes and categories of the findings. Once codes and categories have been identified, the researcher uses inter-textual analysis to look for patterns of relationships within different interviews (Thompson 1997). Thus, intra-text analysis addresses the extent to which general themes are shared by different respondents, and patterns of difference.

FINDINGS

In this section, we first report our findings related to consumer trust and distrust in social institutions² and then we report consumers' views of the GMF policy debates.

Trust in Social Institutions: The analysis of data reveals that trust in social institutions can be categorized mainly into two: confident beliefs that are based on competence/assurance (CA), and

the beliefs that are based on faith and hope (FH) in particular institution. The CA aspect of trust can be characterized as knowledge and experience-based trust and therefore, more to do with consumers' own (and perhaps direct) experiences with the target of trust (e.g. manufacturers). In other words, buying (using) particular brands for years gives informants a first hand experience/reason to trust the manufacturers of these brands. Similarly, knowing that government enforces rules (such as limits on chemicals use or crop rotation) once again gives the informant a first hand reason to trust government. FH-based trust, on the other hand, is characterized as more perception-driven, indirect experience and generalized expectations with the target of trust. For example, informants can trust farmers based on the perception that farmers would not see food as a commodity and care more about the land, the earth and ultimately about consumers. Table 1 provides details about the types and sources of consumer trust in social institutions.

Distrust in Social Institutions: Coding and analysis of data reveal that there are mainly three categorizes of distrust: skepticism/cynicism-inducing distrust (SC); fear-inducing distrust; and vigilance/watchfulness-inducing distrust (VW). Similar to those of sources of trust, informants' distrust in social institutions is mainly direct and indirect experience-based. For example, the source of distrust in media can come from direct experiences (e.g. watching inconsistent health reports in the news media for years). At the same time, consumers can have perception driven distrust (e.g. believing that most research in universities is done through grants provided by "big business" and therefore biased). Our data analysis revealed that the informants develop a number of coping mechanisms in the presence of distrust (regardless of whether based on direct or indirect experiences). We categorize these strategies (consequences of distrust) into three: skepticism/cynicism (SC), fear, and, vigilance/watchfulness (VW). Fear-inducing distrust is conceptualized as repeated and long-term experiences of suspicion that leads to great concern about the safety of food supply. When a respondent's distrust is fear-inducing, he/she intends to completely disregard information that comes from the target of distrust. The difference between SC and VW is that with VW-inducing distrust, informants are able to provide particular methods/strategies that help them deal with the distrust-creating situation. In other words, when distrust is VW-inducing, informant becomes active (take an action) to overcome the situation that created distrust in the first place. For example, when an informant has reasons to believe that a big food manufacturer should be distrusted because they are unable to prevent bacterial contamination (coded as VW-inducing distrust) then she takes an action and decides to buy ground beef from the grocery stores who grind their own meat, instead of buying as already grounded from big meat manufacturers. Table 2 provides more details about various types and sources of consumer distrust in social institutions.

Consumers' View of the GMF policy Debates: One of the broad research questions that motivated this study was "what does our understanding of consumer trust/distrust contribute to public policy debates on the future of biotechnologies and genetically modified foods?" In this section we report finding related to consumers view of biotechnology debates.

Novelty Debate: The debate over the novelty of modern genetic engineering techniques focuses on whether modern agricultural technologies are really so novel that special regulatory

¹Informant profiles are available upon request.

²Due to page limitation, only a general framework for the findings of institutional trust and distrust is presented here. Detailed excerpts for each category and code listed in Table 1 and Table 2 are available upon request.

TABLE 1
Trust in Social Institutions

Target of Trust	Type of Trust	Sources of Trust
Manufacturers	Competence/Assurance	Competence through brand names and expertise Through inspection of products through packaging: packages product, inspected product Accountability Confidence through product testing
	Hope/Faith	Fiduciary obligations Benevolence Reputation to hold (perceived check and balance) Their business to take care Enforcement of rules Sufficient regulations
Government	Competence/Assurance	Overseeing industry operations, watching the companies Enforce recalls of problem products Government research process Motive is ensuring public safety (no profit motives)
Scientific Community	Faith/Hope	Intentions are good (to make food safer) Technology is both for producer and for consumers Objective, consumer oriented motives, non-profit nature
Consumer Groups	Competence/Assurance	Credible source of information Public education efforts They see food not just as commodity (closer to production, different meaning to farmers)
Farmers	Faith/Hope	It is their business to keep (by offering healthy products) Won't produce things that are harmful to consumers) Doing their best for humanity
Media	Faith/Hope	Relies on press to be a watchdog Reliance (making food news available)

attention to the products of those techniques is warranted. According to the regulatory agencies, the novelty debate is closely related to the extent that GMF can cause additional health problems. A general look at the concerns with GMF across the two-stage study suggests that informants' GMF concerns shift from human health-related concerns (in stage 1) to other (non-human health) related concerns. Informants in stage 2 largely talked about their "political," "ecological," "environmental," and "moral" concerns with the use of agricultural biotechnologies. We suspect that recent well-publicized debates over the future of stem cell research may be credited for this shift. In other words, it was found that the informants usually do not worry about the safety (health) aspect of genetically modified foods. Threats to human health by GMF appear to be a small and the informants seem willing to dismiss the immediate health issues with GMF. For example, Pam distrusts various institutions in the food safety system in general because she sees negative synergetic interactions between the component institutions. It is interesting to observe that a respondent who appears to distrust a number of institution in the food safety system would not have health/safety related concerns with GMF.

Um...as far as safety for the consumer, I don't see any problem. Um...you know, I don't see that this stuffs gonna...unless they...they take something like a tomato and in the process of modifying it change it back towards a deadly nightshade. Um...I think they're going to figure that out before they get the stuff to the market (laughing). I...I just can't see...if...if there's been research done into genetic manipulation. Um...I can't...maybe it's just my ignorance, but I can't see where...there are going to be safety issues involved. Um...you know, I hear scare stories of oh...but what if...what if they get loose, what if they interbreed, uh...with wild species and...um...this stuff sounds just so far fetched that...I dismiss it (laughing). Maybe I shouldn't but I...(Pam)

Pam's position may suggest that respondents who distrust some of the institutions (namely industry and scientific communities) may not feel unsafe about GMF products. On the other hand, as will be discussed later in this section, a respondent (Amanda) who trusts these institutions will still demand labeling on GMF products.

TABLE 2
 Distrust in Social Institutions

Target of Distrust	Consequences of Distrust	Sources of Distrust
Manufacturers	SC-inducing	Unjustified practices (e.g. the use of antibiotics)
	Fear-inducing	Hide information from consumers, cover things up Motivated by greed Immoral motives
	VW-inducing	Big operations can get out of hand out of control Insufficient prevention of contaminations
Government problems)	SC-inducing	Setting low standards for food safety Setting wrong farm/food policies Surface treatment of problems (not creating real solution to
	VW-inducing	Insufficient inspection of food products on the market Slow responding to reality Non regulated areas of food production
Scientific Community	SC-inducing	Creates suspicion about food quality (limiting consumer choice) Questionable findings (one-sided research) Arrogant scientists (some scientists have blinders) Research funded by big business (results skewed)
Consumer Groups	SC-inducing	Sometimes deal with unimportant issues They can create misinformation which is damaging for society Overdo things (overreact to things)
Farmers	VW-inducing	The use of potentially damaging substances in food production Overdosing chemicals (financial pressures, profit motives)
Media	SC-inducing	Irresponsible reporting (can be more damaging to society)
	Fear-inducing	Too many reports on food/health (not worthy of attention)

We believe these views suggest interesting insights with respect to the debate on novelty. For example, there is an important separation between the informants' views and the views that regulatory agencies and the biotech industry hold. For the informants, novel aspects of GMF may not necessarily be related to food or the processes in which it is done. Since they are largely not worried about the safety of the food, many informants do not even make references to the GMF as "new" food product. Instead, for them the novelty comes from the belief that genetic modification brings "novel" issues to the table. These issues are related to social, political, environmental, ecological, moral, etc. consequences of the use of genetic modification. The starting point of the regulatory bodies is, however, whether GM food appears to cause health problems (something these informants do not have strong feelings about). The point of reference of the regulatory agencies and the point of reference for the informants as far as GMF concerns seem to be different ones. When points of references are different, it may be quite difficult to have effective communication between government and the public.

Labeling Debate: Perhaps the most contentious of the public debates over GM foods to date has been debate over whether GM foods should be labeled so that consumers can easily ascertain

whether the foods that they are consuming have been genetically modified or contain genetically modified components. Most polls suggest that the American public is currently not strongly opposed to GM foods. For example, a December 1999 Gallup Poll found that two-thirds of the more than 1000 participants were of the opinion that GM foods were not dangerous, and less than 20 percent believed that they posed a serious health hazard. Finally 20 percent were uncertain. The same poll found that 16 percent of the respondents strongly opposed GM foods, 25 percent were moderately opposed, 42 percent moderately favored them, and 9 percent strongly favored them (Restaurants and Institutions 1999).

Informants in our study largely share the proponents' view in the labeling debate in that even though they may not see human-health related problems with GMF, they still want labeling in order to make informed decisions about the food they buy. Some scholars (e.g. Silbergold 1999) along with the consumer activist groups who are proponents for labeling have argued that the fact that US consumers demand labeling is an indicator that they may distrust their government in its dealings with the safety of GMF. We argue that this claim may not be entirely true. In other words, it is possible that even though consumers trust the regulatory bodies to make the food supply safe, they may still demand labeling. In these cases,

labeling would give the consumers power to respond to the developments in the area of biotechnology when they see the technology is "going to undesirable places." In other words, demand for labeling might not translate into distrust in government but actually be making a statement about the use of biotechnologies in general. In excerpt below, Amanda explains her reasons for demanding labeling: She is first of all not worried about the safety of GMF food. However, through labeling, she wants to be able to make statements (send messages to the biotech industry) if genetic modification is taken in other directions (e.g., human cloning), an area that she would not promote.

I think it's my...the negative response I had to the genetic altering had to do with something beyond what it really does, beyond the safety. Yeah, no...yeah it had to do with, um...the direction our technology is going in other areas...with genetic technology. But, with food, if my understanding is correct...when they genetically, you know, recreate something, or...or, they're genetically, um...changing, uh...food. That it's not...(something I worry) I see it more as they're trying to...to enhance that food...or, um, duplicate it or, you know, again, to multiply it. But, when I think of genetic...and I might be way off, I mean, maybe genetically altering is gonna...is involved with the chemical change too. But, that's...that's why I don't worry about that as much... I don't see that being bad. It bothers me if they were taking that to technology (to other areas), yes...yeah, that bothers me. But, you know...that...I don't mind if they keep it in the...the fruits, but they aren't gonna do that. You know, well, they obviously aren't. I think it's the day we live in, Ahmet, that we're...we're taking our research into areas of genetic research going to into the areas of duplicate...duplicating humans. And...even though certain things got limited for a time. Like, for instance, um...stem cell research...with the babies, the infants. That...I think that's something that I expect that I know will come. I'm just not happy about it. And, that's your highest authority. That's the government...I mean, not God. But, but your government is, uh...our government is headed that direction. So, if our government is headed that direction so are our companies because they're going to make profit. You know, they want to be able to do these things. They're gonna...so that's, you know, where I'm not...I'm not excited. I wish...and yet not everything is...if everything that you have, the technology we have can be, very good.

As mentioned earlier, our informants usually are not worried about the human health effects/risks of the GMF. We argue that this belief comes from the consumer perception that the food supply in the United States is safe overall. Consumers believe that any food that is known to carry risks to human health should not be in the market, and as Jason notes in the following excerpt, if the food is on the market, it must be safe, or should not be on the market in the first place. And when the product is on the market there is little reason to be suspicious about it.

I think that would be good to know, but at the same time if they were detrimental consequences to me I would expect that they shouldn't be distributing, it shouldn't be on the market at all...If you can't say specifically what it is going to do, because everybody is different, then it doesn't make sense to do any labeling at all, you know, to that effect. To the effect that if you eat this, this going to be the consequence, if you can't say that for sure then probably you shouldn't be saying that at all. And

at the same time, if you can't say that eating this genetically modified food is not going to have, a 99 percent chance of not having any effect on you, detrimental effect on you, then, if you can't say that, you should probably not be marketing or distributing (Jason).

Substantial Equivalence versus the Precautionary Principles: Under the doctrine of "substantial equivalence," a GM food that the relevant regulatory agency determines as a "scientific matter" to be substantially equivalent to a food that is already in the food supply should not be subject to additional regulatory requirements, such as toxicological testing or product labeling, designed to protect public health and the environment (Teitel and Wilson 1999). The precautionary principle is another highly subjective approach to regulatory decisionmaking that requires regulatory agencies to proceed within caution, paying particular attention to the views of scientists from various disciplines and from the affected public, when dealing with activities that pose potentially irreversible health and environmental risks. In the above excerpt, Jason speaks about his view with respect to the debate between substantial equivalence and the precautionary principle. It appears that Jason's view is closer to those who argue that GMF is not different from any other product that is on the market, and therefore, GM foods do not require labeling. Proponents of the precautionary principle would argue that since we are not 99 percent sure that the foods are safe, labeling is necessary. Jason believes that labeling is not necessary; products should either be in the market (if they are safe) or not in the market at all. We know from our interview that Jason, even though he is suspicious about some of the activities of the industry, he basically trusts the government and regulator agencies to protect the consumer. Consider the following excerpt:

Now that I know that 80 percent of the foods are genetically modified. Am I going to go out and find out whether that has a detrimental effect on me? Probably not. If they put a label on it tomorrow and say that this food is genetically modified, will it change my eating habits? Will it change my buying habits? Probably not. I guess at this point I am depending on the government to regulate the industry. And make sure that if they are genetically modifying the products that they are not causing health problems to the people that consume them. Maybe that is misplaced trust. I don't know.

When the data are incorporated within the context of debate between the proponents of substantial equivalence and proponents of precautionary principal, it can be seen that the solution to the debate is not "either-or". In other words, these two regulatory doctrines (both subjective) may not necessarily be mutually exclusive. An informant may see GM food as substantially equivalent to non-GM food with respect to food quality and/or safety. However, the same informant may also believe that precautionary principle should be applied to the production of GM food because he/she has "other than food safety" concerns.

Debate on Transparency: The debates over transparency center on the degree to which regulator decisionmakers must allow public participation in the decision making process. An important issue for the debate of transparency deals with "who should provide the information to the public." Many proponents of modern biotechnologies are convinced that broad public participation is less likely to inspire public confidence in GM foods than broad-based industry-sponsored efforts to educate the public about the large benefits and comparatively small risks associated with such GM foods. Our study suggests that some consumers perceive media (the

popular press) to be a watchdog, and the media are expected to make food/health-related food information available for the public. In addition, as Ross indicates, information learned through the media could change the shopping behaviors of consumers.

I rely on the press too in some ways as a watchdog...as a way of...of, you know, a scout or something...to make that news available. I...I rely on them to make that news available and if I have access to that information then I...I...my shopping behaviors would change.

At the same time, media and food manufacturers (the industry) are identified as the only two institutions in which some of our informants have fear-type distrust. As mentioned earlier, fear-type distrust would make the communication between citizens and the target of distrust almost impossible because the public may dismiss all information that come from the source.

In addition, the objectivity of the education programs sponsored by the industry could be questionable. As we stated earlier in Table 2, our informants were concerned about the possibility that industry (manufacturers) would hide important information from the public (i.e. some informants have fear-type distrust in manufacturers). It is feared that some companies are motivated by greed and they are prone to "cover-ups." This informant suggests very few people (among the consumers) know/read about biotechnology. They are mostly ignorant, and industry, when running such educational programs, would strategically focus on the one side (potential benefits) of the issue, and would avoid any information pertaining to the negative sides.

I mean, there's...there's portions of the population that because of their own interest or because the these individuals just happen to read a lot...even if they're not scientists they may be aware of it, but it's...it's really just a very small portion of...of...of the population here in the United States that have these...science and um...and political economic concerns about the biotech industry. But...but from the point of view of the biotech industry, you know, I...I...like if I was to try to put myself in...in...say...an executives'...the CEO's shoes. That executive...that...that company is not going to do anything to address these concerns because if they address these concerns they...they will be admitting that there are problems. But, their whole argument so far has been that there are no problems...both in terms of safety and that they're also trying to...they, you know, they've tried to establish that this image that we're doing this for the greater good of...of humanity. You know, that we're going to raise cheap food. We'll be able to share all of this with...with...uh...the starving hungry of this world. They won't because if they...if they even attempt to take of my concerns through...through...you know, through altruism, right away they're...they're going to be...the fear...they're fear is that O.K. now we've let the cat out of the bag. (George)

Based on the informants' trust and distrust in various social institutions (such as media, government, and the manufacturers), this research suggests that public education programs should be prepared and run by governmental outlets (e.g. NPR or PBS). A relatively successful example of this suggestion was executed about two years ago. "Frontline" and "Nova" combined their efforts to produce *Harvest of Fear* aired on PBS in the fall of 2000, incidentally during the most intense days of the Starlink[®]-corn fiasco. According to the critics, the program was "a better presentation of the controversy surrounding biotechnologies" and ap-

plauded even by the opponents of the biotechnologies (McCullum 2001)

In addition, it has been argued that the condescending attitude of many federal officials has done little to inspire consumers to buy into the GM food. One of the primary messages that the activists at the World Trade Organization protests in Seattle and the Bio2000 protests in Boston have attempted to convey is that the federal government cannot be trusted to make protective decisions about genetically modified foods (Kriz 2000). This study suggests that one of the reasons consumers distrust the government is because they see government as a structure that responds "slowly to the realities." In other words, because of the bureaucracies involved, some of our informants perceive regulatory agencies to be inadequate and slow to make important decisions to protect the public.

Here's, uh...here's uh...the government's a big...big bureaucracy and there's a lot of paperwork and...and...um. In general, I find it's very...very slow to respond to reality. Um...so, I think, when there are problems, even potential miniscule problems with the food, you know they say biotech food can be allergenic. Government bureaucracy is so slow to do anything about it... (Larry)

At the same time, our data also suggest that some of the informants trust the (food related) decisions taken by the regulatory agencies because the decision process is a lengthy and therefore an assuring one. In the example below, Willie indicates that it took 10-15 years to set up the organic food regulations, and this long period allowed for a number of groups to participate in debates to develop the regulations. He is in the end pleased that the rules are rigid and believes that the lengthy process ensured the rigidity if the rules.

I would say that I don't have a strong (negative) feeling about the regulation. You know, um...I'm also a little bit interested in the organic certification issues and uh...well, it's just kind of interesting to look at...the way, uh, organic certification has been set up in the United States. I think at this point it's very rigid and very, uh, and uh...I understand how it got there I think in terms of people who instituted that and worked very hard and that took many, many years for them to get to that point. And, it's...things were...have been debated quite a bit in the last 10 or 15 years. Uh, and...I think it was 1996 when the first guidelines were issued by the USDA and were pretty much rejected by the organic producers. Well...Because it was not rigid enough. Then more debates were done and finally they (regulators) felt like they had a very clear idea of what it was.

DISCUSSION

This paper has dealt with two main areas. On the theoretical side, we study consumer trust and distrust in social institutions of the food system, and on the pragmatic side, we aim to provide consumer input for the debates surrounding genetically modified foods. As noted earlier, many scholars and experts have argued that consumer trust in social institutions is the most important determinant for the future of food biotechnologies. The research has numerous theoretical and practical contributions. It is one of the first macro-level trust studies in our discipline. Most research to date has dealt with micro-level trust (trust between specific marketers, or trust between consumers and specific marketers). This research is also pioneer in that it deals with the concept of distrust separately from the concept of trust. Further, it empirically provides three-dimensions within which distrust in social institutions can be

viewed. In the following sections we detail the significance of the study, offer concluding remarks, implications, and directions for future research.

Discussion on Institutional Trust and Distrust: The findings suggest that public trust in various social institutions may be conceptually different, coming from different domains. For example, when an informant says "I trust government" this, according to the findings, is not exactly same as when he/she says "I trust farmers." In other words, trust in government and trust in farmers may come from two different directions, while the source of trust in government is mostly confidence based (and therefore, based mainly on direct experiences), trust in farmers is largely faith based (based on indirect experiences, perceptions, and inferential beliefs). This finding is important and should have implications for research that aims at "measuring" public trust in social institutions.

Secondly, the finding that informants trust various social institutions based on different domains may suggest different strategies for these institutions to reinforce public trust. For example, since trust in government has been mainly identified as confidence based (and therefore, based on direct experience and exposure with the government's activities), it may become crucial for governmental agencies to have direct and clear communication with the public in policy design and implementations. Encouraging the public's direct participation during the policy debates, and communicating the results of enforcements with the public (in the form of product recall, bans, and so forth) appear to be effective strategies government agencies can use to enhance public trust.

The findings with respect to distrust in social institutions are important for many reasons. First, as argued earlier very little attention has been paid to the concept of distrust. In addition, most research has treated trust and distrust as mutually exclusive constructs (conceptualize distrust as the negative of trust and assumed low levels of trust would indicate distrust). Our findings suggest that this notion in fact may not be correct and individuals can have both trust and distrust toward the same target at the same time. The idea of simultaneous existence of trust and distrust has been conceptualized (e.g. Lewicki et al 1998; Luhmann 1979), but relatively little empirical evidence had been produced in its favor.

We believe this study is one of the first empirical studies that deals with the concept of distrust. The qualitative nature of the study makes it even more useful in that it empirically identifies three dimensions (in the form of consequences) of distrust within which social institutions of the food system can be viewed. From a practical point of view, identification of these dimensions could potentially help design strategies to reduce citizens' distrust in various institutions.

Discussion for the Consumer View of GMF Debates: In the last part of the results section, we tried to provide some consumer input to the debates surrounding GMF. Our findings suggest that both sides of these debates should listen to consumers carefully as they (the consumers) do not share either group's views completely.

First of all, it is very important to make a distinction between health-related concerns and other (social, economic, ecological, moral, etc.) concerns consumers have about GMF. This, in turn, would mean that regulatory agencies should broaden their scope of what is a reasonable regulatory regime for GMF. As argued earlier, we do not agree with the current view that the American public distrusts the regulatory agencies in their dealings with GMF and other food safety issues as Europeans distrust their governments on the same issue. However, we agree with the view that public administrators should reexamine the regulatory posture on GMF and begin to consider other options (such as the precautionary

principle) for GMF regulations. This way, the government can respond to the broader public concerns about GMF that include social, political, ecological, and moral issues.

Our study suggests that open communication with the public would enhance citizens' trust in the government in handling issues related to the safety of genetically modified foods. As can be recalled, informants' trust in the government is identified mainly as competence/assurance (CA) based and therefore, their trust in the government is largely due to their direct experiences with the government's handling of food safety issues. For example, consumers believe that government is "able" to enforce rules, recalls, have sufficient regulations, and rely on results of extensive research for making decisions about food safety. With respect to the charge that regulatory agencies are slow in responding to new situations (realities), it would be possible for the government to overcome such views by making the regulatory process open and transparent to the public. This could allow consumers to have first hand experience with the process, and help them appreciate the length and the difficulty of trying to regulate subjective issues such as GMF.

We further suggest that the European experience should be taken very seriously by the US regulatory agencies and the biotechnology industry. First, the findings of this study suggest that the informants do not have fear-inducing distrust in the government. In Europe, due to numerous and widespread food and health scares (from the Chernobyl disaster to mad cow disease), citizens have developed a –what we call–fear-inducing distrust in regulatory agencies. As a result, they have demanded immediate labeling and/or moratoriums on GMF products. Second, the experience of GM foods in Europe should demonstrate that communication about matters of great concern to consumers cannot be a one-way street. Consumers may not be educated on the details of the biology or the gene technology behind GM foods, but as this study suggests, they are capable of understanding issues (e.g., about health or environmental risks), and they resent being treated in a condescending fashion. We also argue that the informants for numerous reasons appear to trust their regulatory agencies (and to the manufacturers to a lesser extent). We therefore suggest that if manufacturers of GM foods and the government expect consumers to (continue to) trust their decisions about GMF, they will have to listen to consumers more and treat consumers or their representatives as equals in the debates about the nature and magnitude of the risks posed by GM foods. As argued earlier, such treatments (inclusion of consumers in the debates) would boost consumer confidence in the decision process that sometimes can take years or even decades.

The findings of this study also suggest that consumers demand labeling of GM foods. Despite protests from the biotechnology industry, there appears to be an emerging worldwide consensus that GM foods should be labeled to allow consumer to choose whether or not to purchase such foods. Even many observers who generally support the greater availability of GM foods believe that the industry could eliminate a great deal of needless controversy if it would simply place a discrete label on GM foods (Reaburn 1999). In addition to the "right to choose" issue, we found that consumer may also want labeling in order to feel less powerless against the biotechnology industry. The decision to require labeling, however, is not the end of the matter. Difficult questions concerning the content of the label and the kinds of GM foods to which the labeling requirements would apply must still be answered. This research, in its current form, is not designed to provide answers to such detailed issues about labeling. We hope to provide consumer input for labeling details in future studies.

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