

**ACR 2014**

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**BACK TO FUN**

ASSOCIATION FOR CONSUMER RESEARCH

**Volume XLII  
PROCEEDINGS**

**EDITORS**

June Cotte

Stacy Wood

## **Advances in Consumer Research, Volume 42**

June Cotte, Stacy Wood

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# Preface

It was our great pleasure to co-chair the 2014 North American conference of the Association for Consumer Research, which was held in Baltimore, MD, from Oct. 23-26. This volume reports the presentations made in special sessions, competitive paper sessions, working paper session, roundtables and the film festival.

This year's conference theme was "**Back to Fun.**" While all of us see our scholarship (both our research and our pedagogical endeavors) as an important and serious undertaking, it's hard to deny that our job is one of the most fun in academia. Our topic is inherently interesting and impactful, we have tremendous agency, and our ACR community is filled with colleagues who are as nice, generous, and multifaceted as they are intelligent. Life is indeed good! But, the stress of publication and promotion can take its toll. Thus, we sought to talk more at this conference about the joy that helps motivate us through the challenges of rigorous research. When we truly enjoy what we do, our work is deeper, more careful, more relevant, and more interconnected. Fun is serious stuff, after all.

The 2014 ACR conference attracted 1278 participants, 73 special session proposals (59% accepted), 541 competitive paper submissions (41% accepted), 374 working paper submissions (78% accepted), 8 roundtable proposals (87% accepted) and 17 film festival submissions (76% accepted).

This year we introduced or modified a few innovations:

- **The Forum Program** provided specially curated sessions, available at every session of ACR for maximum accessibility. The Forum Program included three types of sessions: *Roundtables*, *Perspectives*, and *Workshop* sessions,
- **The Presidential Address**, a separate event that allowed interested parties (and drawing a standing room only crowd) to come and hear Linda Price's remarks in a dedicated and celebratory space,
- **Friday Social Lunch**, speech-free, because we knew that many people were seeing friends for the first time and were excited to connect,
- **Dedicated "together" spaces: The Coauthor Room and The Wellness Room**, to congregate more easily for both work and relaxation.

We thank our generous donors, especially our schools, the Ivey Business School, Western University, Canada, and the Poole College of Management, North Carolina State University. Thank you so much. Also providing major support was the American Marketing Association Consumer Behavior SIG, the *Journal of Marketing Research*, the *Journal of Consumer Research*, the Marketing Science Institute, the Society for Consumer Psychology, the University of Maryland, the University of Arizona, and the Schulich School of Business at York University.

Running this conference is a major undertaking, and would be overwhelming were it not for the incredible advice and assistance freely given, with a smile, by many volunteers. In particular, it would be well-nigh impossible without the following wonderful people: ACR Executive Director Rajiv Vaidyanathan, Conference Manager Paula Rigling, and website manager Aleksey Chermas. We also gratefully acknowledge Membership Executive Manager Praveen Aggarwal, Communication Executive Manager Ekant Veer, ACR's Executive Assistants Aaron Christen and Jessica Mendez Jeffers and the wonderful assistance of administrative coordinator Anna Potrawiak. Thanks also to the enthusiastic assistance from PhD student volunteers: Jeff Rotman, Jennifer Jeffrey, Juan Wang, Mansur Khamitov, Scott Connors, Sean Hingston, Justin McManus, Lidan Xu, Beth Du Fault, and Ainsle Schultz.

Each year the ACR Conference Co-Chairs must rely on the expertise and hard work from other co-chairs, and we would like to thank Film Festival Co-Chairs Marylouise Caldwell and Paul Henry, Working Paper/Poster Co-Chairs Tiffany Barnett White and Hope Schau, the Forum Program Co-Chairs Kent Grayson and Deborah Small, Mid-Career Mentorship Co-Chairs (Pre-tenure) Cait Poyner Lamberton and Kelly Hawes, and (Post-tenure) Americus Reed and Gavan Fitzsimons and Doctoral Symposium Co-Chairs Eileen Fischer and Peter Darke. *Whew!* That is a lot of people. No one ever has to say yes when asked to help, and we want to thank you very much for saying yes to us, and then delivering such an outstanding program!

Thanks also to our Program Committee, as well as to the hundreds of Competitive and Working Paper reviewers who sent in on-time and high quality feedback for submitting authors – the resulting conference was a fantastic reflection of your hard work! And a final thank you to ACR 2014 President Linda Price, who believed in us enough to give us the chance to put on the big show!

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# 2014 ACR Presidential Address

## Obliquity, Wonderment and The Grand Adventure of Doing Consumer Research

Linda L. Price, University of Arizona, USA

*Oh, how I envy you not everyone has the chance to face the  
unspeakable terrors of the great unknown*

*Hoo, hoo*

*Today's the day*

*In only a matter of moments*

*You'll all be on your way*

*What lurks around the corner*

*Not a soul can say*

*But I can guess*

*More or less*

*Hidden dangers*

*Great duress*

*Ah, the moment of glory*

*Is close at hand*

*Hoo, hoo*

*It's gonna be grand*

*OWL, in Pooh's Grand Adventure:  
The Search for Christopher Robin*

Leading up to today a lot of people have asked me how the Presidential address was coming along and I have to say that although I kinda, sorta knew what I wanted to talk about over a year ago, there's a big difference between kinda, sorta knowing and actually having something to say. It wasn't until the "best used by" date on the milk carton was well past the ACR conference that I started to panic about what I was **actually** going to say. I ended up with the title you see before you, which itself has about it a *character of misadventure*.

However, before I attempt to coax you along that winding path, I'd like to thank Angela Lee for the lovely introduction. Over the course of this year I have truly come to think of Angela as a goddess who is enormously caring and thoughtful about all things small and large.

Also, I want to thank those of you who are here today for choosing to be here!! At ACR there's a lot of competition for your time, and I'm grateful for a few minutes of your attention. I especially want to thank June Cotte and Stacy Wood for putting together a wonderful, creative, fun conference and also for allowing people to **opt out** of this event, so that I don't have to compete with your best friend over lunch. In addition, I want to thank the Marketing Department at Eller College of Management, University of Arizona for providing a little additional incentive to **opt in**. Celebrating life on a Friday afternoon with family, friends and a glass of champagne is always a good way to spend time.

Finally, I want to thank the membership of ACR for giving me a chance to serve as President. From the time I first joined ACR in 1981 I felt it was my home and extended family. I carried the little blue book of ACR members around with me everywhere, believing that if I were ever somewhere in need, the ACR community would be there for me. In this role, I've had a chance to test that proposition. Working with Angela Lee, Jeff Inman, Sharon Shavitt, Amna Kirmani, Rajiv Vaidyanathan, the ACR Board and many, many others in the ACR community has reaffirmed for me why this is such a special organization.

About the time I was originally trying to figure out what I wanted to talk about Michel Pham did a wonderful Presidential Address at SCP on *The Seven Sins of Consumer Research*—that also went viral in our community, and at that point, and a few times since then, I seriously considered outsourcing my talk to him (2013). You might also be surprised to learn that I briefly flirted with playing the piano, it was suggested I could dance, and a few well-meaning colleagues, who are probably not here today, told me to just cancel it.

In Michel Pham's address he echoed the call of many others, including many past ACR Presidents, for more relevant research (2013; Andraesen, 1993; Mick, 2006; Keller 2008; Inman, 2012). A focus on relevance, very broadly defined, was also the topic of the inaugural editorial by the new *Journal Of Consumer Research* editorial team, and a major organizing theme for the new *Journal of the Association for Consumer Research* that Jeff Inman talked about in his Presidential Address, and we'll hear more about this at tomorrow's luncheon (Inman, 2012). The concern over the lack of relevance applies not just to consumer research, but also to the marketing discipline more generally. A recent paper in *Journal of Academy of Marketing Science* documents how little of our research ever gets cited in business disciplines outside of marketing (Clark, Key, Hodis and Rajaratnam 2014), and a preconference event at AMA Winter 2015 will also focus on how we can be more relevant.

Michel went on to talk in detail about some of the things that we do that make us largely irrelevant to ourselves and everyone else. He concluded like others by suggesting that we need changes in how we train doctoral students and in the reward structure. Although not the topic of Michel's talk, we have also seen increased concern about research integrity and how to police it with a general understanding that these problems are also driven by our training and reward structures. His last sentence carries a familiar, and discouraging tone:

*"As long as researchers are rewarded mostly for maximizing the number of articles that they publish in A-level journals rather than for the lasting impact of their articles, regardless of the journals where they are published, then narrow scope, narrow lenses, narrow epistemology, disregard for content, overgeneralization, research by convenience, and "theories of studies," will remain prevalent in our field," and the relevance of consumer research will remain a struggle (2013, p. 422).*

I think he's right about the things we are doing wrong, and I'm all for us trying to change these things every day in our organizations, and in our relations with students and colleagues, but I think there's something more important at stake here, it's the very essence of why and how we do what we do. And that's what I'd like to talk about today.

Randomly selected like many of the books that inspire me, a couple years ago I picked up a little book titled *Obliquity: Why Our Goals are best Achieved Indirectly*, by John Kay (2011). He wanted to persuade people that the path to success and happiness does not run through the bottom line. He dedicated the book to Sir James Black a Nobel Prize-winning pharmacologist, but also a scientist who accidentally created a lot of shareholder wealth through his discoveries. Sir James Black called it "the Principle of Obliquity:

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Goals are often best achieved without intending them.” John Stuart Mill in his autobiography eloquently writes:

*I never, indeed, wavered in the conviction that happiness is the test of all rules of conduct, and the end of life. But I now thought that this end was only to be attained by not making it the direct end. Those only are happy (I thought) who have their minds fixed on some object other than their own happiness; on the happiness of others, on the improvement of mankind, even on some art or pursuit, followed not as a means, but as itself an ideal end. Aiming thus at something else, they find happiness by the way (1893; p. 117).*

Perhaps all of us have thought about the obliquity principle with regard to our students, our best students are typically not the ones that ask “how do I get an A in this class.” Similarly, I would posit that the most successful academics typically do not have publishing or tenure as their goals. Perhaps, even the quest for relevance is a double-edge sword if sought out the same way that PhD students now quest for “hot topics.” Who would have thought that a cross-country, summer road trip to learn about consumers and their possessions would end up a consumer odyssey that transformed the field of consumer research, and my own research, in profound ways, (Belk, Wallendorf and Sherry, 1989)?

Speaking personally, because that’s the misadventures I’m most familiar with, a lot of my most exciting, fun and surprising research was deemed by leaders in the field as irrelevant, no longer interesting, or a project that could never be published in a leading marketing journal—something not to waste my time on. When as a brand new assistant professor I worked with an incoming PhD student Debbie MacInnis on a theoretical paper on Imagery Processing we were assured it would be impossible to publish—one of the reviewers to the very end wrote it off as “highly speculative,” which it was (MacInnis and Price, 1987). Many people told Larry Feick and me not to waste time on the Market Maven project because word-of-mouth is just not interesting to managers (Feick and Price, 1987). Numerous wise scholars told me that my project with Eric Arnould done in the context of white water river rafting (but that tried to solve niggling puzzles about satisfaction and *communitas*) would never see the light of day in a marketing journal (Arnould and Price, 1993). When I worked with PhD students Carolyn Curasi then at University of South Florida (Curasi, Price and Arnould, 2004), and later Amber Epp then at University of Nebraska to explore Family Identity in all its myriad complexity (Epp and Price, 2008), we were assured family decision-making was dead. Obviously, my own vexing questions, questions that kept me awake at night were not widely recognized as “relevant.” I’m sure many of you in the audience have had this same experience—difficult, troublesome quests that others found irrelevant. So perhaps even relevance is best approached using the Principle of Obliquity.

Lately I’ve been wondering if we do a better job of teaching doctoral students how to publish articles and get tenure than we do of giving our students “the deep principles of science and the love of it, what’s behind it and why it’s worth doing,” (Feynman 1988; p. 14). Richard P. Feynman, a reluctant Nobel Prize-winning physicist, notes this is exactly what his father gave him, and he reflects:

*“I’ve been caught, so to speak—like someone who was given something wonderful when he was a child, and he’s always looking for it again. I’m always looking, like a child, for the wonders I know I’m going to find—maybe not every time, but every once in a while,” (1988, p. 14).*

Another one of my favorite books, I picked up many years ago on a sale shelf. The book is by Martin Gardner, who has written extensively in math, science and philosophy, but also literary criticism and fiction. The title is *The Whys of a Philosophical Scrivener*, and it’s filled with essays self-described as “What I believe and Why,” (1983). My favorite essay is “Surprise: Why I Cannot Take the World for Granted,” in which Martin Gardner describes the magnificent gift of wonderment. Albert Einstein observes, “The finest thing we can experience is the mysterious. It is the fundamental emotion which stands at the cradle of true art and true science. He who does not know it and can no longer wonder, no longer feel amazement, is as good as dead, a snuffed-out candle.” The incredible, inexhaustible mystery of everyday life with all its rhythms and lines of flight to unexpected places is a constant inspiration (Deleuze and Guattari 1987). And as consumer researchers we are immersed in it—the mystery is all around us, all the time.

If you are watching the new PBS series or have read the book “How We Got to Now,” then you know that a practical discovery or invention can have wide-reaching consequences—can literally change our world (Johnson, 2014). A printing press that enables people to read books is also the source of demand for eyeglasses, which in turn generates microscopes and telescopes and a revolution in what we see in biology, astronomy, medicine and physics. Everything changes because of this small thing. At the center of health, sustainability, financial wellbeing and happiness, consumer behavior is right up there with brain surgery and rocket science in complexity, scope and potential impact—we can change the world.

Lewis Thomas, another of my favorite scientists, argued that to create scientists we should have courses that teach “informed bewilderment”—he writes “every important scientific advance that has come in looking like an answer has turned, sooner or later—usually sooner—into a question. And the game is just beginning.” (Thomas, 1983). I believe we should engage our students and ourselves with “deep play.” Diane Ackerman writes, “Make-believe is at the heart of play, and also at the heart of much of what passes for work. Let’s make-believe we can shoot a rocket to the moon,” (1999, p. 7). She elaborates, “The spirit of deep play is central to the life of each person and also to society inspiring . . . arts, exploration and discovery.” “Swept up by the deepest states of play, one feels balanced, creative, focused.” “Deep play thrives on a romance with life.” It is “a love affair with the world,” (Ackerman 1999, p. 19).

Science that follows the questions as they tumble out across an unanticipated line of flight can’t be rigidly locked into some formulaic template for how to publish consumer research. By focusing less on publishing templates and more on how to follow a question through cracks and crevices and over walls and up mountains, letting the question itself bounce against our theories and assumptions and with us tell a story—we can instead share findings with all the qualities of a good, trustworthy, prospective and useful story (Weick 1995, cited about 15,000 times). This then would be consumer research as a grand adventure filled with mystery and import rather than a publishing game.

My perspective on research as a grand life adventure is certainly not unique to me. Many people here today are embracing and living this grand life adventure. My dear colleague Sidney Levy is a case in point. At 93, he comes into the office five days a week unless he’s speaking somewhere around the globe. He also tucks in going to the Opera, piano lessons, and is teaching himself Chinese. I remember him sharing with me his thrill at his first experience with M-Turk, bursting with enthusiasm at this new way to reach out to people and understand their lives. He publishes articles all the time, including a recent JCR, but more as a byproduct of his “love affair with the

world.” He’s certainly an anomaly, but he exemplifies research as adventure, delight, persistence; research as community, creation, and self-completion. I may not last as long as Sidney, but if I die collecting data it’s okay with me.

When I am able to pursue research as a grand adventure—a peak experience of ecstasy, rapture, bliss; and awe, mystery, humility and surrender it is a mindset that leaves me thoroughly delighted with all the research I did and didn’t publish, and all the mysteries that await my gaze tomorrow. However, for all of us, including me and everyone in this room, it requires resisting four temptations that are built into things we hear daily about how to be a successful academic researcher.

We all succumb to these temptations some of the time. We succumb because it is the spooky forest we live in—as owl tells pooh and companions “the eye of the skull itself.” It’s easy to lose sight of its illusions, mere shadows and assumptions. We fear for our students, our families, our colleagues and ourselves.

### TEMPTATION #1

If you want a grand adventure, resist the temptation to “View Publication as a Significant Part of Your Job.” Instead view each research project as a new road to wander along, driven by the question not the answer. If you look at publishing as a job, then you try to maximize output and minimize input. This frames research in a particular way: research is what you do to get published. A colleague explained to me how this works. He admonished me to pick a substantive topic (preferably one that not many people have published in) and then pick a theory (again, it’s better if there’s not much out there that you have to read). Finally, add a good, robust methodology and crank out publications. The goal is to minimize additional reading and learning in order to generate your next article.

Given that I grew up in a forest of books and questions, wishing nothing more than to stay there forever, to treat reading, learning and data collection as costs seems strange. Blind alleys are not a waste of time, they are intriguing, unique adventures with friends, and occasionally I find my way out of them. To be honest, as any one of my co-authors will confirm, I personally have zero sense of direction. I would still be somewhere on the outskirts of Eastern Hungary without Robin Coulter and her maps. But still, for me, new research projects are adventures filled with wonder risk, ordeal and thrill. Would I have published more using my colleague’s wise adage? Possibly, but I doubt I would have had nearly as much fun.

In fact, with honesty as a guide, when Robin Coulter, Larry Feick and I adventured in Central and Eastern Europe right after the fall of the Berlin Wall to learn more about the Origins of Product Involvement and Brand Commitment even we weren’t sure anything we were doing would ever be more than our own field notes and amazing memories. Even we were surprised when it was finally published as a lead article in JCR—thank you David Mick (Coulter, Price and Feick, 2003)! We literally muddled for a decade publishing a little here and a little there, but mostly just trying to figure it out for ourselves. Nevertheless, I’ll never regret all the amazing experiences and frustrations that were part of that.

Last week, instead of working on this address I spent my Friday with Ainslie Schultz, a PhD student at University of Arizona, doing an experiment where students decorated pumpkin cookies with four colors of icing and four different decorating tips (lots of lovely noise). Ainslie and I, already fans of Page Moreau and Darren Dahl, developed a whole new respect as we tried to clean icing tips between sessions (Dahl and Moreau, 2007). And we used already baked cookies! I think the most important take-away for me from watching all these students do this, is not something that will ever

be published! The expression of a young woman in the first session created a song of difference and repetition that continued all day, with many students again and again, and it touched me (Deleuze, 1994). I’ve told the story already a dozen times. She decorated her cookie, and not just that, she decorated the plate it was on. And as she set it on the table so we could take a picture, she crossed her arms across her chest, sighed deeply and said, “My mother would love this cookie.” I venture to say she was engaged in deep, creative and meaningful play. I hope that I can help more people have that feeling more often.

### TEMPTATION #2

Resist the temptation to “Pursue a Clear and Consistent Research Program.” Again, let obliquity be your guide. I remember at my consortium when Peter Wright talked about his research program and he revealed that while it looked clear and consistent, that was an unintended consequence of his own burning questions. I never forgot that lesson. Ph.D. students are too often led to believe that the fruit of each research project is another research project that over time composes a clear research program. This is a useful strategy. It minimizes additional inputs, and makes it easy for administrators and tenure review committees to discern a researcher’s identity.

Very early in my career I remember going to an ACR session where Beth Hirschman, then a young mother, was investigating childcare choices, later in her ACR Presidential address she talked about challenges of compulsion and addiction in consumers’ lives (Hirschman 1992). In between, she invited us to explore consumption as a process filled with fantasy, feelings and fun (Holbrook and Hirschman 1982). It seems to me that Beth, like many of my favorite researchers, always let her own vexing questions be her research guide. Although, I have followed up on an earlier research project with another one, for me too, my research projects reflect my environment, my alliances, life-stage, and current concerns. I’m always hoping that the answers that come out of my research will be useful for me in my own life.

Even more so, now that I’m old, I believe in holding dear the option to reinvent myself as a researcher. With this perspective, the world is a constant explosion of research questions, and finding answers seems useful to daily life. Some recent research that I’m doing with Ainslie Schultz and Robin Coulter suggests that believing that *you* can change, that *you* can reinvent yourself, that *you* can actively pursue and make a *fresh start* is an important adaptive life strategy that leads us to be more creative, happier, more willing to try new things, more resilient in the face of failure (Schultz, Price and Coulter 2014). Other research by Dweck and her colleagues shows that adolescents that believe that *people* can change, perform better in high school. Moreover, teaching adolescents that *people* can change can help alleviate or prevent depression (Miu and Yeager 2014; Yeager, Johnson, Spitzer, Trzesniewski, Powers, and Dweck 2014).

### TEMPTATION #3

The temptation to “Choose Co-authors Strategically, to Advance One’s Career” is a third temptation. The motley crew that is Winnie the Pooh’s grand adventure would never have been brought together as the most expert team to find Christopher Robin, but they were the team that wanted to find him the most. Again, let obliquity be your guide. Petty and Cacioppo were accidentally a great team who substantially changed our perspectives on how consumers process information with their Elaboration Likelihood Model (1986). They loved arguing so much that they moved in together and put blackboards up so they could battle effectively. Kohli and Jaworski were accidentally a great team. Two recently minted PhD students

who generally took opposite sides of an argument in my marketing theory seminar and often went to the board and took over the class to make their respective points, they created lasting change in our mindset with their paper on market orientation, a paper that has been cited almost 7000 times (Jaworski and Kohli 1990). Barney Glaser who collaborated with Anselm Strauss for 27 years, talked about how Anselm generated in him a “‘high’ for doing sociology that has never left me,” (1991, 103). Another of his co-authors, David Mains wrote, “If you become a working colleague of Anselm’s chances are high you will become a personal friend. Conversations with him tend to be adventures... His curiosity is contagious...” (1991, p. 7)

At first glance it seems like choosing co-authors strategically will insure that you have the skills that are required and you know what each person will bring to the project, but if you want research to be a grand adventure choose co-authors because they are fun, entertaining, passionate, surprising and willing to take risks. Working with my co-authors, side by side, key to key is incredible “deep play.” I have had so much fun with them. We have explored foreign lands and wild places, cuddled up over computers and campfires, cried in our beer and occasionally shared champagne—in fact some of us are doing that right now, here today. We have muddled more and published less than you can imagine, but we have filled hallowed academic halls all over the world with our laughter, speculations, and debates.

We sometimes forget that science is very much collectively produced—it’s potential for morphogenesis, transformation, and change is created by an assemblage of actors, problems, perspectives and, at least in my case, a kitchen table, and an appropriate amount of lovely coffee and later wine. Each research project is a unique combination of differences, craziness, accidents, synergies, and life events. My love and affection for my co-authors has sustained me through births, deaths, divorces, childrearing, and an almost not quite empty nest. Journal rejections are hardly a test for these relationships.

#### TEMPTATION #4

If on our grand adventure, there is a scary eye of the skull that we must vanquish, it is the temptation to “Chart a Publication Path toward Tenure.” This is truly the worst temptation of all. There’s a charming experiment on embodied creativity that shows, perhaps not too surprisingly, that when people are put in boxes, literally put in boxes, they are not as creative as when they are not (Leung, Kim, Polman, Ong, Qiu, Goncalo, and Sanchez-Burks, 2012). Tenure was intended to promote academic freedom and risk-taking but it has become a horrible, entrapping box. If the goal is to publish in order to get tenure then you minimize time spent in the library, time spent in the field, time spent collecting data. You don’t take on anything too big or too risky or too long term. In short you engage in all of the sins of consumer research that Michel Pham articulated in his SCP presidential address.

Applying the principle of obliquity, if you resist this temptation I think there’s a good chance you will publish lots of amazing and impactful research and you will also get tenure. There are many examples in this room of people who did. I have heard Punam Keller, Jerry Zaltman, Leigh McAlister and many others talk about exactly this on many occasions—the fears loom larger than the realities.

Far, far more importantly, if you resist this temptation, then you can choose to do research that permeates your life, and changes how you think about the world. Whether it’s published or not, whether it appears in a leading journal or not, it will become an intimate and lasting part of your personal history—a period of transformation and growth—something worth having done. To do research that matters begins first and foremost with doing research that matters to you—

that addresses your own mysteries and burning questions! That you would do forever and for free because the people you are working with, the places it takes you and the answers you find are as rewarding and pleasurable as the wonderful party that Stacy Wood and June Cotte have planned for us on Saturday night is also sure to be. See you there!!

Thank you very much!!

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# Special Session Summaries

## Beyond Vulnerability: Building Resilient Consumers and Communities

Chairs: Marlys Mason, Oklahoma State University, USA

Stacey Menzel Baker, University of Wyoming, USA

### **Paper #1: Narratives of Cultural Trauma (and Resilience): Collective Negotiation of Material Well-being in Disaster Recovery**

Stacey Menzel Baker, University of Wyoming, USA

Courtney Nations Baker, University of Wyoming, USA

### **Paper #2: Community Resiliency in the Aftermath of the New Zealand Earthquakes**

Julie Ozanne, Virginia Tech, USA; University of Melbourne, AU

Lucie Ozanne, University of Canterbury, New Zealand

### **Paper #3: Consumption Under Restriction: Vulnerability and Resilience in a Maximum Security Prison**

Ronald Hill, Villanova University, USA

Justine Rapp, University of San Diego, USA

### **Paper #4: Health and Consumer Vulnerability: Identity Dissolution and Resiliency Behaviors**

Marlys Mason, Oklahoma State University, USA

Teresa Pavia, University of Utah, USA

#### SESSION OVERVIEW

Consumers' lives are characterized by a variety of pressures related to self, family, community, and the macroenvironment (Baker & Mason 2012). Over time these pressures may build until a person is pushed to feel that he/she can no longer cope. At other times, a sudden trigger event may thrust consumers into experiencing overwhelming adversity. In such cases, consumers may turn to the market and consumption for some form of resolution.

Consumer research widely acknowledges the positive role that the consumption of goods and interactions with markets play in consumer lives and identities. What is not as commonly recognized is the personal or social instability, and potential vulnerability, related to the lack of access and acceptance within markets (Baker, Gentry & Rittenburg 2005; Baker & Mason 2012). Markets and consumption are sources of meaning, connection, and freedom, but at times can also be sources of exclusion, inequality, and social conflict. When faced with such adversity in addition to everyday pressures or trigger events, consumer vulnerability may occur.

Vulnerability is a state of human existence characterized by powerlessness and lack of control (Baker & Mason 2012). Vulnerability can be profoundly overwhelming; vulnerability can drive people to seek some resolution. Resiliency is argued to be a process that reduces consumer vulnerability, promotes current well-being, and ideally connects consumers with access and engagement to the needed social or market resources that strengthen self and environment from future susceptibility. Further research is needed in the ways in which consumers who experience vulnerability attempt to build resiliency through consumption and market forces.

In this session, four papers explore the resiliency of human beings and their capacities to create individual and social change through consumption and market forces. Drawing from different theoretical and contextual lens, the authors examine how resiliency might be constructed. The first paper by Baker and Baker highlights

how cultural trauma and resilience narratives sustain collective community recovery efforts following a devastating disaster. The second paper by Ozanne and Ozanne examine the evolving community response, capacities, and ultimately resiliency across a four year span following a series of earthquakes. Moving from community to an individual perspective, in the third paper, Hill and Rapp investigate resiliency in a maximum security prison, an environment which is characterized by restricted choice, depersonalization, and commoditization. The fourth paper by Mason and Pavia investigate serious health threats to consumer identity and market presence, which spark efforts to reconstitute identity, restore market engagement, and build personal resiliency. Together the studies reveal rich insights into what is resiliency and how persons overcome devastating conditions to build it. Our informants do not passively accept vulnerability or powerlessness. The consumers and communities actively and constructively resist constraints to adopt resilience behaviors.

### **Narratives of Cultural Trauma (and Resilience): Collective Negotiation of Material Well-being in Disaster Recovery**

#### EXTENDED ABSTRACT

Cultural trauma occurs "when members of a collectivity feel they have been subjected to a horrendous event that leaves indelible marks upon their group consciousness, marking their memories forever and changing their future identity in fundamental and irrevocable ways" (Alexander 2004, p.1). Importantly, cultural trauma is not caused by catastrophic events in and of themselves; but, instead, is socially constructed and located in meaningful relationships between discourse, practice, structure, and events (Alexander 2004; Breese 2011; Oliver-Smith 1999; Smelser 2004).

Routines, social bonds, and material and ecological worlds are irrevocably changed in times of cultural trauma. Imagine a community devastated by mass unemployment, war, terrorist attack, criminal activity, technological malfunction, or a natural hazard event and notions of *how* inhabitants garner resources, rebuild infrastructure/homes, and seek other forms of recovery may come to mind. Discourse centers on the destructive event, followed by demand for symbolic and institutional reparation. Who or what is to blame? Who are the victims? What kind of material help is needed? Community history, the suffering of its members, actions taken to alleviate suffering, and the relationship between the impacted community and the rest of the world narrate the trauma. Such narratives stimulate and inform practices to restore community functioning.

By blending theory from cultural sociology with data derived from a documentary TV series on community recovery after a tornado devastated Greensburg, Kansas, our work explores how collective memories about trauma *and* resilience morph and change over the course of disaster recovery. Using cultural trauma theory as our basis, we theorize why there is demand for trauma *and* resilience narratives, how such demand is created and sustained, and of what the structure and content of the narratives are composed. We also discuss the effects of such narratives on anticipated and realized consump-

tion post-disaster, and theorize why communities have different experiences in garnering outside support for their recoveries.

*Theoretical Framing.* Collective memory theory explains how members of a social group retain, alter, or re-appropriate public knowledge of events from the past (Halbwachs 1950, 1980; Schwartz 1982). Though there is no *single* memory, collective memories are shared and are allowed to change and develop as group needs for the memories change (Schwartz 1991). Collective memory is a social construction; social groups reinterpret the past to be consistent with present concerns and social groups remember what they want and need to remember (Schwartz 1991). The public discourse over collective events determines whether an event or set of events constitutes cultural trauma (Alexander 2004). And, how such events are interpreted greatly impacts future consumption practice and discourse in community. In other words, cultural trauma theory employs collective memory theory as its basis for understanding narratives about particular events.

Our work analyzes the narratives of loss *and* recovery in a 29-episode television series, *Greensburg: A Story of Community Rebuilding*, produced by Leonardo DiCaprio and aired on the Planet Green television channel via Discovery Networks. The series' cover description illustrates the interplay between collective narratives on trauma *and* resilience in a disaster.

*On May 4, 2007, a deadly tornado struck Greensburg, Kansas, ripping the town to shreds. Ninety-five percent of the town was destroyed, 11 lives were tragically lost, and survivors were left without homes, businesses, schools and basic city services. Greensburg was gone, and it seemed that all was lost for its residents. Out of the rubble came resilience and courage...the spirit of the Greensburg citizens is what makes the journey most inspirational, as ordinary people of great character choose to create a better life for themselves and their children.*

Narrative analysis concentrates on community members' interpretations, as revealed during the television program (Heider 2001). This analytic method does not sit squarely within any theoretical tradition, but the approach "gives prominence to human agency and imagination, [and] it is well suited to studies of subjectivity and identity" (Riessman 1993, p.3). The interpretation of the episodes is complete. Each episode is analyzed as multiple blocks of text/narratives. As suggested by Riessman (1993) and Thompson (1997), analysis moved from the specific toward higher levels of abstraction. First, data from each narrative set was analyzed independently of one another. We created spreadsheets in which we listed aspects of different core narratives related to loss and recovery. We looked at how stories about particular experiences were told and asked why they were told that way (Riessman 1993). Time references to specific passages were listed. Next, we compared narratives across episodes (and time) and looked for changes and commonalities along the story lines. In the last phase emergent themes are stated in light of combined literatures on collective memory, cultural trauma, and consumer vulnerability.

In contrast to previous consumer behavior explorations of disaster where the impacts of disaster on consumption and self-identity are explored (Sayre 1994) or trade-offs between self-identity and collective identity are illuminated (Baker and Hill 2013), this research sits squarely in the cultural tradition, and explores broader macro-cultural narratives, as well as the marketing and public policy implications that flow from them. We highlight collective memories in times of cultural trauma to explain the demand for and interplay between trauma and resilience narratives. Our discussion highlights

human perspectives of trauma and resilience, and then provides a theoretical perspective on cultural trauma and the processes that sustain it. We indicate how narratives relate to anticipated and realized consumption post-disaster, as well as provide implications for consumer well-being and disaster response.

## Community Resiliency in the Aftermath of the New Zealand Earthquakes

### EXTENDED ABSTRACT

Within the social sciences, community capacity is widely examined as the characteristics of a community that impact its ability to mobilize and address social problems (Goodman et al. 1998). More recently, researchers are moving from an interest in community capacity to community resiliency--or the ability of a community to bounce back following a disaster (Baker 2009; Longstaff 2005). Whereas community capacity is the potential to mobilize resources, resiliency is the effective deployment of resources to address a crisis. This new emphasis on resiliency means that researchers are no longer examining single-event disturbances but are adopting a longer-term perspective to understand how communities respond in the face of ongoing disturbances, such as the continuing challenges facing the U.S. Gulf Coast region (Baker and Hill 2013).

We examine how a community responded to a series of earthquakes based on four years of ethnographic field work. Prior to the earthquake, our research was focused on examining a local exchange system where services were traded to get needs met and build skills. This meant that we had first-hand knowledge of the town and established relationships in the community before the disaster hit. Following a series of earthquakes, our research expanded to examine the community-wide response to the disaster. We build upon the conceptual framework developed by Norris et al. (2008) to present resiliency as a set of adaptive and networked capacities that town members activated to solve immediate practical problems and enhance individual and collective efficacy.

Over a six year period, the local trading system had developed and evolved significant capacities. The trading organization established extensive communication and social capacities that were regularly practiced through the thousands of hours of services that were exchanged. At first, these capacities were activated to encourage trading services to meet individual needs but, over time, larger projects were organized to meet broader community needs. Across years of exchanging services, a culture of caring emerged where town members worked to meet local needs. Notably, the community was practicing skills that were preparing them to work together to solve unanticipated problems by engaging in team work to respond to practical challenges, tap into relevant expertise within the team, and collaborate to get the job done.

Following the crises, the local exchange network was able to activate its communication capacity to send and receive critical information through its social network allowing crucial resources to flow. Moreover, the flat organization demonstrated that it was nimble, creative, and flexible at problem solving by leveraging the distributed knowledge and resources of its social network. It was particularly sensitive to local vulnerabilities, identifying and responding to individuals (e.g., families in crisis) and groups with special needs. For example, the Medical Center was provided with volunteers to assist by calling 156 elderly residents to check on physical and emotional needs. Volunteers also organized material and emotional support for families in crises with damaged homes and organizational members who required assistance with damaged facilities.

Relying on in-depth and nuanced knowledge of the local community, the local exchange organization was far more responsive to local vulnerabilities than were external emergency personnel and organizations, which often take a top-down authoritative approach and leave before the difficult work of reconstruction begins (Guion, Scammon, and Borders 2007; Klein and Huang 2007). Moreover, the local exchange system encouraged old and new rituals and narratives of resiliency as the larger community prepared itself for the long and extensive work of reconstruction. For instance, members organized frequent community celebrations to bring residents together in fellowship as well as enhance the weak and strong social ties that had been created and have been shown to be critical to community recovery (Aldrich 2011, 2012). As more community members practiced collective problem solving, the community developed greater redundancy in terms of the people who could be activated during the continuing crises. For example, much of the built environment in the local town was damaged and many recreational and gathering areas were destroyed. Community members organized people across several work days where a lot was cleared, a Petanque court was built, a garden was planted, and tables, benches, and a performance stage were built. This area is now an important gathering site that is regularly used and maintained by the town.

### **Consumption Under Restriction: Vulnerability and Resilience in a Maximum Security Prison**

#### **EXTENDED ABSTRACT**

Choice is one of the most studied phenomena in the consumer behavior literature, allowing scholars to discern emotional and psychological drivers and reactions to interactions within the marketplace (Luce, Bettman, and Payne 2001). While the majority of our literature evaluates consumer choice architectures and decision-making in situations of abundant choice (Chernev and Hamilton 2009), we seek to expand comprehension of the much less understood context of consumption under *severe restriction* of choice (Botti et al. 2008). Markus and Schwartz (2010, p. 344) aptly define choice as “what enables each person to pursue precisely those objects and activities that best satisfy his or her own preferences within the limits of his or her resources,” but they also recognize that “there is bound to be someone, somewhere, who is deprived of the opportunity to pursue something of personal value.” Accordingly, we seek to learn more about how consumers react to situations of extreme choice restriction induced by a total control institution that negates the kinds of freedom implicit in most of the current research models in consumer behavior.

The most extensive forms of restriction may occur in what Goffman (1963) calls total-control institutions, exemplified by prisons, psychiatric hospitals, concentration camps, and other intensive forms of person-over-person control. For instance, individuals who are incarcerated in certain lock-down facilities face elimination of nearly all human rights as punishment for crimes committed. Early views of such treatment are often rooted in the belief that incarcerated persons are “outlaws,” and are not protected by the same legal rights as law-abiding citizens (Vogelman 1968). Accordingly, inmates typically live in cells with one or more persons, are told what and when to eat, how and when to bathe, work, and recreate, and face strict regulation of personal possessions and random searches, leading to heightened levels of psychological distress and subsequent behavioral reactions.

Our goal is to advance the understanding of consumer behavior processes and their impact on consumption in the face of such extreme restrictions through first-hand accounts of life in a maximum

security prison. Designed to house about 3,300 men, it typically operates beyond capacity by several hundred prisoners. The 60+ acre walled complex lies in the middle of the grounds and contains several cellblocks, along with a variety of service units for food, spiritual needs, medical care, education, and work. The average age of the men is 37 years old, with a racial balance of 50% black, 38% white, 11% Hispanic, and 1% listed as other. The dominant licit occupation before arrival is unskilled laborer, the mean reading level is below 8<sup>th</sup> grade, and over 40% did not graduate from high school or have a diploma equivalent. Men arrive shackled in the back of police vans after stays of up to one year or more in a local jail while awaiting sentencing. The intake process follows a strict routine and consists of psychological testing, removal of possessions including clothing, a cavity check for contraband, assignment of a number that is used to refer to them instead of their names, and provision of prison garb and toiletries of state issue. The men are also asked where they want their bodies delivered at their deaths, emphasizing the unlikelihood of parole.

The process of discovery passed through three phases that were co-created by one of the researchers and the men. Tenets of ethnography where researchers occupy a locally appropriate role (Hill 1991), as well as principles of participatory action research (PAR) where community members are invited into research on their terms for the purposes of consciousness-raising and institutional change (Ozanne and Saatcioglu 2008), guided this project. The sensitive nature of the men’s subordinate position in the prison system required an initial period of trust building (phase 1), while phase 2 involved a shift in the power relationship away from the traditional researcher role to that of facilitator and active participant in the process. The final phase (3) required a reversal of leadership, whereby the men used these data and interpretations to press for collective agendas in formal settings and initiate novel methods of advocacy.

This investigation provides a rare glimpse into a total control institution that seeks to depersonalize and commoditize men under its charge, in part, through restricted choices and consumption. Our study yielded themes and subthemes based on perspectives of incarcerated men. The first theme involves depersonalization, capturing dehumanizing and commoditizing processes that the men were subject to by the prison system. The second theme deals directly with consumption consequences that provide relief from prison life and its assault on humanness. Our findings show negative short-term outcomes of masking current realities and the return to previous ways of exchange relationships that mirror pre-incarceration consumption experiences. The final theme examines psychological responses to depersonalization and commodification, focusing on coping reactions by the men. Resulting coping behaviors of blaming the self or others for their predicaments and lack of choice, isolating themselves or bonding with others who face the same circumstances, and desire to seek higher ground by looking to advance oneself through new consumption avenues lead to several alternative ways of achieving need satisfaction and revealing various levels of resilience.

### **Health Challenges and Consumer Vulnerability: Identity Dissolution and Resiliency Behaviors**

#### **EXTENDED ABSTRACT**

When conceptualizing vulnerability, it is common to think of someone as vulnerable because they are limited in their ability to engage effectively in the marketplace (Baker, Gentry and Rittenberg 2005; Shultz and Holbrook 2009). Such vulnerability can arise from a variety of individual and external factors, but one’s health and body may be a catalyst central to experiencing vulnerability (Mason and

Pavia 2006; Pavia and Mason 2014, 2004). It is through our bodies, whether healthy or challenged, that we consume and construct identities. This consumption and construction occur within a dynamic market environment structured on resources, social norms and processes which can heighten one's vulnerability (Baker and Mason 2012). In this paper, we highlight the ways that health can evoke vulnerability through consumption challenges and identity dissolution. We then examine consumer attempts to reconstitute lost facets of identity and build lasting resiliency through altered consumption and market engagement.

Staggering numbers of consumers live with health limitations due to illness, aging, and disability. In the U.S., nearly 27 million persons live with heart disease, 20 million with cancer, 16 million with diabetes, 25 million with asthma, and 52 million with arthritis (CDC 2014). Furthermore, with aging populations, health limitations are rising. In the U.S. the majority of persons over 65 years have at least one chronic condition and 62% report having a physical limitation which restricts basic living activities (CDC 2014). What these numbers don't reveal are the difficulties and ongoing uncertainties that millions of consumers with health challenges face in their daily living and consumption (Charmaz 1991; Frank 1995).

Previous consumer research has explored consumption during transitions embedded with health crisis and limitations including illness diagnosis, disability, advanced age, or loss of a loved one (Baker 2006; Barnhart and Penaloza 2013; Gentry et al. 1995; Mason and Pavia 2006; Pavia and Mason 2004; 2014). The research has found that significant adjustments in consumer attitudes and behaviors occur during these transitional periods. Such adjustments occur because health challenges limit one's ability to access or successfully navigate the marketplace. For example, physical barriers to the market and an inability to consume in past fashion may exacerbate recognition of bodily limitations (Barnhart and Penaloza 2013; Mason and Pavia 2006). Uncomfortable encounters and critical gazes in the marketplace may further stigmatize and negatively impact self-perceptions (Baker 2006; Pavia and Mason 2012). Through times of adversity, consumer vulnerability is heightened. Furthermore, during a health crisis, the act of consuming and participating in the market takes on deep, reflexive meanings (Pavia and Mason 2004), and the inability to do so is likely to evoke a vulnerability that involves the dissolution of core parts of the self. However, consumer studies also reveal that individuals are not destined to these stereotypical or stigmatized consumer identities (Barnhart and Penaloza 2013; Pavia and Mason 2012). Further research is needed regarding the vulnerability and resiliency that emerges when core facets of the self are threatened and consumption paradoxically involves both triggers and resolutions.

This research explores the vulnerability, identity concerns, and resilient behaviors that consumers experience or undertake in light of daunting health circumstances. More specifically, we examine identity dissolution and reconstitution through acts of consumption and market engagement. Moving beyond notions of consumer vulnerability as an adverse market interaction, and drawing from the illness literature (Charmaz 1991; Frank 1995), we first identify deeply valued facets of one's identity which are threatened when confronted with severe health challenges. Based on these underpinnings of vulnerability and identity dissolution, we then examine the ways in which consumption and market engagement may help reconstitute identity and build resiliency. Adopting a grounded theory approach (Charmaz 2006), more than sixty depth interviews were conducted with individuals facing acute diagnosis, chronic illness, disability, and end-of-life issues.

Emerging themes reveal that beyond market exclusion, deep trajectory concerns related to role stability and productive value, social/relational stability and separateness or stigmatization, emotional stability and dependency, temporal stability and liminality, and financial stability and lost market status erode important facets of identity. Faced with ongoing identity dissolution and vulnerability, consumers enact, mobilize, and challenge those norms which have threatened their identity. They attempt to construct a more resilient identity, which contests the loss and focuses on redefining and reconstituting valued aspects of self. However, continuing metaphors of opposition (e.g., self vs. body, struggle vs. surrender, idealized body vs. real/experienced body, freedom of bodily movement vs. physical constraint and dependency) reveal ongoing challenges in overcoming adversity. Despite setbacks, consumers persist in crafting consumption practices aimed at reconstituting identity, restoring market engagement, and building lasting resiliency.

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# Incentives for Good Behavior and Good Behavior as Incentives

Chair: Alixandra Barasch, Wharton, UPenn, USA

## Paper #1: The Motivating Force of Carrot versus Stick Incentives on Prosocial Behavior

Alixandra Barasch, Wharton, UPenn, USA

Deborah Small, Wharton, UPenn, USA

## Paper #2: Contingent Match Incentives Increase One-Time and Recurring Donations

Lalin Anik, Duke University, USA

Michael I. Norton, Harvard Business School, USA

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## Paper #3: Prosocial Incentives in the Field

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## Paper #4: How Conventional Products Can Use Cause-Related Marketing Campaigns To Make Up for Not Being Organic

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### SESSION OVERVIEW

Incentives can be extremely useful tools for encouraging desirable behaviors. Hence, incentives are often linked to prosocial behavior in two different ways: 1) Because people often lack the motivation to do good deeds on their own, incentives are employed to encourage prosocial behavior, including blood donations, volunteering, and pro-environmental acts (Gneezy, Meier, and Rey-Biel 2011). 2) Good deeds *themselves* can be employed as incentives to encourage other desirable behaviors (e.g., someone donates to charity for each pound that you lose; Imas 2014). Such “prosocial incentives” may be effective because people care deeply about a social cause or like to signal their virtue to themselves and others.

These connections point to the possibility of a virtuous cycle: incentives encourage good deeds, which in turn become the incentives themselves. The four papers in this session present a full picture of this relationship, illustrating boundary conditions and guidelines for implementation, both when incentives promote good behavior and when good behavior is the incentive. Across various contexts that cover a range of desirable behaviors, the presentations use a mixture of field studies and controlled laboratory experiments to demonstrate both consequential effects and their underlying mechanisms.

The first two papers identify characteristics of incentives that influence their effectiveness in encouraging good deeds. **Barasch and Small** investigate the relative effectiveness of carrot versus stick incentives in the prosocial domain. Although sticks are more successful for non-prosocial acts, carrots outperform sticks in motivating prosocial behavior due to their greater potential to serve as self-signals of generosity. **Anik, Norton, and Ariely** examine the use of contingent match incentives for non-profits (e.g., “if X% of others give, we will match all donations”) on donation behavior. A large-scale field study and two lab studies demonstrate the success of contingent percentages at middle values (around 75%) where both social proof and plausibility, the countervailing forces that influence donation behavior, are at work.

The second two papers focus on how good deeds can be used *as incentives* to motivate other behaviors. **Keenan, Imas, and Gneezy** examine whether “prosocial incentives” improve effort beyond standard incentives. Their field studies show that prosocial incentives

increase participation and effort both in a recycling program and a labor market, and work better in public than in private. Finally, **Müller, Mazar, and Fries** examine how companies can incentivize consumer purchase by offering donations to offset the negative externalities caused by their products. Companies benefit most from providing donations in product-unrelated domains, unless the product-related damage is personalized.

Because implementing incentives can be challenging, it is important to understand what features of incentives make them effective. Together, these papers highlight various novel intersections between incentives and prosocial behavior, helping point the way to a virtuous cycle of greater personal enjoyment and social good. Given the widespread applicability of the issues discussed, the session should attract researchers interested not only in prosocial behavior and incentives, but also crowding out, nudges, and field studies. We hope that the theoretical and practical implications of each presentation will generate a fruitful discussion.

### The Motivating Force of Carrot versus Stick Incentives on Prosocial Behavior

#### EXTENDED ABSTRACT

Since 2010, dozens of major cities have started imposing a surcharge on disposable paper and plastic bags commonly used at grocery and retail stores. However, in the face of this tax, some retailers have turned the “stick” incentive into a “carrot” by giving shoppers a discount for each reusable bag they bring in. But which will be more effective at changing behavior, both at the point of purchase and subsequently in other environmental contexts? More generally, what is the relative effectiveness of carrot versus stick incentives on prosocial behavior?

While much is known about the effects of extrinsic rewards on individuals’ performance and actions (Deci, Koestner, and Ryan 1999), little work has directly compared *reward* incentives (carrots) to incentives that *penalize* people for poor behavior (sticks). Prior work has shown that due to loss aversion, stick incentives to avoid losses outperform carrot incentives to achieve gains (Goldsmith and Dhar 2013; Imas 2014). We hypothesize the opposite pattern when incentives are designed to motivate prosocial behavior.

People often look to their own prosocial behavior to signal to themselves that they are good people, and tend to act accordingly in the future (Gneezy et al. 2012). In the context of motivating consumers to perform good deeds, we predict that carrots will outperform sticks due to their greater potential to enable people to signal to themselves that they are indeed good. Negative framing has been shown to reduce the warm glow that individuals derive from engaging in prosocial behavior (Andreoni 1995). As such, we suggest that the controlling nature of sticks may impede people’s ability to make positive inferences about themselves. Thus, people acting to avoid a punishment may be less likely to infer they are doing good because they are truly charitable. We test these hypotheses in seven studies.

First, the results of two scenario studies testing people’s behavioral intentions provide initial evidence that carrots outperform sticks in real consumption situations. In these studies, participants were given a short description of a situation in which they would receive a carrot incentive for performing a prosocial act or a stick incentive for failing to perform a prosocial act. Then, they reported how likely they would be to engage in that act. In **Study 1**, people were



more likely to report that they would bring their own reusable bags to a grocery store if the store offered them a refund for every bag they brought than if the store charged them for every disposable bag they had to use ( $t=2.92$ ;  $p=.010$ ). In **Study 2**, people reported greater compliance when an energy company offered financial rewards for efficient energy use than when a company charged its consumers for excessive energy use ( $t=3.54$ ;  $p<.01$ ).

Next, five laboratory studies examining real behavior lend further support, finding that carrot incentives are more effective than stick incentives in actually motivating prosocial actions. In all these studies, participants performed real tasks for charity and were randomly assigned to receive either a monetary reward for each completed task, incur a monetary penalty for each unfinished task, or receive no incentive. We controlled for compensation amount by equating the minimum and maximum amount participants could receive in each incentive condition.

In **Study 3**, we found that relative to stick incentives, carrot incentives led individuals to commit to performing more charitable tasks in advance of the actual behavior ( $t=3.66$ ;  $p<.001$ ). In **Study 4**, carrot incentives induced individuals to perform more charitable tasks, even without pre-commitment ( $t=2.58$ ;  $p=.01$ ). In **Study 5**, when working for a carrot rather than a stick, participants performed more charitable tasks even after these incentives were removed ( $t=3.12$ ;  $p<.01$ ). In all three studies, the control condition was similar to the stick incentive condition. In addition, our results supported a self-signaling mechanism: relative to sticks, participants working for carrots rated themselves as more generous (Study 4;  $t=2.74$ ;  $p<.01$ ) and reported greater willingness to perform a separate task for charity in the future (Study 3;  $\chi^2=6.98$ ;  $p=.03$ ).

Two final studies provided additional support for a self-signaling process by directly comparing carrot and stick incentives between prosocial and non-prosocial domains. In a 2x2 between-subjects design, participants were randomly assigned to write words either for a charity's or a company's annual report, and to receive either a monetary reward for each word they wrote (carrot) or a monetary punishment for each word they did not write (stick).

**Study 6** found a significant interaction, such that the effect of incentive type depended on whether the behavior affected prosocial inferences ( $F=9.06$ ;  $p=.003$ ). For those working for a company, stick incentives were more effective than carrots ( $F=4.99$ ;  $p=.02$ ), replicating work showing that loss aversion operates in non-prosocial domains. However, for those working for a charity (i.e., completing prosocial tasks), carrots outperformed sticks ( $F=4.09$ ;  $p=.04$ ), replicating our earlier findings that people work more for rewards than punishments when doing so better enables self-signals of virtue.

**Study 7** replicated this interaction ( $F=8.61$ ;  $p=.004$ ), as well as the simple effects in the company domain ( $F=3.73$ ;  $p=.05$ ) and charity domain ( $F=4.97$ ;  $p=.03$ ). In addition, individuals in the charity-carrot condition predicted that they would have done more tasks in the absence of the incentive than individuals in the charity-stick condition ( $F=4.45$ ;  $p=.04$ ), reflecting greater perceptions of their own generosity. In the company condition with no prosocial implications, there were no differences between carrot and stick incentives on self-reported generosity predictions ( $F=.13$ ;  $p=.72$ ), and predictions of task completion were lower overall than in either charity condition, confirming the crucial role of charitable self-perceptions in altering how incentives affect behavior.

Across seven studies, we demonstrate that carrot incentives are more effective than stick incentives in prosocial domains. While loss aversion makes stick incentives more successful in non-prosocial domains, carrots have greater potential to allow consumer self-signals of generosity through the completion of prosocial actions. These

results underscore the importance of understanding which types of incentives are effective in different contexts.

## Contingent Match Incentives Increase One-Time and Recurring Donations

### EXTENDED ABSTRACT

Imagine that you are making an online donation; as you check out, you are given the option to upgrade to a recurring donation. If you are like many donors, you'd be unlikely to make such a commitment. Now imagine that you see a message, informing you that the charity will match all donations made that day, if – and only if –  $X\%$  of donors agree to upgrade to a recurring donation. Would this type of matching incentive – what we term a contingent match – change your likelihood of upgrading? And if you were in this situation, what percentage would motivate you most? If the match were set to “kick in” if 25% of people upgraded, you might feel that while the match is likely to occur, the percentage being set so low indicates that very few people are expected to upgrade. In contrast, if the match were set at 100% of donors – sending a strong signal that many people are expected to upgrade – you might feel that it is unlikely that everyone will agree, such that the likelihood of the match occurring is low. Therefore, we suggest that upgrading to recurring donations will be highest for a middle value which signals both that many other people are likely to upgrade (offering social proof) and that hitting the match target remains plausible.

Decades of research suggest that people's behavior is shaped by the behavior of others (Asch 1956; Cialdini 1993; Griskevicius et al. 2006; Sherif 1936). Social proof has been shown to guide a diverse set of actions such as helping in emergencies, littering, and recycling (e.g., Buunk and Bakker 1995; Latané and Darley 1968). Previous research suggests that consumers are sensitive to social proof when deciding to make one-shot donations (e.g., Shearman and Yoo 2007); as a result, we expected that donors would also be sensitive to social proof when considering recurring donations.

Note, however, a critical difference between typical instantiations of social proof (“ $X\%$  of people have engaged in the behavior”) and contingent matches (“If  $X\%$  of people engage in the behavior”); both suggest that many people have or are expected to engage in a behavior, but the latter has an element of uncertainty. As a result, we predicted an important role for another construct: plausibility. Certainly, individual motivation is strongly influenced by plausibility that goals can be reached (Bandura and Schunk 1981; Fishbach and Dhar 2005; Koo and Fishbach 2008; Zhang, Fishbach and Dhar 2007). Therefore, we expected donors' decisions to upgrade to recurring donations to be influenced not only by social proof (where a higher percentage is generally better) but also by plausibility (where a percentage that is too high may seem unreachable).

In three experiments, we assessed the impact of contingent match incentives. In Experiment 1, we partnered with Global Giving, a non-profit organization that connects donors with grassroots projects. After browsing the projects available on GlobalGiving.org, on the check-out page, donors ( $N = 12,769$ ) viewed the project, the amount of donation they selected, and the frequency of the donation. It was optional to switch the frequency from one-time (the default) to a monthly recurring donation. Our dependent variable was the percent of people who converted from one-time to recurring donations. Donors were randomly assigned to one of seven conditions. Donors in the *control* condition had the opportunity to spontaneously upgrade one-time donations to monthly recurring donations. Those in the *prompt* condition were provided with a prompt that encouraged them to “help make a sustained impact by upgrading to a monthly

recurring donation.” Those in the *standard match* condition were told: “A generous anonymous donor has agreed to match 100% of new monthly donations today.” Finally, donors in one of the four *contingent match* conditions were told: “A generous anonymous donor has agreed to match 100% of new monthly donations today, but only if 25/50/75/100% of donors start a recurring donation today.”

We found that informing potential donors that their donations would be matched if and only if 75% of other donors agreed to upgrade led to the highest percent of upgrades. Most interestingly, two years after the completion of the field experiment, the follow-through rates on the seven different pledges revealed that donors in the 75% *contingent match* condition not only kept giving for the most number of months, but they also donated the highest total amount, suggesting that the 75% *contingent match* creates significantly higher value for the charities over the long term.

Next, we conducted a controlled experiment to assess social proof and plausibility as potential mechanisms. Participants ( $N=275$ ) were asked to imagine taking part in Experiment 1 and indicate whether they would upgrade to recurring donations. We also measured *social proof* by asking participants “what percent of people who see this message would upgrade to a monthly recurring donation?” and *plausibility* by asking them “how likely do you think that the project would reach its goal?” Replicating our results from the field experiment, participants in the 75% *contingent match* condition indicated the highest willingness to upgrade to recurring donations. We also showed that *social proof* and *plausibility* mediated the effectiveness of contingent matches.

Finally, in Experiment 3, we examined whether the impact of contingent matches is specific to recurring donations, or extends to a simpler decision: one-time donations. In an online experiment, participants were randomly assigned to one of four conditions – *standard match*, *50% contingent match*, *75% contingent match*, or a *control* condition – and chose whether to keep a \$.50 payment or donate it to a charitable cause. Once again compliance peaked at 75%, and we found that the effect of contingent matches also hold for one-time donations as they do for recurring donations.

Across three experiments, we suggest and provide evidence that contingent match incentives are an effective and underutilized means of inducing people to become recurring donors. We are happy to share that Global Giving has integrated these incentives into their business model as the contingent matches allowed them to double the amount of money raised through recurring donations.

## Prosocial Incentives in the Field

### EXTENDED ABSTRACT

Designing incentive schemes to motivate performance is critical for organizations and individuals. Recent work demonstrates that prosocial incentives (i.e., connecting effort directly to charitable contributions) may be more effective than standard, self-benefiting incentives (Imas, 2014). Specifically, individuals exert more effort under a prosocial incentive compared to a self-benefiting scheme, though only at low incentive levels. When incentives are high, the two incentive schemes become equally effective. Individuals increase effort in the self-benefiting condition under high incentives compared to low, while those in the prosocial condition show insensitivity to incentive size—their effort does not increase with higher incentives.

While these results suggest prosocial incentives may at times provide stronger motivation than the commonly used self-benefiting ones, several open questions remain. First, although individuals often choose to behave prosocially when in a situation that requires

them to decide whether to do so, they may intentionally *avoid* such situations if possible (Andreoni, Rao & Trachtman, 2012; DellaVigna, List & Malmendier, 2012). Since prior work on prosocial incentives has only studied behavior after subjects were assigned an incentive scheme, it is important to examine whether individuals are more likely to opt-out of projects with prosocial incentives when given the opportunity.

Second, signaling models of prosocial behavior suggest giving is motivated by the desire to appear prosocial to both oneself and others (Bénabou & Tirole, 2006). In these models, individuals derive utility from a positive self and social image, and prosocial behavior acts as a signal that further bolsters that image. Consistent with signaling models, prosocial effort is greater in public than in private (Ariely, Bracha, & Meier, 2009). Since effort under prosocial incentive schemes is tied to charitable contributions, these results imply that making effort public could increase performance under prosocial incentives to a greater extent when compared to standard incentives.

Finally, the relevance of prosocial incentive schemes for organizational and policy applications critically depends on their effectiveness in the field. It is therefore important to demonstrate the usefulness of prosocial incentives outside of the lab in naturalistic contexts. In two field studies, we show that in addition to increasing effort, prosocial incentives encourage participation and are more effective in public versus private settings.

Study 1 was run in the context of recycling. We made announcements for an upcoming recycling drive in a total of 12 classrooms, and asked students ( $N=846$ ) to indicate on a slip of paper their intention to participate. Those who indicated that they would like to participate also provided their email address and specified how many recyclables they planned to bring. All were told that individuals who opted-in to participate would receive a reminder email prior to the drive, including the number of recyclables they planned to bring.

Students saw one of two incentive schemes for bringing in recyclables (For Self or For Others), crossed with one of two levels of visibility (Private or Public). In the For Self condition, individuals expected to receive a direct payment of 0.05 cents per recyclable brought to the drive. In the For Others condition, 0.05 cents would be donated to the Make-A-Wish foundation per recyclable brought. In the Private condition, individuals opted-in to participate privately by marking a sheet of paper and slipping it into an envelope that was passed to the front of the class. In the Public condition, after marking the paper, individuals who opted-in were asked to raise their hands and bring the sheet to the front of the room. Students were told the procedure prior to making their decisions.

Results showed individuals were significantly more likely to participate in the recycling drive when money from recyclables went to charity rather than themselves. The prosocial incentive scheme had a significant main effect on participation, with 19.1% of students agreeing to participate in the For Others treatments compared to 7.4% in the For Self treatments ( $p<.01$ ). Pairwise comparisons showed significantly more sign-ups in both the public and private For Others treatments (23.9% and 15.1%, respectively), compared to sign-ups in the public and private For Self treatments (6.79% and 8.09%, respectively), though the difference between private For Others and private For Self was marginally significant ( $p=.06$ ). Making participation public had a significant effect on sign-ups, but only in the prosocial treatment: 23.9% signed up in the For Others public treatment compared to 15.1% in the private treatment ( $p<.05$ ). In contrast, making the act public had no significant effect on participation in the For Self treatments (6.79% vs. 8.09%, n.s.).

In Study 2, we aimed to replicate the results of Study 1 in a different domain—an online labor spot-market. We used Amazon Mechanical Turk's spot-market to advertise a task requiring workers to populate an image database with pictures in a particular domain (e.g., wildlife). The advertisement featured the basic details of how these images should be collected, as well as the flat fee for completing the task, which entailed collecting ten links to images from the web. It also included a link to learn more information and to sign up. Once workers ( $N=872$ ) clicked on the link, they were randomized into one of four conditions, which varied the incentive (Low/\$0.01 per 10 images vs. High/\$0.05 per 10 images) and the beneficiary (For Self vs. For Others, where the Others is one of six charities). The flat participation fee was the same in each of the four treatments. This design allowed us to test how many workers opted-in to working under the incentive scheme, as measured by the ratio of those who finished the task to those who clicked on the link, as well as effort of workers conditional on opting-in.

Results revealed that when incentives were Low, workers were more likely to opt-in to the prosocial incentive scheme (62% For Others) than in the standard incentive scheme (53% For Self,  $p=.04$ ). As incentives increased, however, workers were just as likely to complete the task under the prosocial incentive scheme (64% For Others) as under the standard one (61% For Self,  $p=.45$ ).

### How Conventional Products Can Use Cause-Related Marketing Campaigns To Make Up for Not Being Organic

#### EXTENDED ABSTRACT

The production and consumption of products can cause various damages to the environment (e.g., air pollution) and society (e.g., unfair trade). As consumers are becoming increasingly attentive to social and ethical considerations – in part due to the offering of fair trade or organic products – and thus, more aware of products' negative externalities, the purchase and consumption of conventional products may become increasingly associated with guilt (Dahl, Honea, & Manchanda, 2003). To alleviate potential guilt so that consumers continue buying conventional products, some companies use cause-related marketing (CM) campaigns in which they promise a donation to a cause every time a consumer purchases their product. The idea behind this approach is related to moral regulation (Mazar & Zhong, 2010): if customers' moral self-concept is threatened by the purchase or consumption of a product that is associated with negative externalities, a morally good act such as a donation can "save" it.

The challenge when designing such CM campaigns is that companies can offer a donation to fight a problem caused by their products (*same domain-donation*) – for example, a donation to offset water pollution when buying coffee – or they can offer a donation to fight a problem unrelated to their products (*other domain-donation*) – such as a donation to fight illiteracy. However, little is known about which type of donation would be more beneficial for companies and why.

Research on moral regulation simply suggests that licensing and compensation-mechanisms can be successful regardless of whether the two counterbalancing behaviors are in the same domain (Monin & Miller, 2001) or in differing domains (Mazar & Zhong, 2010), but does not compare the effectiveness of both types to each other. Intuition suggests that a *same domain-donation* has the advantage of directly reducing a product's specific negative externalities, potentially making the product and thus the consumption appear less harmful – which should translate into less guilt and increased

demand for the conventional product. Yet, a same domain-donation might increase the saliency of the damage supported by one's consumption and thus make oneself feel hypocritical. Consequently, the consumer's guilt might be promoted rather than reduced, such that the consumer might choose a less harmful product instead. An *other domain-donation* avoids emphasizing the product's negative externalities and subsequent feelings of hypocrisy and thus could provide a better guilt-reduction mechanism or simply a good feeling.

In one field and one laboratory study, both with incentive compatible, consequential purchases, we show that consumers are more likely to buy a conventional product (rather than an organic product) when coupled with an *other domain* CM campaign than when coupled with a *same domain* CM campaign – unless the *same domain* CM campaign is personalized.

In our first experiment, we operated a coffee stand during a music festival on a European university campus, where we sold conventional and organic coffee at Euro 1.20 each and varied between subjects ( $N = 290$ ) the sign accompanying the conventional coffee. A pre-test within the same population revealed that water pollution was an environmental damage that was highly associated with the production of conventional coffee. Another pre-test revealed that fighting illiteracy was viewed as equally important as fighting water pollution, and both causes were viewed to fit equally well with the product category coffee. Thus, in one condition (*same domain*) the sign read that for each purchase of a cup of conventional coffee, 10 cents would be donated toward offsetting water pollution caused by the production of coffee. In another condition (*same domain-personalized*), the sign read that for each purchase of a cup of conventional coffee, 10 cents would be donated toward offsetting water pollution caused by the production of the consumer's ("your") coffee. In a third condition (*other domain*), the sign read that for each purchase of a cup of conventional coffee, 10 cents would be donated toward offsetting the educational disadvantages caused by illiteracy. We added two control conditions without any donation: one in which both coffees were offered at the same price (Euro 1.20; *control + equal price*) and one in which the conventional coffee cost 10 cents less (i.e. Euro 1.10) than the organic coffee (*control*).

We found that when both coffees were offered without a donation and at the same price (*control + equal price*), only 17.9% purchased the conventional coffee. Not surprisingly, this market share increased (up to 28.1%) when the price of conventional coffee was decreased by 10 cents (*control condition*). More importantly, demand for conventional coffee significantly increased when instead of lowering the price, the product was coupled with a donation in an other domain (28.1% vs. 58.3%;  $p < .001$ ), while a same domain-donation failed to significantly increase purchases (28.13% vs. 36.8%;  $p = .31$ ). Interestingly, however, the same domain-donation did significantly boost the purchase of conventional coffee when it was personalized (28.1% vs. 66.4%;  $p < .001$ ).

We replicated our findings in an incentive-compatible laboratory experiment, in which we offered participants the possibility to purchase coffee before taking part in an unrelated study. In contrast to the field experiment, this setting also allowed us to observe decisions to abandon the purchase of coffee (no matter if conventional or organic) altogether. Further, it allowed us to examine the underlying process. The results of this laboratory experiment revealed that the positive effects of a personalized same domain-donation as well as of an other domain-donation on the purchase of conventional coffee were fully mediated by the relative guilt associated with the purchase of conventional versus organic coffee.

Our findings are particularly interesting for companies intending to use CM for conventional products that have less harmful com-

petitors. We show that offering the right type of donation can allow such products to increase their market share without giving up profit – the customers are willing to pick up the tab.

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# New Perspectives on the Dynamics of Status: from Signaling to Consumption

Chairs: Silvia Bellezza, Harvard Business School, USA  
David Dubois, INSEAD, France

## **Paper #1: Conspicuous Consumption of Time: When Busyness and Lack of Leisure Time Become a Status Symbol**

Silvia Bellezza, Harvard Business School, USA  
Anat Keinan, Harvard Business School, USA  
Neeru Paharia, Georgetown University, USA

## **Paper #2: When Do Consumers Prefer to Look Like a King vs. Feel Like a King? Power-Induced Preferences for Experiential vs. Material Luxury**

David Dubois, INSEAD, France  
Ayalla Ruvio, Michigan State University, USA

## **Paper #3: When Underdog Narratives Backfire: The Effect of Perceived Market Advantage on Brand Status**

Neeru Paharia, Georgetown University, USA  
Debora V. Thompson, Georgetown University, USA

## **Paper #4: Politics and Status: How Political Ideology Shapes Status Concerns and Preferences**

Nailya Ordabayeva, Boston College, Boston, USA  
Daniel Fernandes, Católica-Lisbon School of Business and Economics, Portugal

### **SESSION PROPOSAL**

Despite the lasting financial crisis that put a strain on consumers' resources, the business of luxury and premium goods has grown tremendously across product categories and geographical areas in recent years (Bain 2013). This trend sparked renewed interest in understanding when and why consumers purchase status products and services as luxury items (e.g., Bellezza et al. 2014; Dubois et al. 2012; Han et al. 2010; Ordabayeva and Chandon 2011; Rucker and Galinsky 2008). The session brings together state of the art research in this area by bridging two important questions: first, how do products, services, people or even behaviors become associated with high or low status? Second, how might such associations affect the way people acquire and consume products and services or interact with high vs. low status people?

The first two papers shed light on conditions under which behaviors or types of products can become associated with status. First Bellezza, Keinan, and Paharia investigate conspicuous consumption related to spending time. In contrast to the theory of the leisure class (Veblen, 1899/1994) suggesting that individuals who conduct idle lives, and spend their time on leisure are perceived to be higher in status, the authors demonstrate across four studies that "being busy" can become a status symbol. Second, Dubois and Ruvio explore the theme of status creation by examining the conditions under which luxury experiences (e.g., a fancy vacation) are preferred over luxury goods (e.g., an expensive car). The authors demonstrate that power (powerlessness) trigger preference for experiential (material) luxury offerings over material luxury offerings and the moderating role of the stability of consumers' power position.

The next two papers focus on the implication of acquiring status through preferences for status products. Specifically, Paharia and Thompson show that brands having a large amount of resources with which to compete in the marketplace can become perceived as "top dog" brands, and are preferred by consumers who have a higher need for status or in a consumer context where status is salient (e.g., a brand that is used publicly rather than privately). Finally, Ordabayeva and Fernandes conclude the session by investigating the relationship

between status preferences and political ideology. Throughout five studies conducted inside and outside the lab with inherent measures of ideology as well as ideology primes, the authors show that conservatives and liberals seek status in fundamentally different ways: while conservatives seek status through conspicuous consumption, liberals seek status through sustainable consumption. This happens because liberals and conservatives seek to communicate fundamentally different moral values that they uphold to others.

This session is of interest to a broad swath of consumer researchers and of special interest to those interested in status, conspicuous consumption, power, and political ideology. By providing a series of thought-provoking findings of when status associations are created in the marketplace and their implications for when and why luxury brands might be favored by consumers, this session offers novel insights on status processes and paves the road for future research.

## **Conspicuous Consumption of Time: When Busyness and Lack of Leisure Time Become a Status Symbol**

### **EXTENDED ABSTRACT**

The lavish expenditure of scarce and valuable resources, such as money and time, can act as a signal of status and wealth. While past research has primarily focused on how the expenditure of *money* has been a vehicle to signal social status, in this research we focus on how the conspicuous expenditure of *time* can lead to the same end. Veblen (1899/1994) suggests that the wealthy consume time unproductively as demonstrated by their ability to live idle lives. Specifically, leisure is defined as the non-productive consumption of time. Thus we would expect that those who have the ability to waste time, and are not busy, would be perceived to have higher levels of social status. However in modern Western society, hard work, ambition, and busyness are respected admirable traits and appear to be associated with success and wealth. Anecdotal evidence suggests that being busy can evoke pride, and is often made public to others through the process of complaining or bragging (Kreider, 2012). We investigate whether a busy or non-busy lifestyle will indicate higher levels of social status and portray a high aspirational image.

We propose that working hard and busy lifestyles lead to greater inferences of social status in comparison to working less hard and non-busy lifestyles. The underlying paradigm shift for status attribution based on time expenditure may be linked to the development of a highly structured human resources market in advanced economies. In contrast to people who do not work, or work for limited hours, busy individuals might be perceived as highly sought after and desired in the job market. Busyness might speak to the intrinsic qualities and capabilities of the individual who, as a scarce and precious resource herself, is like a rare gemstone and thus perceived to have higher status. Accordingly, we predict that the positive inferences in response to busyness and lack of leisure time are mediated and driven by the perception that a busy person is a scarce resource in high demand. We then consider boundary conditions related to agency, whether working long hours is perceived as a deliberate choice, and find that the positive status attributions associated with busyness at work are muted when an individual is perceived to have no agency in her choice to be busy. We further demonstrate the moderating role of observers' time affluence (Kasser and Sheldon 2009), an individual difference measuring whether one feels pressed for time, and find a

stronger effect of busyness for observers who feel their own time is very limited.

A series of experiments test our conceptual model and explore how busyness conveys status in the eyes of others. We uncover the mediating (perceived scarcity) and moderating processes related to the effect (agency over the decision to be busy and time affluence). We employ various methods to manipulate busyness and products related to busyness with participants representing different countries and cultures.

As a preliminary investigation, we first explore Twitter data categorized as “humblebrags,” which consist of self-deprecating boasts (Alford 2012), and find that a significant number of them relate to busyness. Inspired by these findings, study 1 uses hypothetical Facebook posts to either communicate a busy lifestyle or a non-busy lifestyle, in addition to considering the role of agency. In studies 2A and 2B, in addition to generalizing the effects from study 1, we also consider the mediating role of scarcity – the degree to which a person is perceived to be scarce and in demand. In study 3, we explore the moderating factor of observers’ time affluence, an individual difference (Kasser & Sheldon 2009). In this study we also explore perceived ambition as another potential mechanism driving the positive effect of busyness. In studies 4A and 4B, we consider specific marketing implications for brands and products associated with busyness. Specifically in study 4A, we considered two brands: Whole Foods, pretested to be associated with an expensive lifestyle, and Peapod, a service associated with a busy lifestyle. In study 4B, we conducted a similar study but instead of grocery stores, participants considered a person who either wore a Bluetooth ear device (associated with a busy lifestyle) or a pair of gold earrings (associated with an expensive lifestyle). In both studies, we further examine individual level differences in time affluence in the observers. Finally, in study 5 we consider how busyness can be portrayed in advertisements. In a follow-up study, we also explore cross cultural responses to busyness at work and we demonstrate a reversal of the effect, whereby busyness leads to lower rather than higher inferences of status.

Recent research suggests that high-status individuals tend to avoid blatant and conspicuous displays of wealth or status, and instead seek alternative ways to differentiate themselves from lower-status individuals (Bellezza et al., 2014; Berger and Ward, 2010; Han et al. 2010). For example, sophisticated luxury consumers elect to use less known and less conspicuous luxury brands. We contribute to this literature by investigating the conditions under which busyness can serve as an alternative, nonconventional signaling mechanism and lead to positive inferences of status in the eyes of others. We demonstrate a nuanced kind of conspicuous consumption that operates by shifting the focus from the preciousness and scarcity of goods, to the preciousness and scarcity of individuals. While owning expensive products signals status through the value of these material goods, displaying one’s busyness and lack of leisure signals status through the value of the person.

### **When Do Consumers Prefer to Look Like a King vs. Feel Like a King? Power-Induced Preferences for Experiential vs. Material Luxury**

#### **EXTENDED ABSTRACT**

The repeated two-digit growth in the luxury industry (Bain, 2013) has sparked significant efforts to explain such sustained success (Rucker and Galinsky, 2008; Han, Nunes and Drèze, 2010). However, research mostly focused on luxury products in the form of material objects (e.g., handbags) despite luxury’s success largely

stemming from experiential offerings—from art performances to unique travel adventures. This type of luxury, in contrast to material objects, offers unique intrinsic (e.g., sensorial) benefits associated with the experience (e.g., an opera). Interestingly, marketers can offer the same item – e.g., a car – as a material object (e.g., by emphasizing the uniqueness of the car’s features) or as an experience (e.g., by emphasizing the uniqueness of the driving experience).

Yet, little theory speaks to when and why luxury managers should frame luxury as an experience or as a material possession. On the one hand, past research proposes that experiences can be more psychologically rewarding than possessions (Van Boven and Gilovich, 2003), suggesting that consumers might prefer experiential luxury to material luxury. In support, work on materialism suggests experiences are more personal and self-defining than material possessions (Carter and Gilovich, 2012). On the other hand, conspicuous and compensatory consumption research argues material luxury might provide a means to alleviate the discomfort associated with a low-ranked position (e.g., Charles et al., 2009). We integrate these findings by offering two novel propositions on how a fundamental feature of society, power (i.e., asymmetric control over valued resources in relationships (Rucker, Galinsky and Dubois, 2012), affects consumers’ aspirations to purchase experiential vs. material luxury goods.

First, building on work showing that power increases the salience of one’s inner feelings and needs (Guinote, 2009) but powerlessness increases the salience of one’s social surroundings (Van Kleef et al., 2008), we theorize that a state of high power might heighten one’s intrinsic aspirations whereas a state of low power might heighten one’s extrinsic aspirations. Intrinsic vs. extrinsic aspiration refers to the extent to which people consider own needs irrespective of social externalities (Kasser and Ryan, 2011). Given that experiences tend to be self-defining (Carter and Gilovich, 2012) but material items increase consumers’ visibility (Han, Nunes and Drèze, 2010), we propose that power might induce people to focus and weight different aspects of a product; leading the powerful to prefer experiential over material luxury, but the powerless to prefer material over experiential luxury. In short, the powerless might prefer luxury that can make them “look like a king,” but the powerful preferring luxuries that make them “feel like a king.”

Second, we theorize the stability of one’s power can moderate preferences for experiential vs. material luxury. Power stability refers to the sustaining character of a powerful or powerless position (Tajfel, 1984). In consumer settings, power instability might stem from personal and contextual variables, such as variability in one’s role (e.g., variability of one’s job security) or in valuation of one’s own resources (e.g., variability of stock exchange). Because instability might reinforce a power holder’s motivation to signal one’s authority, we propose that in an unstable situation (Scheepers and Ellemers, 2008), powerful consumers might prefer material luxury over experiential luxury. In contrast, because instability might alleviate a powerless’ need to engage in compensatory signaling by opening the possibility that s/he might move up the hierarchy, we propose that in an unstable situation, low-power consumers’ preference for material luxury over experiential luxury will reduce. We conducted two experiments to test these hypotheses and analyzed the data using ANOVAs, regressions and/or t-tests. Across experiments, manipulation checks confirmed all manipulations were successful.

*Experiment 1: Power-Induced Preference for Experiential vs. Material Luxury* One hundred and twenty one participants were randomly assigned to a 3 (power: high, control, low) × 2 (offering type: experiential, material) between-subjects design. First, participants recalled a time they had or lacked power (Galinsky et al., 2003).

Baseline participants did not complete any task. During the second task, participants either evaluated an evening at the opera and an exclusive massage (experiential condition) or a pair of luxury glasses and an exclusive pen (material condition). Participants indicated their willingness-to-pay (WTP) in % of the retail price (Rucker and Galinsky, 2008). Results revealed a main effect of power such that low-power participants' WTP was higher than both that of baseline and high-power participants, replicating classic findings (Rucker and Galinsky, 2008). There was also a main effect of framing reflecting higher WTP for experiential luxury than material luxury (Van Boven and Gilovich, 2003). Most importantly, there was a significant power  $\times$  offering type interaction, such that low-power participants preferred material luxury to experiential luxury, compared to other conditions. In contrast, high-power participants preferred experiential luxury to material luxury, compared to other conditions.

*Experiment 2: Framing Luxury as Experience or Material.* One hundred and sixty participants were randomly assigned to a 2 (power: low, high)  $\times$  2 (stability: low, high)  $\times$  2 (framing: material, experiential) between-subjects design. Participants were assigned to a role of boss or employee (De Dreu and Van Kleef, 2004). Importantly, participants were told that power positions would either remain unchanged (stable condition) or that they might be switched later (unstable condition; Slight et al., 2011). Next, participants evaluated an ad for a pen either the pen's experiential benefits or its material benefits. In the stable condition, we replicated experiment 1's results. In the unstable condition, results revealed a significant power  $\times$  framing interaction: high-power participants reported a higher WTP for the material luxury than for the experiential luxury, reversing the pattern in the stable condition; in addition, there were no marked preference for either the experiential luxury or the material luxury among low-power participants.

Overall, our results successfully replicated and integrated classic findings from both the power (Rucker and Galinsky 2008; 2009) and materialism (Carter and Gilovich, 2010; Van Boven and Gilovich, 2003) literatures. In addition, we shed light on an important moderator how power informs luxury tendencies – the stability of consumers' power position. Implications for power and luxury marketing practices will be discussed.

### **When Underdog Narratives Backfire: The Effect of Perceived Market Advantage on Brand Status**

#### **EXTENDED ABSTRACT**

As Under Armour – a relatively new athletics apparel company – considers how to expand into new markets across the world, the brand must consider a fundamental question: How should they position themselves relative to their competitors? Being a relatively weaker brand compared to rivals such as Nike and Adidas, Under Armour could capitalize on an “underdog effect,” and position themselves as disadvantaged in the market place, but with the determination to battle the competition. Underdog narratives have been found to enhance consumers' brand evaluations because people identify with the underdog's struggles (Paharia, Keinan, Avery & Schor, 2011). Accordingly, consumers may root for the weaker Under Armour as they fight against powerful companies such as Nike.

However, exposing oneself as an underdog also exposes a fundamental weakness, the fact that the brand has fewer resources than their competitors. In interpersonal domains, previous work has shown that one's ability to attain resources is positively associated with a higher level of social status (Magee and Galinsky, 2008; Marriot, 2004). Similarly, in consumption domains, the ability to signal status is an important driver of consumers' preferences (Rucker and

Galinsky, 2008; Eastman, Goldsmith, and Flynn, 1999). Accordingly, if Under Armour positioned itself as an underdog brand, could they unknowingly alienate consumers who care about status?

In this research we investigate a novel condition under which we find a “top dog effect,” when consumers prefer brands that have more (vs. less) resources to compete in the marketplace. While luxury brands intentionally use scarcity to signal status, we find that having a large amount of resources to compete in the marketplace as a top dog is also associated with status. Controlling for price and quality, we find that for consumers who care more about status (i.e., consistently worry about status when selecting products and services) or purchase contexts that increase the importance of status (e.g., public vs. private consumption experiences), top dog brands are favored. Importantly, we show that preference for top dog brands in high-status contexts: 1) can be observed even when the top dog brand is less unique and less scarce than underdog brands, 2) is not driven by the fact that top dog brands are more well-known, and 3) is mediated by consumers' perceptions of brand's power which lead to feelings of higher individual status.

Four experiments tested our hypotheses that top dog brands can signal status, and are therefore preferred in contexts where status is important and by those who have a higher need for status as an individual difference. In study 1, we show that top dog brands are perceived to have more status than underdog brands, and that preference for them is moderated by an individual difference, the importance of status. Experiment 2 was conducted between three distinct groups: undergraduate liberal arts students, Mechanical Turk participants, and undergraduate business school students. Each group significantly varied on their stated importance of status from one another. For the undergraduate business school students, a group who cares about status more, we found a preference for the top dog brand. However for undergraduate liberal arts students and the Mechanical Turk participants, groups who care about status less, we found an underdog effect. Again, these effects were moderated by the importance of status. In experiment 3 rather than consider the individual or the group, we varied the situational context and manipulated whether status was more relevant or less relevant. We found that participants favored the top dog brand more in the high status relevant context, when considered for public use, than in the low status relevant context, when considered for private use. Again, this effect was moderated by an individual difference, the importance of status. Finally in experiment 4, we test the mediating role of being able to signal status. We find that for people who cared about status, the ability to signal status through a top dog brand mediated their preference for the top dog brand, however for the people who care about status less, the ability to communicate status was not relevant. Furthermore, we find that the brand's power, versus the fact that it may be more well-known, is driving the effect. Finally, we explore demographic segments and find African Americans, who care about status more than Caucasians, like top dog brands more because they better enable them to signal their status.

Taken together, our studies qualify previous research documenting a positive effect of underdog narratives. More specifically, we make four contributions to the literature: 1) we provide evidence of a top dog effect in contexts where status considerations are important, 2) we show that a positive top dog effect can occur despite the fact that consumers tend to more readily identify with underdog brands, 3) we demonstrate that top dog preference is based on the brand's ability to confer status, controlling for alternative mechanisms related to brand awareness, price, perceived risk, and finally, 4) we find that a position of resource abundance can trump perceptions of uniqueness and scarcity as a signal of status in the marketplace.

## Politics and Status: How Political Ideology Shapes Status Concerns and Preferences

### EXTENDED ABSTRACT

As political opinions become more polarized, consumers increasingly find themselves at the opposite ends of the political debate (Abramowitz and Saunders 2008). While the majority of adult consumers (upwards of 65%) identify themselves as conservative or liberal (Gallup 2012), little is known about how political ideology influences behaviors that are not ideological in nature. Recent data uncovers interesting differences in the consumer behaviors of conservatives and liberals. Specifically, it seems that conservatives and liberals prefer different brands, restaurants, and entertainment (Duhigg 2012); show different patterns in energy consumption (The Economist 2007); and display different products at home (Carney et al. 2008). However, it is unclear whether these differences are stable, why they arise, and whether they are causally linked to ideology.

In this research, we examine the effect of political ideology on status consumption. Drawing on the moral foundations theory (Haidt 2012; Haidt and Graham 2007; Haidt and Joseph 2004) which suggests that conservatives and liberals prioritize different sets of moral values (Graham et al. 2009; Graham et al. 2011), we hypothesize that conservatives and liberals seek status in systematically different ways because they wish to signal different moral values through their purchases. We predict that conservatives will seek status through conspicuous consumption which signals power and fulfills conservatives' esteem for authority and in-group loyalty. On the other hand, liberals will seek status through sustainable consumption which signals concern for social welfare and fulfills liberals' desire to promote fairness and prevent harm. We thereby propose that there is a direct causal link between political ideology and status consumption, that moral values may serve as signals of status, and that political ideology can explain when and why individuals use altruism or power cues to signal status. We test our predictions in five studies conducted inside and outside the lab using well-established scales of ideology as well as a novel prime.

Study 1 examined the effect of inherent political ideology on status-seeking through conspicuous and sustainable consumption. To manipulate the status-seeking motivation, half of participants read a scenario about starting a new job at a very competitive workplace (status prime condition), and the other half read a scenario about losing house keys or concert tickets (control condition, Griskevicius, Tybur and Van Den Bergh 2010). Afterwards, participants indicated their preference between sustainable and conspicuous products in four categories (dishwasher, household cleaner, batteries, car) using three items (product preference and attractiveness on 9-point scales, 1 = definitely conspicuous product, 9 = definitely sustainable product; product choice on a dichotomous scale), followed by a 7-item ideology scale (Nail et al. 2009). To test the role of moral values, we administered a 5-item moral identity internalization scale (Aquino and Reed 2002; Winterich, Zhang and Mittal 2012). Consistent with our predictions, preferences for sustainable (vs. conspicuous) products significantly strengthened with the degree of participants' liberalism (vs. conservatism), but only when the internalization of moral identity was high and the status motivation was active.

Study 2 tested our theory using the same sustainable and conspicuous descriptions of the dishwasher and cleaner as in Study 1, but with a manipulation of the type of setting (public vs. private) in which the product purchase was taking place (instead of the status prime used in Study 1). Participants in the public (vs. private) condition read that they were purchasing the products in a busy physical (vs. an online) store (Griskevicius et al. 2010). We then measured

participants' political ideology and moral identity internalization. The results revealed that preferences for sustainable (vs. conspicuous) products strengthened with the degree of liberalism (vs. conservatism), but only in public and when the internalization of moral identity was high.

Study 3 tested the mediating role of moral values. All participants were first exposed to the status prime used in Study 1 and then indicated their preferences for dishwasher, cleaner and batteries. Next, they answered 18 questions about the relative importance of binding authority / group loyalty dimensions ("factor 1") compared to individualizing fairness / harm prevention dimensions ("factor 2") in moral decisions using 7-point scales, 1 = "factor 1 is definitely more important" to 7 = "factor 2 is definitely more important." Finally, participants completed a single-item ideology scale, 1 = "extremely liberal" to 9 = "extremely conservative" (Jost et al. 2003). The mediation was significant: there was only a significant indirect effect of ideology on preferences for sustainable (vs. conspicuous) products through the relative strength of individualizing (vs. binding) moral values.

Study 4 tested the causal effect of ideology by priming ideological ideals and the role of inherent status-seeking motivations by measuring individuals' self-monitoring tendencies. Participants descrambled sentences that communicated conservative or liberal ideals, after which they filled out the product preference items as in Study 1, followed by a 13-item self-monitoring scale (Lennox and Wolfe 1984). As predicted, liberal (vs. conservative) primes strengthened preferences for sustainable (vs. conspicuous) products, but only when individual self-monitoring was high.

Study 5 relied on novel secondary data to test whether the conservatism of US states would influence web search for conspicuous products. We examined the volume of searches for forty conspicuous terms (conspicuous brands, product categories and concepts) on Google in each of fifty US states between 2004 and 2012. We linked the search data to state conservatism (the proportion of individuals from a representative sample of the state population who identified themselves as conservative in the 2012 Gallup state of the state metrics and the number of times the state voted for a republican presidential candidate in 2000, 2004, 2008, and 2012). As predicted, controlling for state GDP and population density, interest in conspicuous products online was stronger in conservative states than in liberal states.

Our findings contribute to research on political ideology, consumer behavior, and moral foundations by uncovering a systematic relationship that links ideology, moral values, and consumer decisions that are devoid of politics. More generally, our findings add to an emerging stream of research which underlines the importance of accounting for consumers' ideological beliefs as a powerful predictor of consumer behaviors (e.g., Fernandes and Mandel 2013; Kidwell, Farmer, and Hardesty 2013). The results have useful implications for marketers.

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# Gift Givers and Gift Recipients: “You Don’t Always Get What You Want...”

Chairs: Meg G. Meloy, Penn State, USA

Evan Polman, University of Wisconsin-Madison, USA

## **Paper #1: Choosing Gifts for Picky People: Where is the Fun in That?**

Andong Cheng, Penn State, USA

Meg G. Meloy, Penn State, USA

Evan Polman, University of Wisconsin-Madison, USA

## **Paper #2: Gratitude, Guilt, and Gift Giving**

Cindy Chan, University of Toronto, Canada

Cassie Mogilner, University of Pennsylvania, USA

Leaf Van Boven, University of Colorado Boulder, USA

## **Paper #3: Giving Happiness: Do Experiential Gifts Lead to More Happiness?**

Joseph K. Goodman, Washington University in St. Louis, USA

## **Paper #4: Mental Accounting and Gift Card Spending**

Chelsea Helion, Cornell University, USA

Tom Gilovich, Cornell University, USA

### **SESSION OVERVIEW**

Individuals spend a lot of money on gifts each year. According to the National Retail Federation (NRF 2013), holiday retail sales were over US\$602 billion in 2013 – 40% more than Belgium’s gross domestic product – and much of that spending was on gifts for others. Similarly, in November 2013, the average household planned to spend about \$801 on holiday gifts alone, and that was just on “planned” purchases (American Research Group 2013). Despite the fact that consumers spend much of their income on gifts for others, relatively little is understood about how consumers select such gifts and whether such gifts actually bring happiness to the recipient. Stated more formally, what gifts are selected for others, and how much happiness is derived from the exchange? It is these questions that our session intends to address.

The first paper by Cheng, Meloy and Polman begins with a common challenge of gift-giving: Shopping for picky people. The authors delineate what it means to be a picky person (from the perspective of the giver), and how shopping for someone who is thought to be picky is different from shopping for someone who is thought to be difficult. This paper identifies some of the gifts consumers prefer to buy for picky people, and how people negotiate the burden of shopping for picky people.

The next two papers continue to examine gift-giving, and both extend this research by identifying different asymmetries between givers and receivers. In one paper, Chan, Mogilner, and Van Boven demonstrate that when the gift giver is motivated by feelings of gratitude versus guilt, the strategies and choices are different. Their research shows that givers feel more connected to their receivers when the givers’ motivation is guilt, but receivers feel more connected to their givers when the motivation for the gift is based on feelings of gratitude. In the other paper, Goodman investigates the relationship between giving and receiving experiential gifts. He finds that givers prefer to give material gifts, rather than experiential gifts, because material gifts are more conventional and easier to give. However, receivers prefer to receive experiential gifts, evidencing a gap between what givers prefer to give and what receivers prefer to receive.

Finally, in the last paper, Helion and Gilovich examine how the recipient chooses to spend a gift that they have received in the form of a gift card and compare the effects of spending gift cards versus cash on others. They find that people are more generous when using

gift cards, such that people are more likely to buy dinner and books for others when they are using a gift card rather than when they are using cash.

Taken together, these papers provide insight into the gift-giving process. In theoretical terms, people have considerable experience acting as both givers and receivers, yet despite the extensive experience that people have as both givers and receivers, it seems people struggle to transfer information from one role (giver) and apply it to another role (receiver). In practical terms, people spend substantial amounts of money on gifts. By better understanding the context and constraints of the gift-giving process, we hope to improve overall well-being for both givers and recipients.

## **Choosing Gifts for Picky People: Where is the Fun in That?**

### **EXTENDED ABSTRACT**

In this paper, we discuss the challenges of choosing gifts for picky people. Such choices are common – in a recent survey concerning Black Friday, consumers reported that 39% of their purchases were for people they considered “picky” (NPD Group 2014). Despite the ubiquity of buying gifts for picky people, little research has formally examined how such gift purchases are made. In this vein, we explore how consumers cope with choosing gifts for picky people. First, we show how buying a gift for someone picky is uniquely different from other forms of difficulty that may accompany a gift choice. For example, we argue that “pickiness” is a unique construct because it focuses solely on the perceived preferences of the recipient. In contrast, a gift choice may be “difficult” should it stem from environmental and contextual constraints (e.g., choosing a gift for a recipient who lives far away); relationship closeness (e.g., choosing a gift for a co-worker or boss); and personal constraints (e.g., insufficient funds). Then, we examine whether consumers’ choices (such as what gift consumers decide to buy) and their respective shopping tendencies (such as consumers’ willingness to pay) systematically differ when a gift recipient is picky vs. difficult. Study 1 begins by defining “picky” in a gift-giving context. Study 2 examines gift choices people make for picky versus difficult recipients. Study 3 examines the effort and money consumers are willing to spend on picky recipients (relative to difficult recipients). Finally, study 4 examines the specific strategies that are employed in selecting a gift for a picky recipient.

**Study 1.** Participants (n=205) imagined selecting a gift for a “picky” or “difficult” person in a between-subjects design. They rated how well each of 18 short phrases described their gift recipient on a 1 (*not at all*) to 11 (*extremely*) scale. Half of the phrases were drawn from descriptions of difficult gift recipients; for example, choosing for someone distant (Otnes et al. 1992, 1993). The other half of phrases were drawn from the literature on picky eating; for example, phrases that describe people who display narrow preferences and avoid consuming specific foods (Carruthers et al. 2004). In addition we added phrases we created, such as *snobby* and *decisive*. Five factors emerged (VE=61.88%). Picky gift recipients were seen as having narrower preferences ( $M_{\text{Picky}}=7.47$ ,  $M_{\text{Diff}}=6.76$ ,  $p=.012$ ) and stronger opinions ( $M_{\text{Picky}}=7.02$ ,  $M_{\text{Diff}}=5.93$ ,  $p<.001$ ). Difficult gift recipients were perceived as more likely to have different tastes than the giver ( $M_{\text{Picky}}=6.29$ ,  $M_{\text{Diff}}=6.93$ ,  $p=.031$ ), be someone in a relation-

## Gratitude, Guilt, and Gift Giving

## EXTENDED ABSTRACT

Gratitude and guilt are both socially-adaptive emotions that help cultivate interpersonal relationships. This research shows that the same situation of social inequity can elicit feelings of gratitude or guilt, and that both emotions motivate people to give gifts to restore the relationship. For example, if one spouse performs the lion's share of the housework, the idle spouse may feel grateful (for the other's benevolence) or guilty (for inadequately contributing), and give their spouse a gift. We further explore the downstream social consequences of gifts that say "thanks" versus "sorry" and find that a gift can help restore social equity, but with differential effects for the giver and recipient. Gift givers report greater improvements in relationship closeness from giving out of guilt, whereas recipients tend to report greater relationship improvements from receiving a gift given out of gratitude.

Experiment 1 tested the hypothesis that gratitude and guilt can arise in the same situation of social inequity, but are differentially associated with the actions of others and the self. Participants read and imagined themselves in four randomly-ordered scenarios in which another person had helped them when they were in need (e.g., they left the kitchen a mess and their roommate cleaned up for them). Immediately after reading each scenario, participants rated how grateful and guilty they would feel in that scenario (1-7), as well as to what extent the other person went above and beyond what was required of him/her and to what extent they themselves fell short of what was expected of them (1-7).

The results of Experiment 1 showed that gratitude was more closely associated with ratings of the other person's actions than guilt: both emotions were positively associated with perceptions of benevolence, however the effect of gratitude ( $\beta = 0.76, t=17.30, p<.001$ ) was four times that of guilt ( $\beta = 0.19, t=7.42, p<.001$ ). In contrast, guilt was more closely associated with ratings of one's own actions than gratitude: both emotions were positively associated with perceptions of personal shortcomings, however the effect of guilt ( $\beta = 0.64, t=15.24, p<.001$ ) was four times that of gratitude ( $\beta = 0.16, t=2.24, p<.03$ ). These results suggest that although these emotions arise from the same situations, gratitude is more focused on the extent to which the other person has gone above and beyond whereas guilt is more focused on the extent to which they had fallen short.

Experiment 2 examined the extent to which gratitude and guilt motivate gift giving. Participants imagined that they had asked a friend to help them move to a new apartment and that s/he spent the weekend helping with the move. Participants were randomly assigned to one of three conditions and asked to write about why they would feel grateful or guilty in the situation, or to write about the situation in an objective, unemotional way. Participants then indicated how likely they would be to give a gift to their friend (1-7). Those who wrote about feeling grateful and guilty reported they were more likely give a gift to their friend compared to those who wrote unemotionally ( $ps<.05$ ); the likelihood of giving a gift did not significantly differ between participants in the grateful and guilty conditions ( $p>.66$ ). These results highlight that both gratitude and guilt are emotions that motivate gift giving.

Experiments 3A and 3B examined how giving and receiving gifts that express gratitude or guilt affect relationship closeness. In Experiment 3A, participants imagined they had left the kitchen a mess and that their roommate had cleaned up after them. Participants then wrote about the extent to which their roommate had gone above and beyond (gratitude condition), about the extent to which they had fallen short (guilt condition), or no essay (control condition).

ship-conflict with the giver ( $M_{\text{Picky}}=5.13, M_{\text{Diff}}=5.82, p=.012$ ), or be someone of a different age/income group than the giver ( $M_{\text{Picky}}=5.67, M_{\text{Diff}}=6.59, p=.003$ ). Overall, the results reveal that picky recipients are differentiated from difficult gift recipients through their narrow preferences and stronger opinions. An open question, however, is whether these beliefs affect consumers' gift choices and the strategies they decide to implement. We addressed this issue next in study 2.

**Study 2.** Participants ( $n=206$ ) were randomly assigned to one of two conditions (picky/difficult) and asked to imagine participating in a Secret Santa exchange. After describing their gift choices in an open-ended response, participants rated how much effort they would exert in obtaining a gift for their gift recipient (from 1 to 11), estimated their WTP for the gift, and reported whether they believed the gift recipient would return or re-gift their gift (from 1 to 11). We analyzed the open-ended responses and found that participants provided less specific identifying details (e.g., brand names) when describing a gift choice for a picky recipient (20% mentioned a brand name) versus a difficult recipient (38.2%),  $\chi^2=8.12, p=.004$ . Furthermore, givers reported expending less effort selecting a gift for a picky recipient ( $M_{\text{Picky}}=6.18, M_{\text{Diff}}=7.16, p=.021$ ). And participants indicated they would spend less money for a picky recipient ( $M_{\text{Picky}}=\$31.04, M_{\text{Diff}}=\$35.40, p=.009$ ). Finally, although there were no differences in perceptions that the gift would be returned, participants did believe that a picky recipient was more likely to re-gift the item in the future ( $M_{\text{Picky}}=3.30, M_{\text{Diff}}=2.71, p=.046$ ). These results indicate that givers spend less money on a gift for a picky recipient – we investigated this further in study 3.

**Study 3.** Participants ( $n=162$ ) were assigned to a 2 (social distance: acquaintance, friend)  $\times$  2 (recipient: picky, difficult) between-subjects design. Givers' WTP for the recipient's gift was assessed. While difficult friends received a more expensive gift than difficult acquaintances ( $M_{\text{DFriend}}=\$43.00, M_{\text{DAcq}}=\$27.73$ ), social distance did not moderate the amount of money givers intended to spend on picky gift recipients ( $M_{\text{PFriend}}=\$32.73, M_{\text{PAcq}}=\$31.53, p=.008$ ).

**Study 4.** Study 4 was a 3 (recipient: picky, difficult, control)  $\times$  2 (social distance: acquaintance, friend) between-subjects design. Participants ( $n=277$ ) considered seven popular gift-giving strategies (Otnes et al. 1993) and were asked to select the strategy they preferred, according to recipient condition. Two popular strategies include the *ask strategy* (where participants ask the recipient what they want) and the *fun strategy* (where participants give the recipient something delightful). The *ask strategy* was preferred over the *fun strategy* when the recipient was picky, but we did not observe this difference in the difficult or control conditions ( $\text{Ask}_{\text{Picky}}=77.2\%, \text{Ask}_{\text{Diff}}=37.0\%, \text{Ask}_{\text{Cont}}=31.2\%$ , and  $\text{Fun}_{\text{Picky}}=5.4\%, \text{Fun}_{\text{Diff}}=32.6\%, \text{Fun}_{\text{Cont}}=31.2\%$ ;  $\chi^2=49.41, p=.000$ ). This suggests that people do not use the same gift-giving strategies for picky recipients relative to difficult/neutral recipients.

**Discussion.** Our studies show that gift givers do not approach the gifting process for picky recipients in the same way they would approach choosing gifts for other types of recipients (notably, difficult recipients). Givers recognize that picky recipients are more decisive and have narrower preferences. This results in a greater probability that they will put in less effort, spend less money on picky friends, and may ask the picky recipients directly for gift ideas instead of trying to delight them. This leaves a number of open questions for future research, including whether there are asymmetries in giver/picky recipient perceptions of what the ideal gift is, the attractiveness of material versus experiential gifts for picky recipients, and whether gift choices for picky recipients vary based on givers' motivation for the gift (gratitude versus guilt).

They next rated the how close and connected they would feel to their roommate in the situation (1-9). Participants were asked to imagine they decided to give a gift of a drink to their roommate. Finally, participants rated how close and connected they would feel to their roommate after giving the gift (1-9). Results showed the guilty participants experienced a greater improvement (change) in how close they felt to their recipient as a result of giving the gift, compared to grateful participants ( $F=7.30, p<.008$ ).

In Experiment 3B, participants read a scenario similar to in Experiment 3A, however they imagined they were the roommate who had cleaned up the kitchen for their messy roommate. Participants rated how close and connected they would feel to their roommate in this situation (1-9). Participants were next shown an image of a drink with a note attached that said either “thanks” or “sorry,” and asked to imagine their roommate had given them this gift. Participants rated how close and connected they would feel to their roommate after receiving the gift (1-9). Results showed that participants who received a “thanks” gift experienced a greater improvement (change) in how close they felt to their roommate as a result of receiving the gift ( $t=2.37, p<.02$ ).

Experiments 4A and 4B replicated the results of Experiments 3A and 3B using a more natural expression of gratitude and guilt. Instead of imagining a drink, gift givers in Experiment 4A (i.e., the messy roommates) created a card for their roommate using cardstock and markers. These cards were then randomly distributed to recipients in Experiment 4B (i.e., the roommates who cleaned up). The results again showed that guilty gift givers experienced greater improvements in relationship closeness as a result of giving a card than grateful gift givers ( $F=19.18, p<.001$ ); in contrast, recipients of cards made by grateful gift givers experienced greater improvements in relationship closeness than those who received cards made by guilty gift givers ( $F=6.00, p<.02$ ).

Together, these studies reveal the social benefits derived from gifts given out of gratitude and guilt to be asymmetrical. Whereas giving a gift out of guilt proves more connecting, receiving a gift given out of gratitude proves more connecting. This poses a challenge for gift givers seeking to build closer relationships and highlights the important role of emotions in gift giving.

### Giving Happiness: Do Experiential Gifts Lead to More Happiness?

#### EXTENDED ABSTRACT

Gift giving increases consumer happiness (Dunn, Aknin, and Norton 2008) and is a frequent social and consumer behavior in both time and money (\$800+ billion). It has received enormous attention—not only from consumer researchers (e.g., Belk and Coon 1993; Otnes and Beltramini 1996), but also from sociologists, anthropologists, economists, and psychologists (e.g., Camerer 1988; Komter 1996; Robben and Verhallen 1994; Schwartz 1967). Much of this research is qualitative or game theoretic, and has provided a wealth of insight. However, there is little empirical evidence as to what type of gifts—material or experiential—consumers tend to give, which ones lead to the most recipient happiness, and whether gift-giving consumers accurately estimate these differences. After all, the main goal of gift giving is not to increase the giver’s happiness, but to increase the happiness of the person receiving the gift.

To further examine what type of gifts consumers believe will lead to the most happiness, I asked 100 Mechanical Turk (MTurk) workers to list gifts that they recently received, and then rate each gift as more material or more experiential. I found that a vast majority of gifts (81% of holiday gifts and 66% of birthday gifts) were

viewed as more material than experiential. Thus, consumers not only prefer to give material gifts, but it also seems that they do not believe that giving experiential gifts will lead to more happiness than giving material ones.

Though gift givers might prefer to give material gifts, recent research on consumer happiness suggests that experiential gifts may lead to more happiness. When spending money on oneself, research shows that experiences lead to more happiness than material goods, assuming they turn out positively (Nicolao et al. 2009; Van Boven and Gilovich 2003). The process leading to this “experiential advantage” is due to several factors associated with experiences: greater identity relevance (Carter and Gilovich 2012), more comparability (Carter and Gilovich 2010), less regret and interchangeability (Rosenzweig and Gilovich 2012), slower adaptation (Nicolao et al. 2009), and greater social associations (Caprariello and Reis 2013). On the one hand, these theories suggest that a gift should be different because the choosing is done for the recipient, and thus it will not be susceptible to choice comparability, decision regret, or identity relevance, suggesting that an experiential gift is unlikely to be more central to the recipient’s self-concept. On the other hand, the adaptation and the social association theories predict that the experiential advantage should hold for gifts. I conducted several studies to examine whether consumers accurately predict the best gifts and why they prefer to give material gifts.

In the first study, I addressed what makes material gifts different to examine why consumers prefer material gifts. For instance, it is possible that material gifts are more traditional and are thus given due to social norms—the proper gift should fit into a box and to be easily exchanged. Similarly, it could be that material gifts are viewed as more memorable, less risky, more appreciated, are easier to choose, require more effort to buy, or require more effort from the recipient. To test these explanations, I asked 375 MTurkers to list three gifts that they were thinking about giving and rate them on the following dimensions: enjoyable/happiness, giver effort, receiver effort, decision difficulty, traditional, memorable, negative outcome, appreciation, and material/experiential. Three conclusions emerged. First, experiences were perceived as being less traditional ( $M_{\text{Experience}}=3.56$ ) than material gifts ( $M_{\text{Material}}=3.92, t(403)=2.21, p<.05$ ), supporting the notion that experiences can violate gift giving norms. Second, givers perceived experiences as requiring more receiver effort ( $M_{\text{Experience}}=2.89$ ) than material gifts ( $M_{\text{Material}}=2.06, t(401)=5.58, p<.001$ ), suggesting that the extra planning required for an experience can place an extra burden on the recipient. Finally, givers did not believe that experiential gifts ( $M_{\text{Experience}}=5.63$ ) would be more enjoyable by recipients than material gifts ( $M_{\text{Material}}=5.58, t(401)<1$ ).

In the second study, a 2(give vs. receive) x 2(material vs. experiential) between subject design, I asked participants to recall an experiential/material gift that they received/gifted for the holidays. Participants then indicated how much this gift contributed to their own/recipient’s happiness across three happiness measures (adapted from Nicolao et al. 2009). A significant interaction ( $t(132)=2.00, p<.05$ ) supported the experiential advantage for gift recipients ( $M_{\text{Experience}}=5.61$  vs.  $M_{\text{Material}}=4.74, t(132)=3.41, p<.01$ ), while gift-givers did not believe in an advantage for experiences ( $M_{\text{Experience}}=4.97$  vs.  $M_{\text{Material}}=4.81, t<1$ ). Thus, it seems that consumers are biased towards material goods when in fact experiences would lead to more recipient happiness.

Study 3 used a different methodology whereby participants recalled three gifts that they either received or gave around the holidays. As in study 2, participants rated how much each gift contributed to their own or recipient’s happiness, and rated each gift as more material or more experiential. Using a hierarchical analysis

regressing happiness on to each participant's material/experiential ratings, the results again showed a significant difference between givers and receivers. Givers did not believe that their experiential gifts led to more happiness ( $b=.034$ ,  $t(233)=1.10$ ,  $p=.27$ ), while receivers showed that experiential gifts led to more happiness ( $b=.157$ ,  $t(233)=3.30$ ,  $p<.01$ ).

In sum, the research shows that though giving experiences leads to more receiver happiness than giving material goods, givers believe otherwise. Consumers tend to give more material gifts because they are more traditional—and thus more likely to conform to the social norms of gift giving—and because givers view them as demanding less effort from the part of the receiver. For receivers, though, the extra effort and nontraditional nature of experiences is outweighed by the additional happiness. Therefore, it seems that consumers would be better off giving more experiences than material gifts. Yet, this may be a hard pill to swallow for many gift givers, because they mispredict their recipient's happiness pre-consumption. And even if givers overcome their mispredictions about experiences, the extra happiness associated with experiential gifts comes at a cost—they are perceived as less traditional and requiring more effort from the recipient.

## Mental Accounting and Gift Card Spending

### EXTENDED ABSTRACT

How people spend money can be strongly influenced by what, exactly, is being spent. Although individuals enjoy receiving and (sometimes) spending money in any form, how money in the form of a gift card is spent remains unclear. Gift cards were the most requested holiday item in 2009, and had held the top position for the previous three years (NRF 2009). With gift card spending increasing, it is important to know how gift cards are spent as compared to other tender types. The principle of fungibility entails that money not be endowed with specific meaning that might constrain its use. This is an implausible assumption in the case of gift cards, which are typically attached to a specific retailer. In our research, we show that gift cards reduce guilt associated with hedonic spending, thereby increasing indulgent purchasing and generosity towards others.

**Study 1.** Participants ( $n=200$ ) were asked to imagine that they had either a gift card or cash, and had to choose between buying a hedonic item (a novel) or a utilitarian item (a book on doing one's taxes at home). Following the purchase decision, participants reported how guilty they would feel buying each item. A higher proportion of participants in the gift card condition (76%) indicated that they would purchase the hedonic item as compared to individuals in the cash condition (57%),  $X^2(1, N=200)=8.69$ ,  $p<.01$ . To test our prediction that guilt mediates the relationship between condition (gift card or cash) and hedonic purchasing, we conducted a mediational analysis (Hayes 2013). Although condition predicted both hedonic purchasing ( $b=-.90$ ,  $p<.01$ ) and guilt ( $b=-.72$ ,  $p<.01$ ), the relationship between condition and hedonic purchasing dropped to non-significance when adjusting for differences in guilt. A bias-corrected bootstrap 95% CI indicated that the indirect effect through guilt was significant,  $a \times b = -.72$ , 95% CI: [-1.24, -.22].

**Study 2.** Participants ( $n=40$ ) were given the opportunity to earn money (\$5) by completing a trivia task. Half of the participants received their money as a gift card; the other half received their payment in cash. All participants were required to spend their earnings in a laboratory store stocked with items that had been pretested as hedonic or utilitarian. Individuals in the gift card condition spent a significantly higher proportion of their money on luxury items ( $M=.76$ ,

$SD=.29$ ) than individuals in the cash condition ( $M=.47$ ,  $SD=.38$ ),  $t(36)=2.53$ ,  $p<.05$ .

**Study 3.** Six years of transactional data were collected from a bookstore. The dataset included all individuals who had used a gift card during this period and a randomly selected subset of those who had made credit card purchases. Individuals ( $n=13,883$ ) were separated into three types: those who exclusively used a credit card, those who exclusively used a gift card, and those who used both a credit card and gift card. Our primary analysis focused on individuals who had used both tender types. We calculated, for each of these participants, the proportion of their total gift card expenditures that: 1) were made in hedonic departments (e.g. college memorabilia); and 2) were made in utilitarian departments (e.g. textbooks). A significantly higher proportion of the total amount spent with gift cards were in hedonic departments ( $M=.52$ ,  $SD=.43$ ) compared with credit cards ( $M=.21$ ,  $SD=.17$ ),  $t(331)=12.597$ ,  $p<.0001$ . Additionally, individuals who had exclusively used a gift card spent a significantly higher proportion of their total amount in hedonic departments ( $M=.54$ ,  $SD=.44$ ), compared with individuals who had exclusively used a credit card ( $M=.30$ ,  $SD=.28$ ),  $t(12,840) = 33.361$ ,  $p<.0001$ .

**Study 4a.** The previous studies focused on how individuals use gift cards to treat themselves; in the following studies, we examined how gift cards might promote generosity towards others. Participants ( $n=78$ ) were asked to imagine that they were out to dinner with a friend and were planning on paying with a restaurant gift card or with cash. Participants were told that they had enough money on the gift card (or cash in their wallet) to pay for both meals, and were asked if they would buy both their and their friend's meal. A higher proportion of individuals in the gift card condition indicated that they would purchase their friend's meal (85.7%) as compared to individuals in the cash condition (60.5%),  $X^2(1, N=78)=6.075$ ,  $p<.01$ .

**Study 4b.** Participants ( $n=92$ ) were asked to imagine that they were at a bookstore with a friend and were planning to pay with a gift card or with cash. Participants were told that they had enough money on the gift card (or cash in their wallet) to pay for both their and their friend's book, and were asked if they would buy both. A higher proportion of individuals in the gift card condition indicated that they would purchase their friend's book (74%) as compared to individuals in the cash condition (42.9%),  $X^2(1, N=92)=9.208$ ,  $p<.01$ .

**Study 5.** This study examined the differences between gift cards and cash received as a gift when it comes to experiential and material purchases. Participants ( $n=120$ ) were assigned to one condition of a 2 (tender type: gift card or cash gift)  $\times$  2 (purchase type: experiential or material) full factorial design. A binary logistic regression model was used with tender type (-1 = cash gift and 1 = gift card) and purchase type (-1 = material and 1 = experiential) as predictor variables, and with treating a friend (1 = Yes and 0 = No) as the dependent variable. We found two main effects: 1) individuals were more likely to buy their friend an item when using a gift card than when using a cash gift ( $B = .96$ ,  $SE = .23$ ,  $p < .0005$ ), and 2) were more likely to treat a friend to an experiential rather than a material purchase ( $B = .829$ ,  $SE = .23$ ,  $p < .0005$ ).

These studies indicate that gift card spending is unlike that made with other tender types. Gift cards increase hedonic spending compared to cash and credit cards, due in part to decreased guilt about hedonic purchasing. Additionally, gift cards may increase generosity towards others.

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# Unexplored Sides of Mental Imagery

Chairs: Luca Cian, University of Michigan, USA

Aradhna Krishna, University of Michigan, USA

## **Paper #1: A Sign of Things to Come: Increasing Desired Behavior through Dynamic Iconography**

Luca Cian, University of Michigan

Aradhna Krishna, University of Michigan

Ryan S. Elder, Brigham Young University

## **Paper #2: Dark is Durable, Light is Convenient: Color Value Influences Perceived Product Attributes**

Henrik Hagtvædt, Boston College

## **Paper #3: So Close I Can Almost Sense it: The Impact of Differences in Sensory Imagery Distance on Consumer Attitudes and Intentions**

Ryan S. Elder, Brigham Young University

Morgan Poor, University of San Diego

Lidan Xu, University of Illinois

## **Paper #4: Sense and Mental Imagery: The Persuasive Implications of Visualizing Proximal and Distant Senses**

Ann E. Schlosser, University of Washington

### **SESSION OVERVIEW**

Mental imagery is a familiar aspect of most people's everyday life (Marks 1999). Defining and measuring it, however, is difficult (Kosslyn, Thompson, and Ganis 2006).

Paivio (1969) was among the first to demonstrate the fundamental importance of imagery in memory and information processing, and to show that this construct can be experimentally manipulated. Since then, imagery has been studied extensively within consumer behavior literature. However, the vast majority of research has focused either on static visual imagery (the mental representation of static and fixed objects; e.g., Petrova and Cialdini 2005), or on how to facilitate and induce visual imagery of an attribute (e.g., McGill and Anand 1989).

The goal of this special session is to group together research on less studied, but not less important, aspects of mental imagery. Each of four papers contributes uniquely to our understanding of mental imagery and raises several important questions. Collectively, we ask what unexplored elements of mental imagery can be relevant in consumer research. Consequentially, can a subtle variation in these imageries automatically and subconsciously affect consumer perceptions, preferences, and behaviors? As these papers show, imagery is relevant in numerous research domains within consumer behavior, and the special session is uniquely positioned to attract a broad audience at ACR.

The first paper in the session, by Cian, Krishna, and Elder, focuses on dynamic imagery, an aspect of imagery that has received almost no attention in consumer research. Across four studies incorporating multiple methodologies and technologies, the authors show that icons able to evoke dynamic imagery affect consumer behavior (in their propensity to act).

With an analogous reasoning, in the second paper, Hagtvædt proposes that colors are able to change how consumers imagine product attributes. Previous studies in consumer research that have examined colors have left the relation between colors and mental imagery largely unexplored. In this work, seven studies address this issue showing how judgments related to density, heaviness, durability, and convenience change systematically based on the color of the stimuli.

The third and the fourth papers in the session focus on multi-sensory experiential imagery beyond visual imagery. Specifically, the third paper, by Elder, Poor, and Xu, shows across four studies how images evoked using different sensory modalities (e.g., imagining a barbecue through smell versus vision) affect perceptions of distance from the product advertised, ultimately affecting behavioral intentions and attitudes.

The fourth paper, by Schlosser, continues the theme of how multi-sensory imageries can vary in psychological distance, changing the perspective. Indeed, the three studies described in this paper use different manipulations of social distance and show how imagery vividness mediates the effect.

Each paper contributes to our overall theoretical understanding of the less explored aspects of mental imagery and their effect in a consumer context. Ultimately, we hope this session, in accordance with the ACR theme of this year, will spur further discussion of and *inspire passion* in the exploration of these new topics.

## **A Sign of Things to Come: Increasing Desired Behavior through Dynamic Iconography**

### **EXTENDED ABSTRACT**

We propose that perceived movement (or dynamic imagery) from static visuals prepares the observer for action and impacts behavior. The ability of static images and icons to convey movement presents one of the more intriguing, yet underexplored characteristics of visual stimuli. Unlike static visual imagery, dynamic imagery allows for images within the mind to continue in motion, resulting in a moving trajectory or perceived movement of a static image (Clark and Paivio 1991).

We operationalize our research within the context of traffic icons. The number of people injured or killed in traffic accidents each year is staggering, and traffic signs are placed in areas of potential danger to evoke desirable driving behaviors and reduce accidents. Can a subtle difference in traffic icons affect human behavioral response?

In this research, we focus on one dimension of the traffic icon – the perceived movement (or dynamic imagery) that the icon elicits. We hypothesize that dynamic imagery will affect human behavior. Specifically, perceived movement will lead to a propensity for the observer to act, influencing his/her behavior, reaction times, and attention. We test these hypotheses across four studies.

Exploring the implications of subtle changes in traffic signs on consumer behavior, we also contribute to a recent call for research on consumer and societal well-being (Mari 2008; Mick 2008; Mick et al. 2011).

In study 1a, we created four different stimuli, with each stimulus containing a road with a road sign of children crossing as seen from above. Two of the signs were visual icons of children (with lower and higher dynamism visuals). The other two signs were control conditions (higher and lower dynamism verbal depictions of the visual sign, namely, “running children” and “children ahead”). These verbal depictions allow us to test whether differences in behavior are due to differences in inferred conceptual meaning of perceived movement, or whether there is something unique about dynamic visual imagery. Participants were randomly assigned to view one of the four maps and were instructed to imagine themselves driving

on the road depicted in the picture. They were further instructed to click on the location of the road where they would start to slow down their vehicle in response to the traffic sign. We programmed the survey to place a small car where the participant clicked. The final position of the car (click), as measured in pixel coordinates, represented our main dependent variable of interest. We found support for our hypothesized effect: participants indicated earlier positions to begin slowing down when shown a higher dynamism versus lower dynamism visual sign. Similarly, the higher dynamism visual sign differed from both verbal signs. Together, this suggests that the perceived movement in the higher dynamism visual sign affects behavior and not simply the activation of the concept of the sign.

Study 1b tests if the results of study 1a carry over to a consumer setting, and within a less familiar context with less known signs. We created an aerial view of a mall parking lot with a road sign. The road sign portrayed a higher or lower dynamism icon of a shopper with a shopping cart. Instructions and the procedure were similar to study 1a. As in the prior study, participants indicated earlier positions to begin slowing down when shown a higher dynamism versus lower dynamism visual sign.

In study 2, we extend the findings of studies 1a and 1b in a video driving simulation. We created a driving video that showed a drive along a country road as seen from the driver's point of view. During the video, two types of traffic signs appeared randomly on the screen (warning signs or informative signs). The warning signs were traffic signs with either lower or higher dynamism. We use informative signs as control condition. Participants were asked to press the "i" key if the sign was informative and "w" if the sign was a warning. Our dependent measure in study 2 is reaction time to the signs presented. Supporting our hypothesis, results revealed that participants reacted significantly faster to warning signs with higher dynamism than to warning signs with lower dynamism, or to informative signs. There was no difference between warning signs with lower dynamism and informative (control) signs.

In study 3, we examine how perceived movement affects attention. Specifically, we created eight pictures depicting a first-person driving view, with four lower dynamism and four higher dynamism signs. We used four different driving scenes and backdrops. Participants were randomly assigned either to a condition with only lower dynamism signs or to a condition with only higher dynamism signs. We used eye-tracking technology to measure the time to first fixation, which is the time in milliseconds from when a scene is shown to a person until the person's eyes fixate the traffic sign. The eye-tracker results in study 3 support our hypotheses that static pictures with higher perceived movement are able to draw attention more quickly, resulting in an earlier fixation (vs. less dynamic signs).

Our findings show the behavioral consequences of perceived movement from static visuals. In four studies, using multiple methodologies and technologies, a higher dynamism (vs. lower dynamism) icon results in an earlier (studies 1a and 1b) or faster (studies 2 and 3) propensity to act.

Theoretically, our exposition of the effects of perceived movement on behavior provides a foundational framework for future research within consumer psychology and behavior. Finally, our studies show dynamic imagery to be an important and underexplored construct within both cognitive psychology and consumer behavior.

## **Dark is Durable, Light is Convenient: Color Value Influences Perceived Product Attributes**

### **EXTENDED ABSTRACT**

This research demonstrates that consumer perceptions of product attributes such as durability and convenience are malleable; they can be influenced by something as simple as the shade of color applied to the product's surface. Darker shades enhance the perception of durability, but lighter shades enhance the perception of convenience. Both effects arise because consumers associate darkness with weight (Alexander and Shansky 1976; Walker, Francis, and Walker 2010). We expect that when consumers imagine using heavy products (relying on their mental imagery), they tend to view them as more robust and durable, but less convenient or easy to handle, than lighter products. The current findings contribute to the literature on sensory and imagery phenomena in general (Krishna 2012) and color in specific (Bagchi and Cheema 2013; Gorn et al. 2004; Labrecque, Patrick, and Milne 2013), as well as durability and convenience (Berry, Seiders, and Grewal 2002; Bruce, Desai, and Staelin 2005).

The empirical investigation comprises seven experiments. First, three pilot studies are designed to replicate and add nuance to existing findings pertaining to the influence of color value (i.e., the degree of darkness or lightness in a given color, with black on the low-value end and white on the high-value end) on perceived weight. Next, four main studies shed light on the influence of color value on perceived convenience and durability.

Pilot Study A served as a preliminary investigation of the proposed variable underlying the influence of color value on perceived weight, namely, perceived density. Participants viewed a comparatively light (100% value) or dark (80% value) grayscale image of the same forest, and results revealed that the participants viewing the darker image perceived the forest to be denser. Pilot Study B extended this finding to the context of consumer products. It was designed to investigate the mediating role of perceived density in the influence of color value on perceived weight, while also ruling out an alternative explanation for the findings, namely, that the results might stem from a perception of contrast between target stimuli and background. Participants were randomly assigned to one of six conditions. On a computer screen, they viewed either a light (100% value) or dark (50% value) blue suitcase, placed next to an intermediate (75% value) blue suitcase. The intermediate suitcase served as a benchmark. Contrast was manipulated by displaying the background in one of the three identical shades used for the suitcases. The study was a 2 (color: light vs. dark) x 3 (background: light vs. dark vs. intermediate) between-subjects experiment. Results revealed that the suitcase with the darker (vs. lighter) color was perceived to be heavier, while there were no effects stemming from contrast. Similarly, the darker suitcase was perceived to be denser, and this perception of density mediated the influence of color value on perceived weight. Pilot Study C replicated this pattern of results, including the mediating role of density, but the experiment relied on colored blocks that the participants physically lifted before estimating their weight.

In Study 1A, participants viewed images of two red laptops that were identical in shape and color, except that the color of one was comparatively light (100% value) while the color of the other was comparatively dark (50% value). When given a goal of durability, a significantly larger proportion of participants chose the darker laptop, while also identifying it as the heavier one. In Study 1B, participants viewed the same two laptops but were given a goal of convenience. A significantly larger proportion of participants chose



the lighter-colored laptop, while identifying the darker-colored laptop as heavier.

In Study 2A, participants viewed either a light (100% value) or dark (50% value) blue suitcase, depending on randomly assigned condition, and they reported perceived durability and perceived weight of the suitcase. Results revealed that the darker-colored suitcase was perceived to be more durable as well as heavier than the lighter-colored suitcase. Further, perceived weight mediated the influence of color value on perceived durability. In Study 2B, participants viewed one of the same two suitcases from the previous study, and they reported perceived convenience and perceived weight of the suitcase. Results revealed that the darker-colored suitcase was perceived to be less convenient but heavier than the lighter-colored suitcase. Further, perceived weight mediated the influence of color value on perceived convenience.

In these seven studies, judgments related to density, heaviness, convenience, and durability changed systematically based on the color of the stimuli, showcasing the prominent role of visual imagery in altering the perceived qualities of an object. This research goes beyond prior literature in showing that the perception of usage-relevant attributes depends on product color, suggesting a more elaborate process than would be needed for the perception of basic physical properties such as weight. In each of the main studies, participants only viewed images and hence must base their perception of product attributes such as convenience on the imagined rather than actual use of the products. However, follow-up studies could be conducted to investigate whether these perceptions change when physically interacting with the products.

### **So Close I Can Almost Sense it: The Impact of Differences in Sensory Imagery Distance on Consumer Attitudes and Intentions**

#### **EXTENDED ABSTRACT**

Sensory experiences, including sensory images (e.g., visual and haptic imagery), are difficult to compare to one another as they share few common dimensions. However, one underlying dimension that sensory experiences share and uniquely differ on is the distance from the stimulus required for perception (Rodaway 1994). Thus, for a stimulus to be perceived by the sense of touch it must be close to the individual, whereas for the same stimulus to be perceived visually, it may be further away. We propose and show that sensory imagery follows a similar pattern to actual perception on this distance dimension. Across four studies, we specifically highlight how images evoked using different sensory modalities affect both the perceived physical and psychological distances between the consumer and the stimulus, ultimately affecting attitudes and intentions. In general, more proximal (closer) sensory images lead to higher attitudes for physically or psychologically close experiences, whereas more distal (farther away) sensory images lead to higher attitudes for physically or psychologically distant experiences.

*Pilot Study.* With the pilot study we test whether the five senses differ in their imagined distance from a given stimulus. Forty participants were told to imagine a steak skillet using each of the five senses in randomized order (we chose food as it can be experienced with all of the senses). They then rated how far the skillet was away from themselves in their image (0-10 feet).

As hypothesized, taste was rated as the closest sensory image, followed by touch, smell, vision, and sound. The imagined distance for hearing did not differ from that of vision or smell. However, hearing, smell, and vision each significantly differed in distance from both touch and taste. Touch and taste did not differ from one another.

Thus, the results from the pilot study suggest that hearing, vision, and smell may be classified as more distal sensory experiences, with touch and taste classified as more proximal sensory experiences. We use this classification of sensory experiences in the subsequent studies.

*Study 1A.* In study 1a, we randomly assigned participants to use their sense of taste (proximal) or sense of vision (distal) to imagine all of the experiences they would have while visiting a restaurant. Our dependent variable measured how far the imagined restaurant was perceived to be from where participants lived (0-200 miles). We found that when participants were told to imagine a proximal sensory experience, they reported the distance of the restaurant to be significantly closer than those told to imagine a distal sensory experience ( $M_{\text{proximal}}=13.67$ ,  $M_{\text{distal}}=29.96$ ;  $p<.05$ ).

*Study 1B.* In study 1b, participants read a restaurant review that contained either proximal (taste and touch) or distal (vision and sound) sensory experiences. Participants were shown a six-month calendar and were asked to indicate when they would like to make a reservation for the restaurant. This measure served as our dependent variable. We also measured attitudes toward the restaurant to ensure that any differences in temporal distance weren't attributable to differences in attitudes. There was no difference in attitudes resulting from the reviews ( $p>.5$ ). However, there was a difference in the reservation date. When participants read the proximal review they made reservations significantly closer in the future than when they read the distal review ( $M_{\text{proximal}}=5.62$  weeks,  $M_{\text{distal}}=9.50$  weeks;  $p<.05$ ).

*Study 2.* In study 2 we establish conditions of congruence and incongruence between sensory imagery and physical distance, and then explore the impact of the level of congruity on attitudes. We hypothesize that congruence between sensory imagery and physical distance will lead to higher attitudes than incongruence.

One hundred and seventy-five participants were told that they would be imagining a restaurant experience. Participants were randomly assigned to one of two physical distance conditions (city in which they live or different state). Next, they were randomly assigned to imagine all of the taste or visual experiences they would have at the restaurant. We captured attitudes toward the restaurant as our dependent variable.

As hypothesized, the interaction between sensory imagery and physical distance was significant ( $p=.02$ ). Planned follow-up contrasts reveal that within the same-city condition, proximal imagery led to higher attitudes than distal imagery ( $M_{\text{proximal}}=8.06$ ,  $M_{\text{distal}}=7.64$ ;  $p=.09$ ). Within the different-state condition, distal imagery led to higher attitudes than proximal imagery ( $M_{\text{proximal}}=7.32$ ,  $M_{\text{distal}}=7.78$ ;  $p=.07$ ).

*Study 3.* One of the natural consumer contexts in which differences in sensory imagery proximity may be consequential is when comparing online versus in-person purchase decisions. In study 3, we explore this context. We propose that for an in-person (online) presentation proximal (distal) sensory imagery will lead to higher attitudes.

One hundred and fifty-seven undergraduates were told that they would be providing product evaluations for a toy football. Participants were randomly assigned to read one of two advertisements: a proximal advertisement focused on the touch experience of the football, or a distal advertisement focused on the sound the football made when squeezed. Next, participants were randomly assigned to either view the football in person, by opening a box to the side of the computer (but not to touch or move the football inside), or to view a picture of the football online. We captured their attitudes toward the football as our dependent variable.

The hypothesized interaction was significant ( $p < .005$ ). Follow-up contrasts revealed that when the football was presented in-person, the proximal advertisement led to higher attitudes than the distal advertisement ( $p < .01$ ). However, when the football was presented online, the distal advertisement led to higher attitudes than the proximal advertisement ( $p = .13$ ).

Our findings across a pilot study and four additional studies suggest that the specific sensation consumers use to form their images can have important consequences on attitudes and intentions.

### **Sense and Mental Imagery: The Persuasive Implications of Visualizing Proximal and Distant Senses**

#### **EXTENDED ABSTRACT**

Mental imagery is often treated as synonymous with visual imagery. Yet, as reflected in the mental-imagery scale developed by Betts (1909), mental imagery encompasses all of the senses: sight, sound, smell, touch and taste. Although it has been recognized that mental imagery can involve all five senses, the majority of research on mental imagery has concentrated upon visual imagery (Elder 2008; MacInnis and Price 1987). Consequently, it is unclear whether there are differences in imagery evoked across these different senses, and if so, when one is more effective than the other. This research aims to address these questions.

Based on construal level theory, I derive predictions about referring to different senses is most persuasive and why. Psychological distance is egocentric, with the reference point being the individual in the present moment, and can vary depending on the degree of temporal, spatial, and social distance (Trope and Liberman 2010). Similarly, senses can be characterized in terms of distance from the individual. For instance, based on whether an item needs to be within an individual's reach in order to be sensed, smell and touch have been characterized as intimate senses, whereas hearing and sight have been characterized as distant senses (Rodaway 1994). Likewise, others have proposed that taste is most proximal because an object needs to be inside one's mouth in order to be tasted, followed by touch, smell, hearing and sight (Skurnik and George 1964; Trope and Liberman 2010). If senses vary in psychological distance, then referring to a sense should be more persuasive when it matches other dimensions of psychological distance (e.g., both sense distance and social distance are proximal). Furthermore, the underlying mechanism is proposed to be ability to vividly imagine the product. I predict that individuals will be better able to formulate a vivid mental image when sense distance matches the psychological distance of a different dimension (e.g., taste and present tense). I test these hypotheses in four experiments.

Study 1 examines 31,889 Yelp.com restaurant reviews posted in 2012. Consistent with prior research on online reviews, the key dependent variable was the number of "useful" votes a review received from readers (Chen and Lurie 2013). Furthermore, consistent with other research on online reviews (Ludwig et al. 2013), the text of the reviews were automatically coded using the linguistic inquiry and word count (LIWC) program (Pennebaker et al. 2007). The key independent variables extracted from the LIWC were mentions of present tense and mentions of sight and touch. As predicted, regression analyses yielded both a significant present x sight effect ( $b = -.02$ ,  $p < .05$ ), and present x touch effect ( $b = .02$ ,  $p < .05$ ), such that more mentions of sight (touch) led to more useful votes when there were also more (less) use of the present tense.

Study 2 extends these results with a lab study comparing a different pair of senses (sight and sound), and using a different dimension of psychological distance. 107 participants were randomly

assigned to a condition in a 2 (social distance: pictures present vs. absent) x 2 (sense: sight and sound) experimental design. Because study 1 compared the most proximal sense (touch) to the most distant sense (sight), sound was chosen to provide the most conservative test of the hypothesis. All participants read an extremely favorable (5-star) review of a stereo written by a male who lived in the same city as where they attended school (to hold constant spatial distance). To manipulate social distance, consistent with past research indicating that pictures of reviewers can reduce social distance (Schlosser 2009), in the low (high) distance condition, a picture of the reviewer was present (absent). Sense was manipulated in the review itself. Using content from actual peer reviews of stereos posted on websites, two reviews were constructed that either discussed the favorable features of how the stereo looked or sounded. After reading the review, participants reported their attitudes toward the stereo as well as their perceptions of the reviewer. At the very end of the study, participants reported their demographic information. Participants' gender and whether they are a native English speaker were included as covariates in the analyses to control for any variation in social distance due to being of a different gender or nationality than the reviewer. As expected, the sense x social distance interaction was significant ( $F(1,99) = 4.85$ ,  $p < .05$ ;  $F(1,103) = 4.24$ ,  $p < .05$  without covariates). Attitudes were higher when sound was mentioned and social distance was low than high ( $M_s = 5.64$  vs. 5.11), whereas attitudes were higher when sight was mentioned and social distance was high than low ( $M_s = 5.41$  vs. 5.20).

Study 3 further tests the hypothesis by comparing sight with touch, using a different manipulation of social distance as well as tests for mediation. 100 participants were randomly assigned to a condition in a 2 (social distance: own vs. different university) x 2 (sense: sight vs. touch) experimental design. Participants saw a screen capture of a website for a university sweatshirt that they were considering buying for a friend who either attended the participant's university (low social distance) or a different university (high social distance). General information about the sweatshirt was identical with the exception of being described in terms of touch ("See the difference") or sight ("Feel the difference"). In addition to product attitudes, participants also reported their intentions to buy the product and their attitudes toward the website. Finally, to test for mediation, participants completed a measure of how vivid their image of the product was. Replicating and extending the results of the prior studies, the sense x social distance interactions were significant for product attitudes, site attitudes and purchase intentions ( $F_s(1,93) > 4.98$ ,  $p < .05$ ) with the cell means being in the predicted direction. Furthermore, sense x social distance significantly affected imagery vividness ( $F(1,93) = 4.27$ ,  $p < .05$ ). Finally, bootstrapping methods suggest that imagery vividness is a significant mediator of the sense x social distance effect on attitudes and intentions (95% confidence intervals excluded zero).

Taken together, the results of three studies are suggestive that human senses can vary in psychological distance, thereby influencing how persuasive a message is.

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# The Psychology of Debt: Steering Consumers out of the Red and Into the Black

Chairs: Grant E. Donnelly, Harvard Business School, USA

Nina Mazar, University of Toronto, Canada

## **Paper #1: Spending Credit Like a Windfall Gain**

Cynthia Cryder, Washington University St. Louis, USA

Laura Xiao, Washington University St. Louis, USA

## **Paper #2: Debt Repayment Strategy and Consumer Motivation to Get Out of Debt**

Keri Kettle, University of Miami, USA

Remi Trudel, Boston University, USA

Simon Blanchard, Georgetown University, USA

Gerald Häubl, University of Alberta, Canada

## **Paper #3: Balance Reframing: Paying by the Purchase Promotes Higher Repayments**

Grant E. Donnelly, Harvard Business School, USA

Zoe Chance, Yale University, USA

Michael I. Norton, Harvard Business School, USA

## **Paper #4: Applying Behavioral Science in the Field: Nudging Customers to Pay Their Credit Card Dues**

Nina Mazar, University of Toronto, Canada

Dan Ariely, Duke University, USA

## **SESSION OVERVIEW**

Millions of consumers around the world have high-interest credit card debt. In the US alone, credit card use grew 50% in the last decade (US Census Bureau, 2010), with an average household credit card debt of \$10,678 (a 29% increase from 2000; see Chu & Acohido, 2008). This growth in indebtedness has not only had a devastating effect on individuals' personal finances, but has also been associated with increased negative affect (Silvera et al., 2008), lower life satisfaction (Norvilitis et al., 2006), greater instances of domestic violence (Fox et al., 2002) and even suicide (Yip et al., 2007). Despite the ubiquity of indebtedness, many essential questions about credit card use and debt repayment are just coming under the lens of consumer research. This symposium will present cutting-edge research on the psychological underpinnings on using credit, and new insights toward repayment motivation and behavior, with an emphasis on how to reduce consumer indebtedness.

First, Cryder will explore why using credit is so alluring. Cryder's research reveals that the term 'credit' prompts consumers to mentally code credit as a gain, changing the psychophysical representations of spending. A 'credit' (relative to a 'loan') mindset prompted consumers to respond quicker to gain-oriented words, view credit as a larger windfall gain, increased consumer happiness and resulted in additional interest in spending. These findings highlight how credit card terminology may introduce ambiguity to psychological processes of spending, encouraging consumers to feel as if they are spending a windfall gain, rather than incurring a loss, which may contribute to overspending and buildup of debt. Second, Kettle will examine how consumer motivation to repay existing credit card debt is affected by their repayment strategy. Using credit card data and online experiments, Kettle's research shows that the most effective strategy is for consumers to focus their debt payments on a single debt (rather than simultaneously repaying many debts). This focused pursuit leads consumers to perceive greater progress and increases motivation to repay. Third, Donnelly demonstrates that consumers pay more toward their credit card debt if they are given the option of paying off specific purchases, rather than making a payment on

the aggregated balance. When given the option consumers prioritize payment of more 'painful' purchases- splurges and interest charges.

Building on these findings, our symposium next examines real relationships between a credit card company and its customers. Mazar will present findings from a large-scale field experiment with over 500,000 delinquency instances, in which she manipulated the interactive voice recording message that reminds customers of their past dues. Mazar shows that creating a sense of urgency, targeting debt literacy, and helping customers to form implementation intentions substantially decreased delinquency and the time to repay one's past dues.

Spending too much on credit, making insufficient payment and missing the payment due date can prove costly to consumers, potentially resulting in long-term consequences. Together, the talks in this symposium will shed light on the benefits produced by small interventions grounded in judgment and decision-making that may significantly help consumers combat their debt.

## **Spending Credit Like a Windfall Gain**

### **EXTENDED ABSTRACT**

Credit card debt plays a significant role in total consumer debt, totaling \$4,530 of average debt per credit card holder in 2011 (Federal Reserve Bank, 2010; 2011). Credit cards pose multiple challenges to consumers. First, credit cards have high interest rates: once consumers have accrued credit card debt it is expensive to pay off. Another challenge posed by credit cards is that, at least in some cases, credit cards encourage consumers to spend more in the first place, imposing a "credit card premium" (Feinberg 1986; Raghurir and Srivastava 2008; Prelec and Simester, 2001; Soman 2003).

The "credit card premium" describes the tendency for consumers to spend more, up to 100% more, with credit cards compared to other spending currency such as cash (e.g., Feinberg 1986; Prelec and Simester 2001). Lower liquidity constraints, deferral of payment (Laibson 1997; Soman 2001), and decreased transparency of the payment amount (Soman 2003) combine to partially explain the credit card premium. However, we propose that there is an additional contributing factor that remains to be understood. Specifically, we hypothesize that using the term "credit" changes psychophysical representations of spending. Whereas typical spending is coded as a loss, we hypothesize that the term "credit" prompts consumers to mentally code credit as a gain. Therefore, spending credit is psychologically represented as the reduction of a gain, a hedonically less painful prospect than incurring an equivalently sized loss (Kahneman and Tversky, 1979). We test this idea in five experiments.

Experiment 1 used a Lexical Decision task to compare the term "credit" with a financial term that implies a similar arrangement, "loan". Structural differences between these two financial instruments should, if anything, encourage consumers to be more likely to view a loan as a windfall because loan money tends to be in-hand whereas credit money is merely accessible. Nevertheless, we predicted that consumers primed with credit would be more likely to exhibit associations with gains.

Participants first read financially relevant sentences that included the word "credit", the word "loan", or were control sentences. They then judged whether flashed configurations of letters were words or non-words. Participants were marginally significantly

more likely to accurately identify gain-related words when they were primed with “credit” as opposed to “loan” or with control sentences. Additionally, participants primed with “credit” were significantly more likely to accurately identify gain-related words compared to loss-related words or filler words. This pattern did not exist in the “loan” nor control conditions.

Experiment 2A tested whether consumers offered a line of credit represent that account as a gain more frequently than do consumers who are offered an equivalently structured loan. In Experiment 2A, participants were either asked to imagine that they had received a \$500 “line of credit” or a \$500 “loan.” They then were asked to imagine what their account would look like as represented by a bar graph. Next, participants were shown two bar graphs, one with a bar representing \$500 shown as a gain, and the other with the bar representing \$500 shown as a loss. Participants were asked to choose which graph was the closest to their mental representation of their account. Participants in the “credit” condition were significantly more likely to choose the graph with the bar representing a gain than were participants in the “loan” condition.

Experiment 2B tested the same idea, but used a tightly controlled comparison between a \$500 “credit account” versus a \$500 “account” described in equivalent terms. Participants in the “credit account” condition were significantly more likely to choose the graph with the bar representing a gain than were participants in the “account” condition.

Experiment 3 investigated the idea that the term “credit” prompts consumers

consider themselves more favorably in terms of subjective gains or well-being. Participants indicated to what extent their happiness would change after receiving a \$500 line of credit versus a \$500 loan. Participants who imagined receiving a line of credit reported a significant increase in happiness whereas participants in the loan condition reported no change; this difference was significant between conditions.

Finally, experiment 4 examined anticipated spending. Participants who imagined that they had received a \$500 line of credit versus a \$500 loan predicted that they would be more likely to purchase a \$50 DVD set and a \$250 plane ticket.

Using a credit card incurs a financial loss. Yet, credit card terminology introduces ambiguity to the psychological process of spending that encourages consumers to feel as if they are spending down a windfall gain rather than incurring a loss. Such ambiguity may contribute to overspending and over time, to the excessive buildup of consumer debt.

### Debt Repayment Strategy and Consumer Motivation to Get Out of Debt

#### EXTENDED ABSTRACT

Consumers with problematic levels of debt tend to have multiple sources of debt, and must regularly decide how to allocate repayments across their debt accounts. We examine how the allocation of a consumer’s debt repayments influences their subsequent motivation to get out of debt. We theorize that paying down debt accounts sequentially (focusing repayments on one account at a time) rather than simultaneously (spreading repayments out across accounts) causes consumers to perceive greater progress which, in turn, increases their motivation to repay their debt. Evidence from a large consumer debt data set and two experiments provides strong support for the proposed process.

We obtained a dataset (from HelloWallet.com) with a total of 68,858 rows, each representing a separate month for each credit card

account (with a revolving balance) for a total of 2,522 clients. In every month, we measure how their repayments varied from entirely simultaneous (all repayments equal across all accounts) to entirely sequential (only one repayment is made across the indebted accounts). Our measure is based on the Index of Dispersion (Cox and Lewis 1966) and, once normalized, is a continuous score bounded between 0 and 1, where 0 indicates a completely simultaneous strategy and 1 indicates a completely sequential strategy.

We analyzed the effect of debt repayment strategy in month  $t$  on the total amount of repayments in the subsequent month ( $t + 1$ ), while including fixed effects for a consumer’s total debt, number of credit cards, credit card spending, and total debt repayment. In support of our theoretical account, the use of a more sequentially oriented repayment strategy has a positive influence on one’s debt repayment in the subsequent month. This effect is robust to varying levels of indebtedness, credit card spending, and repayment amounts.

To test the proposed psychological process, we conducted two experiments that examined the effect of different debt repayment strategies on consumers’ perceptions of progress and motivation to repay debt. We presented participants with a hypothetical debt repayment scenario, and independently manipulated the total amount of debt repaid and how that amount was allocated across their debt accounts. In support of our theoretical account, participants who had been randomly assigned to more sequential debt repayment strategy perceived greater progress toward the goal of getting out of debt and indicated greater motivation to repay their debt, and perceived progress mediated the effect of debt repayment strategy on motivation.

This is the first research to examine the psychological mechanisms underlying the relationship between debt repayment strategy and motivation to repay debt, and is the first to consider the motivational effects of paying down accounts gradually, as opposed to the discrete events of paying such accounts off altogether. This latter distinction is very important because while closing out a revolving debt account is a very rare event, indebted consumers do regularly make repayments towards their debt accounts, and it is thus important to understand how the ongoing repayment of debt accounts influences the motivation of indebted consumers.

### Balance Reframing: Paying by the Purchase Promoted Higher Payments

#### EXTENDED ABSTRACT

Consumers treat credit differently than other forms of payment. People spend more when using credit cards compared to cash or checks (e.g., Rick, Cryder & Loewenstein, 2008). Possibly, the reason credit cards increase spending is because they allow the consumer to separate the pleasure of buying from the “pain of paying” (i.e., the discomfort of spending money; see Prelec & Loewenstein, 1998), and make the true cost of each purchase more difficult to evaluate by compiling all consumption in a monthly bill (Raghubir & Srivastava, 2008). This strategy relies on insights from prospect theory and the value curve proposed by Kahneman and Tversky (1979). The value curve proposes that humans are sensitive to changes or differences in wealth rather than absolute magnitudes, and that losses loom larger than gains. Considering that credit card companies pool many small losses into one larger loss, they are able to reduce the total loss felt by a consumer (Thaler, 1985).

While this strategy has likely contributed to the accumulation of debt, recent research concerning debt repayment has suggested that aggregated debt balances are overwhelming and difficult to repay. For instance, when consumers are confronted with multiple debts they often prioritize the debt with the smallest balance first (even

when this is not the most financially optimal strategy; see Amar et al., 2011). This tendency is aligned with the literature on sub-goals, suggesting that a short, proximal task will help fuel commitment toward subsequent larger tasks. In fact, a consumer who prioritizes repaying the smallest balance is 14% more likely to become debt free than a consumer who consistently targets the largest balance debt (Gal & McShane, 2012). Further, research has suggested that information presented to consumers at the time of repayment influences repayment decisions. For instance, repayers anchor on the minimum payment requirement (Navarro-Martinez et al., 2011).

Given these conditions, the current study proposes that segregating losses, by allowing consumers to make payments toward each individual purchase on a credit card bill could increase feelings of loss, resulting in increased repayment. The saliency of each cost may (a) increase the pain of parting with money and increase the motivation to repay the purchase, and (b) change perceptions of the manageability of the debt because this process breaks down the charge into smaller pieces.

We presented consumers with a hypothetical purchasing scenario where they made purchases in certain categories (i.e., vacation, clothing). Participants were told that all of these purchases were made on a credit card and were saddled with the same amount of debt. Consumers were presented with either an aggregated debt balance, or an aggregated debt balance with line items that composed the debt (segregating the losses of the debt). Consumers who saw line items were able to allocate money towards certain purchases, while those who saw the aggregated balance were only able to allocate toward the total balance. Consumers who were able to repay toward specific purchases allocated more money toward debt repayment ( $M = \$561.64$ ), than those who paid toward the aggregated balance ( $M = \$473.50$ ),  $p < .001$  (a near 19% increase in repayment).

In another scenario, consumers were presented with the same hypothetical purchasing task but were told that half of the purchases were made on a credit card that allowed purchasing toward the individual purchases, while half were made on a credit card that allowed purchasing on the total balance. Consumers paid significantly more toward the card that allowed repayment toward specific purchases ( $M = \$333.01$ ), relative to the card that allowed repayment toward the total balance ( $M = \$131.75$ ),  $p < .001$  (a near 153% increase in allocation). Consumers perceived the card that allowed payments on the whole balance as bigger than the card that allowed payments toward specific purchases  $t(179) = 2.36$ ,  $p = .019$ .

Consumers who were given the option to repay toward specific purchases prioritized payments toward interest charges and vacations. Previous research has suggested that consumers prefer to pay off vacations prior to the trip because paying for purchases after the benefits have been received is aversive (Hirst et al., 1997). Our findings suggest that when given the option, consumers will make payments toward items they find aversive, or where losses loom larger. Nearly 40% of consumers expressed interest in switching to a credit card that allowed for repayment by the purchase, and this effect was even larger (50%) for consumers who maintain a credit card balance from month-to-month, suggesting that this method might have increased benefits to individuals who struggle with repaying their debts.

### **Applying Behavioral Science in the Field: Nudging Customers to Pay Their Credit Card Dues**

#### **EXTENDED ABSTRACT**

Consumer loans, in principle, serve an important function in society benefiting both consumers and lenders (Shapiro, 2011; Skiba, 2012). In particular, using credit cards can help consumers to man-

age cash flow and expand their financial capabilities. At the same time, credit card loans can also be costly to both consumers and lenders. For consumers who do not pay off their balance in full each month debt can quickly spiral out of control due to accumulating daily interest charges on their outstanding debt. In addition, consumers, who do not make their monthly minimum payment (also referred to on monthly statements as “total due”), become delinquent, which usually results in late fees and potentially downgraded credit scores. The lenders on their side face the risk of not being able to recuperate their loans in case of consumer defaults. In this project we focus on testing interventions that might be helpful in diverting such potential lose-lose situations of delinquency for both lenders and borrowers.

In an effort to avoid such damaging and expensive actions, once a card holder has missed one monthly minimum payment and therefore becomes delinquent, credit card companies often make use of interactive voice recording messages (IVR) to make borrowers aware of their total due amount and prompt them to pay it such that their accounts are no longer delinquent (i.e. their accounts move from being “past due” to become “current”). To the extent that IVRs are effective, they can be an economical way to intervene early on in the delinquency process, and potentially eliminate some of its negative consequence.

Standard IVR messages typically tend to assume that the account holder has full information, experience, and knowledge and, therefore, if anything, all they need is to be reminded of their lapse (i.e. that they have a total due amount). While this reminder-approach has merit, it ignores the possibility that the individuals facing delinquency have low levels of financial and debt literacy (Soman and Mazar, 2012). For example, according to a 2009 National Financial Capability Study (FINRA Investor Education Foundation, 2012), people low on financial literacy are significantly more likely to engage in negative (i.e. costly) credit card behaviors. Yet, only about two-thirds of Americans are estimated not to comprehend the workings of credit cards (Lusardi and Tufon, 2009). Thus, one of the main goals of the current research is to test the potential benefits of a script that is focused on better explaining the situation and the actions needed to resolve it.

In addition to the potential limiting effect of debt literacy, there are other possible barriers that could prevent delinquent customer from repaying their debt. For one, it is possible that while repaying their debt is generally desirable, that this intention is not sufficient to create a repayment action. In this regard, it has been shown that helping people to make plans (i.e. forming implementation intentions; Gollwitzer, 1999; Gollwitzer, Bayer, and McCulloch, 2005; Gollwitzer and Sheeran, 2006; Milkman et al., 2011; Nickerson and Rogers, 2010) and making them actively commit to their intentions (Cialdini and Goldstein, 2004; Shu et al., 2012) can increase their likelihood of following through on these plans. These findings have powerful implications for interventions directed toward increasing socially important behaviors that individuals intend to, but often fail to, perform. Thus, in addition to providing delinquent customers with an explanation of their situation and the actions needed to resolve it (debt literacy), we also tested the effect of creating implementation-intentions for their debt repayment (implementation intentions), and the effect of prompting a promise to repay (active commitment).

Together with a North American credit card company that has a substantial share of higher risk subprime customers (i.e. customers of lower credit quality) we tested the effects of five variations of the traditional IVR message (control condition) on customers' likelihood and speed to make payments on their account such that they were no longer delinquent.

The results from our large-scale field experiment conducted over 9 months with over 500,000 call observations suggest that small and fairly cheap changes to an automated IVR message can significantly alter behavior: they can increase the likelihood and speed to pay current a delinquent credit card account. Specifically, our results show that creating a sense of urgency, coupled with a focus on debt literacy and the formation of implementation intentions reduced delinquency by 3.3% (in absolute percentage points) and increased the average speed by which delinquent account holders set their accounts in order by almost a full day (0.9 days).

While it is possible that the improvement in repayment to the focal credit card accounts was done at the expense of other debts, the results suggest that delinquency is not simply an outcome of either forgetting or sheer inability to make a payment. Instead, delinquency might also be due to a lack of understanding or awareness of its meaning as well as non-specific plans to follow through on one's payment intentions.

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# From Eating Healthy to Planned Purchases: Insights into the Interplay Effect of Goals and Planning on Consumer Welfare

Chair: Yanliu Huang, Drexel University, USA

## **Paper #1: Saying “No” to Cake or “Yes” to Kale: Plans to Exclude or Include Foods to Reach Health Goals**

Meredith David, Baylor University, USA  
Kelly Haws, Vanderbilt University, USA

## **Paper #2: It’s Just Too Easy: How Planning Affects Perceived Effort, Goal Value, and Motivation**

Julia Bayuk, University of Delaware, USA  
Juliano Laran, University of Miami, USA

## **Paper #3: Planned but Not Purchased? A Field Study of Drivers and Consequences of Failed Purchases**

Verena Huettl, University of Hohenheim, Germany  
Aleksandra Kovacheva, University of Pittsburgh, USA  
J. Jeffrey Inman, University of Pittsburgh, USA

## **Paper #4: A Metacognitive Perspective on the Motivational Benefits of Planning Across Domains**

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Utpal Dholakia, Rice University, USA  
Leona Tam, University of Wollongong, Australia

### **SESSION OVERVIEW**

Planning has been argued to be beneficial for improving consumer welfare, ensuring people are more motivated to pursue their goals such as exercising more and saving more money (Lusardi and Mitchell 2007; Sniehotta et al. 2005). Prior research has investigated how goal characteristics and planning interact to influence motivation and goal pursuit (Bagozzi and Dholakia 1999). For instance, Earley and Perry (1987) found that people given specific challenging goals do more task planning than those without such goals. Townsend and Liu (2012) showed that planning can backfire and lessen self-control when consumers are far away from achieving their goals.

The proposed session brings together four papers that provide new insights into the interplay effects of goals and planning on consumer welfare. The opening paper by David and Haws investigates how the “inclusion” plans focusing on goal-consistent behavior (e.g., eating healthy food) differ from the exclusion plans focusing on goal-inconsistent behavior (e.g., avoiding unhealthy foods) in influencing healthy eating. They find that high-control consumers are more likely to develop and benefit from inclusion plans. Although low-control consumers tend to develop exclusion plans, they select more healthy food when they have inclusion plans.

Second, Bayuk and Laran examine how planning interacts with goal difficulty to influence consumer motivation to live healthier. They show that planning makes the pursuit of easy goals even easier, which decreases motivation to pursue the goal. When a goal is moderately difficult to reach, planning facilitates goal pursuit by making people believe the goal is important and requires effort to achieve.

Third, Huettl, Kovacheva, and Inman focus on failed purchases in a large-scale field study and identify trip, shopper, and product category characteristics that predict why some purchases were planned but not fulfilled. They also find that customer satisfaction with the retailer decreases when shoppers fail to achieve these planned shopping goals.

Finally, Huang, Dholakia, and Tam investigate how planning in the first domain influences consumers’ motivation to plan in a second domain. They find that when people form an abstract plan

and answer questions regarding why their goal is important, they are more motivated to plan for a second irrelevant domain (e.g., living a healthy life style) compared with when they form a concrete plan where they specify all the event details.

Overall, these papers highlight several new insights into how goals interact with planning to impact consumer welfare using a wide range of research methodologies (longitudinal surveys, field and lab experiments). Giving the relevance of these topics to consumers, marketers, and public policy makers, we believe this session will appeal to a broad ACR audience who are interested in consumer planning, goals, self-control, self-regulation, consumer welfare, in-store decision making, learning, and anyone who is fascinated by the factors that affect their goal achievement.

## **Saying “No” to Cake or “Yes” to Kale: Plans to Exclude or Include Foods to Reach Health Goals**

### **EXTENDED ABSTRACT**

Research in self-control demonstrates the importance of specific goals and plans for achieving these goals. Although many strategies for goal pursuit have been examined (Hoch and Loewenstein 1991), a fundamental distinction that deserves further attention is whether the pursuit plans focus on acceptable (a positive focus) or unacceptable (a negative focus) behaviors. As such, we examine the adoption and use of “inclusion” versus “exclusion” plans with respect to eating behaviors. Fundamentally, focusing on what one should do versus should not do is quite different psychologically, and likely leads to differential effectiveness, yet advice abounds regarding “the best foods for your health” or “foods you should never eat.” To better understand the effectiveness of these systematically different types of plans, we focus on differences based upon individuals’ propensities for self-control (Hofmann et al. 2012).

We advance novel contributions by integrating important considerations for inclusion or exclusion-focused self-control strategies based on individual differences in self-control (measured by the Tangney et al. 2004 GSC scale in all three studies). First, we predict and find that high self-control individuals tend to establish plans that encourage goal-consistent behavior (inclusion strategies), focusing on what they *should* do; whereas, low self-control individuals more naturally use plans that attempt to discourage goal-inconsistent behavior (exclusion strategies), instead focusing on what they *should not* do, likely making it even harder to resist. Second, for high self-control individuals, inclusion plans foster goal commitment. Third, although low self-control individuals report higher commitment to exclusion plans, these individuals make more healthy choices when they have inclusion plans. Overall, the findings suggest inclusion-based plans are more effective, and yet these are uncommon for those who struggle the most to maintain control.

In study 1, participants were prompted to list specific rules they use to guide their food consumption. Participants then evaluated 23 specific strategies created by the authors from online sources providing healthy-eating guidelines. Participants indicated how often they used each strategy. The open-ended rules were coded for inclusion versus exclusion plans. We found that lower self-control individuals were more likely to use exclusion plans than were those high in self-control, who instead showed a propensity to use inclusion plans. Responses to the list of provided strategies revealed that the use of ex-



clusion plans was strongly associated with lower self-control, while the use of inclusion plans was more strongly associated with higher self-control. As such, study 1 establishes important fundamental differences in the inclusion versus exclusion nature of plans developed by those higher or lower in self-control.

Study 2 was a longitudinal study designed to assess commitment to goals following development of inclusion versus exclusion plans. Participants were exposed to one of three experimental conditions: inclusion plans (i.e., focusing on foods that should be eaten), exclusion plans (i.e., focusing on foods that should not be eaten), and a control condition (no plan). After three weeks, participants indicated how committed they were to meeting their goal. The results reveal that, low (high) self-control individuals with exclusion plans were more (less) committed than those with inclusion plans. In addition, in the inclusion condition, high self-control individuals were more committed than those low in self-control; whereas, in the exclusion condition, commitment did not differ as a function of individual-level self-control. We also found that, among low self-control individuals, inclusion plans may have the same effect as having no strategy; whereas, among high self-control individuals, exclusion plans operate in a manner similar to having no specific strategy. We next examine the impact on plan development, liking of foods planned to be included or excluded, and subsequent food choices.

Study 3 asked participants to imagine that they were pursuing a health related goal. We manipulated pursuit strategies using the same procedure as in study 2. To ascertain how effective participants' were in developing lists that would be motivating, participants were later presented with the specific items that they had listed and were asked to indicate how much they liked each item. After several unrelated tasks, participants were presented with a list of 16 hypothetical snack choices (8 healthy and 8 unhealthy; Laran 2009) that they could receive for their participation and were asked to indicate their top five choices. The results reveal that low self-control individuals listed more food items in the exclusion condition, whereas high self-control individuals listed more items in the inclusion condition. Interestingly, high self-control individuals who were in the inclusion condition liked their listed items more than those who were in the exclusion condition, showing a tendency to focus on favored items to approach. In addition, in the exclusion condition, low self-control individuals report higher liking of their listed items than high self-control individuals, showing that they were focusing on items that were very attractive to them, likely increasing the difficulty of resisting them. We also found that low self-control individuals selected a higher number of healthy items in the inclusion condition than in the control condition. Thus, although low self-control individuals tended to focus on foods they really liked but that should not be eaten, these individuals could enhance their progress by focusing instead on foods that they should eat.

Our research advances new insights into the application of self-control strategies, specifically those involving inclusion or exclusion plans. We demonstrate that individuals higher in self-control utilize more positive (inclusion-related) plans. In addition, we provide evidence suggesting that, through the use of inclusion-related plans, individuals lower in self-control may be able to enhance their goal-related performance.

### **It's Just Too Easy: How Planning Affects Perceived Effort, Goal Value, and Motivation**

#### **EXTENDED ABSTRACT**

Most existing research that examines at the impact of forming plans on goal pursuit suggests that plans are helpful (e.g., Gollwitzer

and Sheeran 2006). Yet, recent research examining goals such as losing weight and saving money suggests that plans are not universally beneficial. For instance, Townsend and Liu (2012) find that those in poor standing actually exhibit less self-control when they form plans versus when they do not. Buehler and Griffin (2003) and Spiller and Lynch (2010) examine holiday shopping behavior and find that both (1) increased propensity to plan for the future and (2) forming detailed time plans are associated with greater planning fallacy. Bayuk et al. (2010) show that planners are less likely to consider alternative means to attain the same goal versus non-planners. These findings suggest that plans benefit consumers in their goal pursuits in some situations but not in others.

We propose that the difficulty of the goal moderates the beneficial effects of planning. Forming a plan increases the salience of the actions that need to be taken to achieve the goal. Since people tend to value things that require effort, to a certain point (Brehm and Wright 1989; Labroo and Kim 2009), we suggest that planning influences perceptions of effort and motivation differently depending on the level of goal difficulty. We show that when planning makes the necessary behaviors seem less effortful, motivation to pursue the goal decreases. When planning makes the necessary behaviors seem more effortful, motivation to pursue the goal increases.

Specifically, we propose that when the goal is relatively easy, planning should lead people to feel that the necessary actions require minimal effort. Thus, planners (vs. non-planners) should be less motivated to pursue the goal or engage in goal-consistent behaviors. When the goal is of moderate difficulty, planning should lead people to feel that the necessary actions are effortful. Based on our conceptualization, planners (vs. non-planners) should be more motivated to pursue the goal. Lastly, when the goal is of extreme difficulty, planning should lead people to feel that the necessary actions are tremendously effortful, but that this feeling is also present for people who think about the goal but don't form a plan. Therefore, both planners and non-planners should be, overall, less motivated to pursue the goal and less likely to engage in a goal-consistent behavior. We test our hypotheses in several studies looking at goals such as being physically fit and being healthy, where we both measure and manipulate goal difficulty.

Study 1 (N = 163) examined a common student goal – to be physically fit. Participants were told that a governmental agency is promoting a challenge across universities to see whether people can manage to lose weight and be physically fit, where the challenge will involve losing 8 pounds. Next, participants either wrote a plan about how they would accomplish such a goal or, in the control condition, wrote about everything that comes to mind for the same period of time. As the key dependent variable, participants were asked if they would participate in such a challenge should it come to their university. Lastly, participants selected whether this goal would be relatively easy, moderately difficult or extremely difficult to achieve. When participants felt the goal would be relatively easy, planners (22.6%) were less likely to participate in the challenge than non-planners (39.3%;  $p = .04$ ). When the goal seemed moderately difficult, planners (70.6%) were more likely to participate in the challenge than non-planners (53.9%;  $p = .03$ ). When the goal seemed extremely difficult, both planners (23.5%) and non-planners were equally unlikely to participate in the challenge (19.0%;  $p = .52$ ).

Study 2 (N = 219) examined the goal of being healthy. First, participants wrote about the importance of being healthy, eating healthy and cutting calories to increase the salience of the goal. Next, they were told that reducing the number of calories they consume is a crucial step to eating healthier. They were assigned to decrease their calorie intake by 300, 700, or 900 calories, which were

pre-determined to be the number of calories other participants felt would be relatively easy, moderately difficult, or extremely difficult to eliminate from their diet. Some participants formed a detailed plan of how they will pursue this goal, whereas others spent an equivalent amount of time writing about how they spent their prior day. Following an unrelated fifteen-minute filler task, participants were told to exit through a side door where a student was doing school work and had a visible bowl of miniature candy bars on her desk. Each participant was offered to take as many as he or she wants under the pretense that these are department holiday candy, while the number of candies taken was secretly recorded and was the key dependent variable. When the goal was easy (improving diet by 300 calories), planners (1.46) took significantly more candy bars than non-planners (.61;  $p < .01$ ). When the goal was of moderate difficulty (improving diet by 700 calories), planners (.48) took significantly fewer candy bars than non-planners (1;  $p = .01$ ). Lastly, when the goal was extremely difficult (improving diet by 900 calories), there was no significant difference among planners (1.19) and non-planners in the number of candy bars they picked up (1.44;  $p = .26$ ).

This work contributes to prior research on the impact of planning on goal pursuit. We demonstrate that forming a plan can increase or decrease peoples' likelihood to engage in goal consistent actions and their motivation to pursue the goal, and show that the relationship between planning and goal pursuit often depends on the difficulty of the goal.

### **Planned but Not Purchased? A Field Study of Drivers and Consequences of Failed Purchases**

#### **EXTENDED ABSTRACT**

When investigating shopping behaviors that show deviations from shoppers' plans, research has focused on unplanned purchases (e.g., Inman et al. 2009; Kollat and Willett 1967). However, little is known about the purchases consumers plan but do not complete (Park et al. 1989). These "failed" purchases have important implications, as they suggest a lost opportunity for purchase conversion and revenue. To the best of our knowledge, our research is the first that comprehensively examines the drivers and consequences of failed purchases in a field study.

We define failed purchases as products that were planned at the beginning of the shopping trip (i.e. explicitly identified as planned by the shopper, see Inman et al. 2009) but were neither substituted nor bought by the end of the trip. In this analysis we focus on three groups of factors – shopper characteristics (shopping enjoyment, price sensitivity, and propensity to plan), trip aspects (duration, number of aisles, and availability of a written list), and category characteristics (fresh, refrigerated, frozen, and hedonic categories).

Research has shown that consumers who extract hedonic value from shopping are more impulsive (e.g., Beatty and Ferrell 1998) and more receptive to in-store stimuli. The more product and display information shoppers take in, the more likely they are to deliberately change their plans or to become distracted and forget about them. Thus, we expect that shopping enjoyment will lead to more failed purchases (H1). Furthermore, we hypothesize that price-sensitive consumers will prioritize the goal of paying low prices over the goal of acquiring products. Therefore, we predict that higher price sensitivity will lead to a greater number of failed purchases (H2). Since research on the "intention-behavior gap" has shown that detailed action planning mediates intentions and behavior (Sniehotta et al. 2005), we argue that individuals' chronic tendency to plan positively impacts plan fulfillment (H3).

The influence of shopping trip duration on unplanned purchases is well established in the literature (e.g., Inman et al. 2009). The longer consumers shop, the more they are exposed to in-store stimuli which may ultimately diminish their self-regulatory resources (Muraen and Baumeister 2000). Consequently, longer trips are associated with a greater number of failed purchases as the consumer is less likely to stick to her plan (H4). Similarly, the more aisles shopped, the greater the number of stimuli the shopper is exposed to and therefore, the higher the likelihood of unpurchased items (H5). Finally, we predict that a written list will help the shopper to follow through (H6), since research indicated that the explicit form of a plan fosters its attainment (Sniehotta et al. 2005). Moreover, having a written list suggests that shopping goals are concrete which makes it harder to influence shopping behavior (Lee and Ariely 2006).

While failed purchases directly impact retailers' revenues, we investigate a less obvious consequence – shopper's satisfaction with the store. Research has shown that when individuals experience goal failure, dissatisfaction with the task results (Locke and Latham 1990). Furthermore, consumers are likely to direct their disappointment from product failure or stockouts towards the manufacturer or retailer (Folkes 1984; Fitzsimons 2000). Thus, we expect that the greater the number of failed purchases, the lower the satisfaction with the store (H7). Furthermore, we argue that the detrimental effect on satisfaction is even stronger when a written list is used (H8). Since the written list represents the shopper's commitment to her plan, it explicitly documents the discrepancy between intention and result, thus increasing the shopper's disappointment.

To test our hypotheses, we use data from 2401 shoppers from the 2012 shopper intercept study conducted by the Point of Purchase Advertising Institute (POPAI). Before entering the store, shoppers indicated their planned purchases. Once shoppers completed their trips, interviewers copied the receipts and collected information about personality traits, trip characteristics, and overall store satisfaction. We find that 18% of planned purchases do not make it to the shopper's cart. To test our predictions regarding the drivers of failed purchases, we estimated a hierarchical model since the data represent a multilevel structure (i.e., purchases nested within shoppers). The dependent variable is type of purchase (planned, failed, unplanned, or substitute) and, for the results presented here, it represents the probability of a failed vs. a planned purchase. To analyze the effects of failed purchases on satisfaction, we used regression analyses.

Our results show that shopping enjoyment, price sensitivity, adjusted trip duration, and number of aisles shopped increase the probability of failed purchases. Conversely, general propensity to plan and the use of a written shopping list decrease this probability. Interestingly, we find that shoppers who are price sensitive but also enjoy shopping are more likely to fulfill their plans. At the category level, we find that failed purchases are less likely to be fresh or refrigerated but more likely to be frozen products. Additionally, our analysis on satisfaction supports our prediction that failed purchases lead to lower satisfaction with the retailer. As expected, we find that having a written list accentuates the detrimental effect of failed purchases.

Taken together, our results demonstrate that a number of shopper, trip and category factors influence the incidence of failed purchases. More importantly, failure to follow through with one's shopping plan is associated with lower satisfaction with the store. Thus, failed purchases cause a "double whammy" for retailers. Not only is there a loss of profits due to the unpurchased items, but a potentially even greater loss due to dissatisfied shoppers who may migrate or spread negative word-of-mouth. Interestingly, we find that having a shopping list is a double-edged sword: it helps shoppers to complete

their plans but it also makes plan failures more salient. In conclusion, our research is the first to provide a comprehensive view on a scarcely researched but important component of in-store decision making.

### A Metacognitive Perspective on the Motivational Benefits of Planning Across Domains

#### EXTENDED ABSTRACT

Consumers often make plans sequentially in different, unrelated domains. For instance, they may plan a vacation, then decide on their grocery shopping for the week. What effects does planning in one domain have on subsequent planning in a different domain? In this research, we examine how different types of plans made in the first domain influence motivation to plan in the second domain. Prior literature has demonstrated the positive role of planning in achieving goals such as exercising more (Snihotta et al. 2005) and following beneficial medical routine (Gollwitzer and Oettingen 2007). Planning helps people develop and implement behavioral intentions (Gollwitzer 1999). However, whether benefits of planning can be “transferred” from the first domain to the second one is an open question. We are particularly interested in the role of two types of plans, concrete versus abstract.

Learning or skill transfer is an important component of many consumer behaviors (e.g., Hutchinson and Eisenstein 2008). Prior literature on learning and problem solving suggests that transfer often does not occur between conceptually similar but perceptually different problems because people cannot make connections between situations that have different surface structures (Barnett and Ceci 2002). Ways of facilitating transfer across domains focus on getting participants to work with training materials at a deep or strategic level (Gick and Holyoak 1980). More generally, learning metacognitive strategies such as analytical thinking, self-explanation, and self-regulation often leads to successful transfer (Halpern 1998).

We hypothesize that when compared with concrete planning where people specify all event details, abstract planning where people answer questions regarding why their goal is important to them will be more effective in enhancing motivation to plan in a second unrelated domain. The reasons for this proposition are three-fold. First, answering the “why” question encourages people to focus on causal relationships that connect actions to outcomes. This metacognitive justification process has been shown to improve consumers’ performance beyond that of simply verbalization or specifying a plan (Huang and Hutchinson 2013). Furthermore, thinking about why the desired goal is important might prime “importance” and make people regard the second domain as important (Chartrand and Bargh 1996). Second, thinking in an abstract way makes people forward-looking and focus more on the future (Fujita et al. 2006). Third, asking people to specify their plans may encourage them to put too much emphasis on specifics of the original plan, which might increase their perceived difference between the two irrelevant domains as they pay much attention on the surface features (Barnett and Ceci 2002).

We tested these hypotheses in three studies. In Study 1 (N=155), we randomly assigned participants to three conditions: concrete planning, abstract planning, and control. In both planning conditions, participants created a detailed plan for a forthcoming event. In concrete planning condition, participants provided details such as when, where, with whom, and specific activities they would engage in. In abstract planning condition, participants answered why the event was important to them, the overall goal and specific objectives they wanted to achieve, and why these goals were important to them. The control group participants did nothing at this stage. All

participants were then asked to indicate their motivation to plan to live a healthy life style next month by answering questions including effort they would put into developing a plan, the importance of developing an effective plan, motivation to engage in activities to live a healthy life, and effort to fit living a healthy life style into their daily schedule. Consistent with our hypothesis, people forming an abstract plan (including “why”) in the first domain demonstrated the greatest motivation to plan living a healthy life style when compared with both concrete and control conditions ( $ps < .05$ ); there was no difference between the latter two conditions.

In Study 2 (N=257), we added one abstract-without-why condition where people answered similar questions as in the original abstract planning condition without the questions of why the event and the goals they would achieve were important. It was found that forming an abstract plan without answering the “why” question was not as effective as the original abstract condition and did not differ from either the concrete or control conditions in increasing people’s motivation to plan for a second domain.

We hypothesized that the abstract-without-why planning condition might make individuals look forward and focus on the whole picture; however, it does not share the same benefits resulting from the metacognitive processing and the heightened importance of the second domain as in the abstract-with-why planning condition. Thus, once the second domain is important to people, it is possible that performance of the abstract-without-why condition may improve. To test this proposition, in Study 3 (N=356) we manipulated goal importance. Specifically, after participants finished their planning in the first domain, we asked them to rank order seven domains (e.g., living a healthy life style, saving/investing money for the future, etc.) based on how important each domain was to them. They were then randomly assigned to answer planning motivation questions for either their most or least important domain. Both a main effect of domain importance and an interaction effect between domain importance and planning type emerged. Specifically, when the second domain was the participant’s least important domain, there was no difference across planning conditions. However, when the second domain was participants’ most important domain, both abstract planning conditions (with and without why questions) led to greater planning motivation than both the concrete and the control conditions. Results from three studies suggest the beneficial effect of planning at a metacognitive level on increasing motivation to plan in a second irrelevant domain. We discuss the implications for both consumers and public policy makers.

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# Emotional Sharing in Social Networks: Its Stability Within and Impact on Sharers

Chairs: Evan Weingarten, Wharton, USA  
Jonah Berger, Wharton, USA

## **Paper #1: Collective Feelings: The Predictable and Systematic Nature of Human Emotion Expression Over Time**

Andrew Stephen, University of Pittsburgh  
Nicole Verrochi Coleman, University of Pittsburgh

## **Paper #2: Positive with Strangers, Negative with Friends: How Interpersonal Closeness Affect Word-of-Mouth Valence through Self-Constraint**

David Dubois, INSEAD, France  
Andrea Bonezzi, NYU Stern, USA  
Matteo De Angelis, Luiss University, Italy

## **Paper #3: If the Future Feels Fine: When Are People Likelier to Share the Past or the Future?**

Evan Weingarten, Wharton, USA  
Jonah Berger, Wharton, USA

## **Paper #4: The Public Heart: The Impact of Sharing Emotions on Social Media**

Virginia Weber, Alberta, Canada  
Sarah G. Moore, Alberta, Canada  
Rhiannon MacDonnell, Cass Business School, England  
Jennifer Argo, Alberta, Canada

### **SESSION OVERVIEW**

Hardly a waking hour goes by without communication. Millions of tweets and Facebook messages are shared each day, and people share all sorts of their and others' stories and news with friends and colleagues. This interpersonal communication is not only frequent, it is also important. The content of what people share affects everything from the products people buy (Chevalier and Mayzlin 2006) to the drugs doctors prescribe (Iyengar et al. 2011).

But, what role does the emotional charge of the content play in sharing? Emotional experiences happen all the time. People see upbeat movies, dread an upcoming exam, or sit through an embarrassing date. But while some work has begun to examine when people share positive versus negative word of mouth (Angelis et al. 2012; East, Hammond, and Wright 2007) and other work has demonstrated the more emotional things are more likely to be shared (Berger 2011; Berger and Milkman 2012; Rime 2009), we still know extremely little about the role of emotion in interpersonal communication. For example, how does sharing emotion impact the person who shares it? How do aspects of the audience (e.g., whether they are close or distant others), impact whether people share positive or negative word of mouth? How does emotion impact whether people talk about the future or the past? Is the expression of one emotion online related to future expression of other emotions? With what frequency are specific emotions, and not just valences, conveyed?

This session addresses these, and related questions, as it integrates various research perspectives to deepen our understanding of the relationship between emotion and word of mouth. **Stephen and Verocchi Coleman** analyze over 100,000 social media posts to ascertain the prevalence, stability, and evolution of specific emotions, finding firstly that some emotions (guilt, shame) are more stable and predictable than others (happiness, anger), and secondly that some emotions develop and evolve into others while neutral words do not. **Dubois, Bonezzi, and De Angelis** study when people share positive or negative word of mouth, demonstrating that close others activate an interdependent construal which leads people to share more nega-

tive things. **Weingarten and Berger** examine how emotionality impacts when people talk about, finding that people are more likely to talk about the same event if it is happening in the future because it evokes greater emotion. Finally, **Weber, Moore, MacDonnell, and Argo** study how emotional sharing affects the sender, illustrating that audience size (small versus large) moderates whether people feel more or less intense after emotional expression.

Taken together, these talks examine the multiplex ways in which emotion shapes, and is shaped by, word of mouth. We not only explore how audience factors such as tie-strength may influence word of mouth valence, but how emotionality can influence when people talk about, and how emotional sharing affects the sender.

Given the importance of interpersonal communication, this session should appeal to a wide range of audiences, including researchers who study word of mouth, emotion, social influence, self-regulation, attitude change, social connectedness, and social networks.

## **Collective Feelings: The Predictable and Systematic Nature of Human Emotion Expression Over Time**

### **EXTENDED ABSTRACT**

A fundamental characteristic of human communication is expressing emotion, which facilitates interpersonal communication and fosters collective understanding. Expressed emotions thus play a key role in organizing social systems. Emotions are so important to social interaction that emotionally deficient individuals have been shown to face social isolation, stunted relationships, and reduced well-being (Thoits 1985). However, despite the importance of emotions to people's relationships and interactions, researchers have been unsuccessful in reliably predicting individuals' emotional states over time, largely because emotions individuals experience and express are often caused by unforeseen situations. Thus, emotions are thought to be inherently unpredictable and predicting the patterns of specific emotions as they unfold over time is very difficult, if not completely impossible (for both biological and psychological reasons; Larsen & Kasimatis 1990). However, being able to predict emotions—or at least observe systematic patterns over time—could be beneficial. For example, predicting the collective emotional state of a population could be useful in diverse fields, such as public health monitoring, political campaigns, advertising, and marketing.

This research shows that it is possible to identify stable intertemporal patterns of emotional experience when individuals' emotions are examined in the aggregate. Our findings suggest that emotions may have properties similar to other phenomena that appear to be random at the micro level but are more systematic when examined at the macro level or in the aggregate. These phenomena, often termed "superorganisms," are manifestations of collective behavior whereby knowledge and behavior is shifted from the individual to the collective (Hölldobler & Wilson 2009). For example, this phenomenon has been found in the popular "wisdom of crowds" concept and economic prediction markets for events as diverse as elections and sporting events (Arrow et al. 2008).

We find a similar property exists when individuals' expressions of emotions in social media are examined over time in the aggregate. Although individuals' emotions might fluctuate randomly when examined by themselves, when they are looked at collectively they appear to have some stable and predictable patterns. We use data cover-

ing emotion expressions in social media posts over a 330-day period from January 1 to November 25, 2012. Social media is an ideal environment for studying emotions over time because users appear to express a range of emotions on a daily basis through what they write. Since emotions play a pivotal role in both communication and social relations, and social media is a pervasive and frequently used form of communication, examining emotions in the context of social media helps develop better understandings of both human communication and collective emotions.

Our data is comprised of daily samples of English-language social media posts that were collected by a research agency that randomly drew posts from all publicly available social media posts. The sampled posts were passed through a natural language processing algorithm that identified expressions of each of eight common emotions: anger, disgust, embarrassment, fear, guilt, happiness, sadness, and shame. For each day we know the number of posts in the sample that were identified as expressing each of these emotions. Our dataset contains 6,947,808 posts in which these emotions were expressed. We first examined the relative prevalence of these emotions in posts and how they varied over time. Fear, happiness, and guilt were the three most expressed emotions, and embarrassment was the least expressed emotion. On any given day, fear, guilt, and happiness were likely to be the most-expressed emotions, although there was some between-day variation in which of these emotions was the most prevalent. For example, the daily share of posts with expressions of fear—the generally most prevalent emotion—ranged from 4.20% to 43.94% (mean = 22.68%). There was also substantial between-day fluctuation in numbers of posts expressing each emotion.

We then considered whether these observed fluctuations over time were stable, systematic, and therefore at least potentially predictable, which would be evidence supporting our hypothesis that, when examined collectively, emotions do exhibit systematic intertemporal patterns. One way to test for the predictability of a time series is to examine its stochastic properties to see whether it is “stationary” or “non-stationary.” A “stationary” time series has constant mean and finite variance over time, thus making the series predictable in the sense that it will revert to the mean. A “non-stationary” time series has a mean and variance that change randomly (e.g., a random walk), which makes the series completely unpredictable because it will never revert to a stable mean level. We found that all of the eight emotions’ time series were stationary, either directly (five out of eight) or after accounting for time-trend components. Finally, we tested how accurately each emotion could be predicted into the future by fitting forecasting models to data. The fits of these models varied across emotions, indicating that not all emotions are as collectively systematic and predictable as others. For example, the model for happiness had excellent predictive fit but the model for disgust did not. However, the worst-fitting model still managed to account for 26% of the variance in the emotion, and averaging across emotions, the mean forecasting fit was high (mean  $r^2 = .52$ , std. dev. = .20).

While each emotion’s intertemporal variation indeed has an unpredictable random component, these results indicate that there is a nontrivial, relatively sizeable systematic component and, critically, that these time series are all stationary and expected to be stable in the long run. Prior to this current investigation, anticipating what the general emotional state of a population will be, based on current emotion states, would have been considered an exercise in futility—however, the present findings demonstrate that that type of aggregate-level prediction is, in fact, possible.

## Positive with Strangers, Negative with Friends: How Interpersonal Closeness Affect Word-of-Mouth Valence through Self-Construal

### EXTENDED ABSTRACT

A great deal of research in word-of-mouth (WOM) has aimed to understand whether consumers are more likely to share positive or negative information (Brown & Reingen 1987; Herr, Kardes, & Kim 1991). While some scholars have shown negative can trump positive WOM (e.g., Kamins, Folkes, & Pernes 1997), others have found positive WOM to prevail (e.g., East, Hammond, & Wright 2007). Yet, little is known about *when* consumers are more likely to share positive versus negative WOM.

This research explores the role of interpersonal closeness as one factor that can influence consumers’ tendency to share positive versus negative information. By interpersonal closeness, we refer to the perceived psychological proximity between a sender and a recipient (Gunia, Sivanathan, & Galinsky 2009). Perceived proximity can stem from social similarity (Latané et al. 1995), tie strength (Marsden and Campbell 1984), or even the type of language used (Brown and Gilman 1960). To illustrate, the more two people have strong ties, occupy similar roles in society or share particular physical or psychological traits, the higher their interpersonal closeness.

Our theorizing builds off the premise that the act of communicating, because it is embedded within social interactions, might activate different social identities in senders’ mind (Brewer 1991). That is, addressing a close other should bring in mind social identities in which the self is closely associated with others (e.g., a friend); in contrast, addressing a distant other should bring in mind social identities in which the self is remotely associated with others (e.g., a distant acquaintance). Thus, communicating to a close other might highlight assimilation motives and activate an interdependent self-construal but communicating to a distant other might highlight contrasting motives and activate an independent self-construal. Self-construal refers to the extent to which the self is defined independently of others or interdependently (Markus and Kitayama 1991; Gardner et al. 1999). In turn, we propose that differences in self-construal might affect the valence of information a WOM sender might share by shifting the salience of positive vs. negative information. In support for this proposition, ample research has shown that changes in self-construal affect regulatory goals (Aaker and Lee 2001) and subsequently direct people’s attention to positive vs. negative information (Idson, Liberman, & Higgins, 2000; Cunningham et al. 2005).

Thus, we hypothesize that low interpersonal closeness activates an independent self-construal, prompting senders to share more positive relative to negative information, whereas high interpersonal closeness activates an interdependent self-construal, prompting senders to share more positive relative to negative information. Two experiments test this hypothesis.

Experiment 1 tested our basic hypothesis that senders of a WOM message tend to share more negative information, relative to positive information, the closer they feel to the message recipient. French participants read a review of a camera containing four positive and four negative attribute and wrote a WOM message to an hypothetical recipient either using the T pronoun (*tu*, typically used with close others) or the V pronoun (*vous*, typically used with distant others; Brown and Gilman 1960). Importantly, a separate pre-test revealed that merely using T-form (V-form) when answering the Singelis scale (1994) activated an interdependent (independent) self-construal. We counted the number of positive and negative attributes in the messages generated. Results revealed that participants included more negative attributes in their message when using the

T-form than when using the V-form ( $p < .01$ ), suggesting that people shared more negative (positive) WOM when addressing a close (distant) other.

Experiment 2 aimed to further investigate the role of self-construal. That is, if the effect stems from differences in self-construal, activating an interdependent mindset should increase the relative proportion of cons in senders' message, even when senders feel distant from recipients; in contrast, activating an independent mindset should increase the relative proportion of pros in senders' message, even when senders feel close from recipients. (Sedikides et al. 1993).

To examine this possibility, we manipulated interpersonal closeness between senders and recipients and their self-construal before participants wrote a WOM message using a 3 (self-construal: interdependent vs. independent vs. baseline)  $\times$  2 (relationship: close vs. distant) between-subjects design. First, participants interacted in pairs with another participant to increase feelings of closeness by asking a series of questions to one another (Sedikides et al. 1993). At the end of the interaction, half of the participants stayed with their assigned partner for the following information-sharing task (close condition; initial pair preserved); the other half of the participants switch partner (distant condition; new pair formed). Next, we assigned one of the pair member to be a WOM sender and the other pair member to be a WOM recipient. We asked senders to write about their last experience at a restaurant and share this information with the recipient. However, before engaging in this information-sharing task, senders completed a self-construal priming task (Gardner et al. 1999) in the interdependent condition and in the independent condition. Senders assigned to the baseline condition did not complete any task.

We computed a valence index (number of positive thoughts minus negative thoughts divided by total number of thoughts). In the baseline condition, participants wrote more negative messages when addressing a close recipient than addressing a distant recipient ( $p < .05$ ), replicating Experiment 1. When primed to be independent, participants' messages were positive ( $p < .05$ ) and similar to messages generated in the baseline distant condition (ns). In contrast, when primed to be interdependent, participants' messages were negative ( $p < .05$ ) and similar to messages in the baseline close condition (ns). Put simply, making senders more interdependent led them share more negative messages, even when addressing distant others. In contrast, making senders more independent led them share more positive messages, even when addressing close others.

Overall, this research provides new insights on WOM diffusion by investigating how a central feature of WOM communication – interpersonal closeness between senders and recipients – influence the sharing of positive vs. negative information. We show that consumers tend to share more positive information with distant compared to close others, and that this effect stems from the activation of different self-construal. Implications for WOM and self-construal are discussed.

### **If the Future Feels Fine: When Are People Likelier to Share the Past or the Future?**

#### **EXTENDED ABSTRACT**

People talk frequently about emotional experiences they face in everyday life. They may discuss embarrassment due to running into an old girlfriend a day earlier, a recent frustrating sports game, or excitement about the upcoming weekend. But, how might the temporal position of an event, its placement in the past or future, change whether people talk about the event? Will people be likelier to discuss the same concert a week before or a week after it happens?

We propose that whether people are likelier to discuss events in the future or past depends on two factors: emotionality and self-presentation. Past word of mouth research has emphasized that people are likelier to share more emotional events (Berger 2011; Berger and Milkman 2012), and other work suggests the future is more emotionally evocative than the past (Van Boven and Ashworth 2007). Therefore, an event coming up in the future will be likelier to be shared than the same event in the past due to the former's heightened emotionality.

However, this pattern should be moderated by whether the event reflects well or badly on the sharer. Self-presentation has a major impact on what people share: people are likelier to share things that reflect favorably rather than unfavorably on them (De Angelis et al. 2012; Wojnicki and Godes 2008). We therefore propose that the future's increased emotionality will decrease sharing when the content reflects negatively on the sharer, but will increase sharing otherwise.

We test these hypotheses in 6,000 social media posts and two laboratory studies.

#### **Study 1: Field Data**

We first examined the distribution of past and future across social media posts and whether the future tended to have fewer negative posts, which may have content that reflects badly on people. We collected 3,000 tweets and 3,000 statuses and coded them based on when the posters were discussing (e.g., yesterday, an hour from now, a month from now). These tweets and statuses were also coded on valence (e.g., positive or negative). We found that for posts over a day from now, people were likelier to discuss future events versus past events ( $\chi^2(1, N = 346) = 44.439, p < .001$ ). Consistent with our theory, these future posts had more positive (68.94%) events relative to neutral (8.95%) and negative (22.13%) events compared to past positive (49.55%) versus neutral (5.40%) and negative events (45.05%;  $\chi^2(2, N = 346) = 19.15, p < .001$ ). This pattern may suggest that at temporal distances over a day away during which there is more future shared, there is less content that potentially reflects negatively on the sharer.

Two laboratory studies further test our hypotheses.

#### **Study 2: Vacation**

Study 2 tests how time frame and temporal distance influence sharing. Participants were asked to imagine that they were either going on week-long vacation at a friend's vacation a week from now (future condition) or had come back a week ago (past condition). We also manipulated if the vacation was a week from then or a month to test the generalizability of the effect. We asked participants to indicate how likely they would be to talk about the vacation with others and how emotional (happy) thinking about the vacation home made them.

First, as expected, a 2 (Past vs. Future)  $\times$  2 (Week vs. Month) ANOVA showed a main effect of time frame ( $F(1, 214) = 20.57, p < .001$ ). Participants were likelier to share using the vacation home in the future ( $M = 5.94$ ) as opposed to the past ( $M = 5.12$ ). Second, the same ANOVA on emotionality revealed a main effect of time frame: participants felt happier thinking about the vacation if it was in the future ( $M = 5.94$ ) as opposed to the past ( $M = 5.60$ );  $F(1, 214) = 8.22, p = .005$ . Third, felt emotion mediated the impact of time frame on sharing (95% CI [.073, .396]). Taken together, Study 2 demonstrates that people are likelier to talk about the same event in the future (compared to the past) due to the heightened emotionality of the future.

**Study 3: Court.**

Study 3 explores whether the increased likelihood of discussing future events is moderated by if the event reflects negatively on the sharer.

Participants read about having a court date one week from now (future condition) or ago (past condition). We also manipulated whether the event reflected badly on them (they were in court for stealing from a local shop) or not (they were in court for jury duty). We measured participants' willingness to talk about this event with others and their felt emotionality.

As predicted, there was a Future x Reflection on Self interaction ( $F(1, 599) = 8.20, p = .004$ ). When the event did not reflect negatively on them (i.e., they were in court for jury duty), participants were more likely to talk about it if it was happening in the future ( $M = 5.13$ ) than if it happened in the past ( $M = 4.51; F(1, 599) = 10.75, p = .001$ ). When the event did reflect negatively on them (i.e., they were in court for stealing), the pattern reversed, albeit nonsignificantly: people were slightly likelier to talk about the event if it was in the past than in the future ( $M = 2.35$  vs.  $M = 2.18; F(1, 599) = .73, ns$ ).

Moreover, a moderated mediation analysis shows that mood mediates these effects (95% CI [-.55, -.14]). As expected, feeling worse increased sharing when the event did not reflect negatively on the sharer (i.e., jury duty, 95% CI [.05, .24]) but decreased sharing when it did (i.e., stealing, 95% CI [-.35, -.05]).

Taken together, these results provide evidence for our hypotheses that (1) emotionality can drive people to talk about future (versus past) things and (2) that these effects are moderated by whether the event reflects negatively on the speaker.

In conclusion, these field data and laboratory studies enhance our understanding of the psychological processes underlying "when" people talk about, and can inform how processes such as emotionality and self-presentation interact.

### The Public Heart: The Impact of Sharing Emotions on Social Media

#### EXTENDED ABSTRACT

Social media is a rapidly growing venue where consumers and firms can converse with larger audiences than ever before. For instance, Facebook has over one billion users and 15 million brands in their network (Koetsier 2013), and Facebook users have an average of 190 friends (Backstrom 2011). Across these platforms, sharing emotional content is common (e.g., minutes after Michael Jackson's death, the number of status updates on Facebook more than doubled; Facebook Data Science 2009). However, prior research has primarily focused on one-on-one emotional sharing (i.e., narrowcasting; Rimé et al. 1991). Our work investigates how broadly sharing positive brand-related emotions via social media impacts the sharer. We posit that when individuals share emotions, the intensity of these emotions changes depending on the size of the audience with whom they share (broad vs. narrow), and on their public self-consciousness (PSC; Fenigstein, Scheier and Buss 1975).

When they have an audience, individuals focus on themselves as an object of attention increases (Carver and Scheier 1978), and when they have broad social-media audiences, individuals focus even more on how their audience perceives them (e.g., Berger and Milkman 2012; Karakayali and Kilic 2013; Vitak 2012). Thus, we predict that sharing broadly (i.e., to a large audience) forces attention away from the emotion that is being shared and instead onto the sharer and their audience's perceptions, inhibiting individuals' ability to relive the emotion, and dampening it instead.

This should be particularly true of individuals low in PSC (LPSC), who do not normally focus on their audiences; thus, we expect LPSCs will feel more (less) intense after narrowcasting (broadcasting). However, focusing on the audience should be natural for individuals high in PSC (HPSC), who are habituated to considering their audience (Kassin 1984); thus, they should be able to relive emotions shared broadly. Further, because HPSCs care about how they are perceived by others (Bushman 1993) they should consider the social benefits they gain by sharing *positive* emotions, which will reflect well on them (cf. Berger and Milkman 2012). As such, broadcast (narrowcasting) positive emotions should make HPSCs' emotions more (less) intense.

Finally, we expect that feelings of closeness with their sharing audience will mediate our results for HPSCs. This group focuses on their audience naturally and should thus feel more in tune and closer to them, especially when they share their positive emotions and experiences with them. LPSCs are less used to considering their audiences (Fenigstein 1984) and may not feel as close with them when they share. In general, we predict that sharing with an audience with whom one is (not) close will (dampen) increase emotional intensity.

Study 1 used a within-subjects design to determine whether broadly sharing a positive brand-related emotion via Facebook could dampen its intensity. Undergraduates ( $N=57$ ) described a recent brand experience and reported how positive and intense the emotional experience was (4 items, pre-sharing). They then posted an "I love [brand]!" status update on their Facebook account, and completed the same measures about the emotional experience (post-sharing;  $\alpha > 0.87$ ). Consistent with our predictions, participants' emotions were significantly less intense post-sharing ( $M_{\text{post}} = 4.46, M_{\text{pre}} = 5.03; t(56) = 4.64, p < .01$ ). Further, a measure of how close individuals felt with the "majority of [their] Facebook friends" significantly predicted this decrease in emotional intensity, providing early evidence for our mediator.

Study 2 used a 2 (PSC: high vs. low) by 2 (Facebook sharing: broad vs. narrow) between-subjects design. Undergraduates ( $N=81$ ) recalled a recent positive experience they had at a restaurant and then reported the name of the restaurant and the positive emotion they experienced. They then logged into their Facebook accounts and either posted a status update (broad) that said "I love [restaurant]!" or sent the same message to a single friend of their choosing (narrow). Following this, participants completed emotional intensity measures ( $\alpha = 0.78$ ) about the experience and a single-item measure of audience closeness. PSC was measured at the start of the semester via mass testing.

The two-way interaction between sharing and PSC was significant ( $F(3, 69) = 9.408, p = .003$ ). Using bootstrapping and Hayes' (2013) simple moderation model, we decomposed the interaction between our broad (post) vs. narrow (message) conditions. At the mean level of PSC, there was no difference for sharing ( $p > .8$ ). However, LPSCs (-1 SD) had lower emotional intensity, while HPSCs (+1 SD) had higher emotional intensity, after sharing broadly compared to narrowly. Moderated mediation analysis showed that audience closeness significantly mediated ( $p < .05$ ) the impact of sharing on emotional intensity for those at the mean and high levels of PSC, but not for those low in PSC.

Study 3 will hold audience size constant (broad) and use a 3 (Facebook sharing: own vs. brand vs. neutral) by measured PSC between-subjects design. We will manipulate whether participants post a positive status update about a brand to their own Facebook page, the brand's page, or a neutral page setup by the experimenters. This will assess the impact of audience *type*, where posting on one's own page is broadcasting to friends—whose perceptions can be anticipat-



ed by HPSCs, and from whom positive benefits can be gained—but posting on a brand or neutral page is broadcasting to an unknown audience, whose reactions will be unknown and from whom positive benefits are not be as important. To the extent that HPSCs gain emotional intensity by anticipating that sharing reflects well on them in the eyes of their friends, we should replicate our Study 2 findings in the “own” page condition. In the “brand” and “neutral” page conditions, we expect no intensity boost for HPSCs, but rather mitigated emotional intensity, as with LPSCs. We will also measure the extent to which individuals focus on themselves, their audience, and their emotions, to elucidate the underlying process.

The current investigation finds that individuals high (low) in PSC feel more (less) intense after sharing positive emotions broadly. Closeness with one’s audience mediates the findings for HPSCs.

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# Consequences of Choosing For and With Others: The Good, the Bad, and the In-between

Chair: Danielle J. Brick, Duke University, USA

## **Paper #1: The ‘Partners-in-Crime’ and the ‘Lone Wolf’: Comparing the Unethical Behaviors of Dyads and Individuals**

Hristina Dzhogleva Nikolova, Boston College, USA  
Cait Poyner Lamberton, University of Pittsburgh, USA  
Nicole Verrochi Coleman, University of Pittsburgh, USA

## **Paper #2: Choosing Variety for Shared Consumption**

Jordan Etkin, Duke University, USA

## **Paper #3: When choosing for others is more fun (and less depleting) than choosing for the self**

Evan Polman, University of Wisconsin-Madison, USA  
Kathleen D. Vohs, University of Minnesota, USA

## **Paper #4: Shared Decision Making and Power in Relationships**

Danielle J. Brick, Duke University, USA  
Tanya L. Chartrand, Duke University, USA  
Gavan J. Fitzsimons, Duke University, USA

### **SESSION OVERVIEW**

Consumers regularly evaluate choices and make decisions on behalf of and with others. Yet, relatively little is known about how consumers make these types of decisions. This session seeks to advance knowledge in this domain by examining choices and decisions made *for* and *with* others. What are some of the consequences of choosing for and with others? Are interpersonal dynamics important to consider when studying this topic? These are some of the questions this session aims to address.

The first paper by Dzhogleva Nikolova, Lamberton, and Coleman begins with a negative consequence of choosing with others: Specifically, they compare whether people behave more unethically when they make decisions in a dyad versus alone. Results reveal that people intuit that joint “crimes” (unethical decisions made with others) lead to social bonding. Therefore, dyads behave more unethically than individuals only in situations when social bonding is needed. Interestingly, results show that collaborative wrongdoing generates social bonding only for some individuals but has perverse effects for others. This paper demonstrates that joint decision-making can have negative consequences and highlights the importance of studying interpersonal dynamics in this domain.

The second paper by Etkin continues to examine the role of interpersonal dynamics, and demonstrates a neutral consequence, variety-seeking, in this domain. Specifically, she finds that perceptions of relationship length affect whether individuals prefer variety or similarity in their choices for others. When the length of the relationship seems short, individuals choose more variety and prefer more varied products and experiences to give to others. Etkin also examines willingness to pay for more or less varied products when choosing for others (e.g., bouquet of flowers), which demonstrates how aspects of the relationship affect choices made for others.

The next two papers demonstrate positive consequences of choosing for and with others in terms of ego-depletion and relationship dynamics. In the third paper, Polman and Vohs find that choosing for others is less depleting (and more fun) than choosing for the self. The authors also find that self-construal moderates the effect of choosing for others on depletion depending upon whether the decision maker is self or other-oriented. These findings highlight that self-other decision making can be explained within the theory of self-construal, and again demonstrate the importance of studying interpersonal dynamics in this domain.

In the last paper, Brick, Chartrand and Fitzsimons compare the effects of choosing with others to those of choosing for others on power and satisfaction in romantic relationships. Previous research would suggest that the person who gets to make all of the choices for their partner should have the most power in the relationship, in other words choosing for others should be associated with greater power. However, the authors find that choosing *with* one’s partner (i.e., shared decision making) is associated with greater power and also greater relationship satisfaction, highlighting an important, positive consequence of choosing with, as opposed to for, others.

Taken together these papers provide some initial insight into the consequences of choosing for and with others. They also demonstrate how interpersonal dynamics are necessary to consider when studying this topic. These papers will appeal to a broad audience as they highlight different theoretical frameworks and topics, e.g., morality, close relationships, self-regulation, variety-seeking, that can be studied in this domain, and, they suggest various avenues for future research.

## **The ‘Partners-in-Crime’ and the ‘Lone Wolf’: Comparing the Unethical Behaviors of Dyads and Individuals**

### **EXTENDED ABSTRACT**

Recognizing the widespread occurrence of fraudulent behaviors and their costs to businesses, individuals, and society, researchers have examined individual and situational factors underlying individuals’ unethical behavior (e.g., Mead et al. 2009; Gino et al. 2013). However, people often solve ethical dilemmas along with others. For example, Enron’s notorious fraud was committed jointly by CEO Jeffrey Skilling and founder Kenneth Lay. Furthermore, people on sports teams, in the workplace, or in academic settings often have to make joint ethical decisions.

Despite the prevalence of such decisions, little research has examined whether people are more unethical when they make decisions jointly in a dyad versus alone. The present research takes a first step toward addressing this gap in the literature, comparing the ethical decisions of dyads and individuals.

Interestingly, the existing literature makes opposing predictions. On one hand, according to the accountability literature, which suggests that “the need to justify one’s views to others” encourages more careful and accurate decisions (Tetlock and colleagues 1983, 1987), it could be argued that decision-making in dyads will be more ethical than solo decision-making. However, research on diffusion of responsibility shows that individuals feel less personal responsibility for group actions (Leary and Forsyth 1987), thus predicting that dyadic decision-making will be more unethical than will that of the ‘lone wolf.’ Further, shared risk-taking and guilt-sharing can provide bonding experiences (Lowe and Haws 2014). Thus it is possible that if individuals wish to form a social bond with others, the opportunity to make joint unethical decisions could provide an avenue. In such cases, the ‘partners-in-crime’ should display more unethical decision-making than should the ‘lone wolf.’

To test these possibilities, our first study presented participants (n=62) with two versions of a cheating scenario adapted from Shu et al. (2011). In Scenario A participants imagined that a student was given the opportunity to make up for a missed exam. The student had the option to cheat by taking a graded copy of the exam from his classmates. In Scenario B participants had to imagine that the same

ethical decision had to be made jointly by a pair of students. After reading both scenarios, participants indicated who they believed was more likely to cheat using a 7-point scale where “1=the student in Scenario A” and “7=the two students in Scenario B.” Furthermore, participants imagined that the two students in Scenario B had decided to cheat together. They then responded to questions regarding the social consequences of such collaborative wrongdoing. Results revealed that people intuit that the pair of students will be more likely to cheat than the individual student ( $M = 4.69$  vs. 4 (scale midpoint),  $t(61) = 2.52, p = .01$ ). Moreover, people anticipate that two cheating students will feel more connected, less distant, and like each other more (all  $p$ 's  $< .02$ ) after “partnering-in-crime.”

Based on these findings, we anticipate that individuals may use joint unethical behavior opportunities to create social bonding. We designed two studies to test this prediction: one using individuals who already know one another and thus, have a less salient need to socially bond through their decisions, and the other using unfamiliar students, who may use joint decisions as a social bonding tool. In Study 2, participants ( $n=111$ ) were MBA students. In addition to sharing a cohort and having worked together on projects in prior semesters, they completed this experiment at approximately the midpoint in a 14-week semester. As such, they were already part of a fairly tight-knit group and would not need to use unethical behaviors to bond socially. In this context, we anticipated that the dyads would be more ethical than individuals. Participants were presented with an ethical decision making scenario based on Charles Ponzi's scheme (Wiltermuth 2011). They had to decide – either alone or jointly with a partner - how likely they would be to take on additional investors in their business although the potential for profit was limited (1=“Not Likely At All;” 7=“Very Likely”). Results showed that the dyads ( $M = 2.21$ ) were less likely to behave unethically than the individuals ( $M = 3.22$ ;  $F(1, 67) = 5.33, p = .02$ ).

In Study 3, we recruited undergraduate students from the university community. Here, we anticipated a small likelihood that the dyad members would know each other. Participants ( $n=253$ ) first completed the Trait Self-Control Scale (Tangney et al. 2004) online as we expected that low and high self-control people might view vicious behaviors such as joint “crimes” differently and thus experience different social bonding consequences. When participants came to the lab (1-2 weeks later), they were randomly assigned to either individual or dyadic conditions and given the same ethical decision as in Study 1. Then participants in the dyads answered questions designed to measure social bonding (how much they liked their partner, how willing they were to work with their partner again) and indicated the extent to which they knew each other (all on a 7-point scale where 1=“Not At All” and 7=“Very Much”). Manipulation check results confirmed that dyad members did not know each other well ( $M = 1.32$  vs. 4,  $p < .0001$ ). In this context, results showed that dyads ( $M = 5.14$ ) were more likely to cheat than individuals ( $M = 4.47, F(1, 133) = 5.48, p = .02$ ). Finally, results highlighted that the likelihood of cheating had a weak positive impact on social bonding - but only for low self-control individuals ( $b = .11, p = .07$ ). Higher likelihood of cheating in fact had a negative effect for high self-control individuals ( $b = -.20, p = .02$ ).

Our next study will explore our prediction that social bonding needs underlie these effects by manipulating the activation of such needs. We will also seek to replicate our findings about the possibly perverse effects of unethical joint decisions on higher self-control individuals, who appear to distance themselves from their ‘partners-in-crime’ rather than effectively creating social bonding through their actions.

## Choosing Variety for Shared Consumption

### EXTENDED ABSTRACT

Consumption experiences are often shared with others. Consumers eat out with their friends, watch movies with their families, and vacation with their significant others. Indeed, more consumption experiences may be shared than not (Raghunathan and Corfman 2006; Ramanathan and McGill 2007). Despite this fact, little research has examined how people make choices for shared consumption. Consider a couple who shares multiple experiences each week. These individuals could choose to incorporate more variety into their shared experiences, or less variety into them. On Friday, Saturday, and Sunday night, for example, the couple could go out to eat, see a movie, and attend a concert, or they could eat at three different restaurants. What might affect how much variety they choose to share?

I propose that the length of consumers' relationship plays a critical role by changing the emotions that they value. Research on the psychology of aging and longevity demonstrates that people's preferences change over time (Carstensen 2006; Carstensen et al. 1999). Whereas younger individuals tend to value feeling excited, older people tend to value feeling calm (Bhattacharjee and Mogilner 2013; Mogilner et al. 2012). Building on this idea, I suggest that relationship length should also affect what emotions consumers value. Just as age (i.e., the length of one's life) changes whether feeling excited or calm is desirable, relationship length should have similar effects. Relationships can be (or seem) short and new, or they can be (or seem) longer and more established. When relationships seem short (like feeling young), consumers should value excitement in their relationship. When relationships seem long (like feeling old), in contrast, consumers should value feeling calm. Evidence from a pilot study supports this reasoning, demonstrating a negative correlation between relationship length and the importance of excitement in relationships ( $r = -.39, p = .001$ ), and a positive correlation between relationship length and the importance of calmness ( $r = .26, p = .04$ ).

Importantly, the variety consumers choose to share with their partner should affect how exciting or calm that relationship feels. A great deal of work shows that choosing more variety increases stimulation and excitement (Berylne 1970; Kahn and Ratner 2005; Raju 1980), whereas choosing less variety reinforces a sense of stability and routine (Khare and Inman 2006; Menon and Kahn 1995; Wood et al. 2002). Thus, sharing more (less) varied experiences should make relationships feel more exciting (calm). Consequently, when relationships are (or seem) short, consumers should prefer sharing more varied experiences with their partner compared to when relationships are (or seem) long.

Four studies test this prediction. In study 1, I manipulated perceived relationship length using a response-frequency scale manipulation adapted from prior research (Etkin and Ratner 2012; Schwarz et al. 1998). Then, I invited participants to choose four consumption experiences to share with their partner over the coming week. The choice set included three options – going out to eat, watching a movie, and listening to live music – and I recorded how many distinct options participants chose. Results demonstrate more variety-seeking among shared experiences (i.e., participants chose a greater number of distinct options) when made to feel their relationship was short ( $M = 2.48$ ) versus long ( $M = 2.15$ ;  $F(1, 51) = 4.50, p < .04$ ).

Building on these findings, studies 2a and 2b explore how relationship length affects consumers' willingness to pay for variety. Following the same relationship length manipulation from study 1, male participants were asked their willingness to pay for two bouquets of roses (order randomized): one with varied colors (high va-

riety option) and one with a single color (low variety option). A 2 (relationship length) X 2 (variety) X 2 (order) repeated-measures ANOVA on log-transformed willingness to pay only revealed the predicted interaction ( $F(1, 129) = 6.57, p < .02$ ). Participants were willing to pay more for the low variety bouquet when led to perceive their relationship as long ( $M = .05$ ) versus short ( $M = -.05$ ). Participants were willing to pay more for the high variety bouquet, in contrast, when led to perceive their relationship as short ( $M = .07$ ) versus long ( $M = -.07$ ).

Study 2b manipulated perceived relationship length in a different way, and then measured willingness to pay for a more versus less varied shared experience. Specifically, participants reported the length of their relationship in years and months, and then described how that was a short (long) amount of time. Next, they read a description of a cruise vacation package and were asked how much they were willing to pay for it. In the low (high) variety condition this cruise package was described as offering many similar (different) experiences. A 2 (relationship length) X 2 (variety) ANOVA only revealed the predicted interaction. When led to perceive their relationship as short, participants were willing to pay more for the high ( $M = \$1420.81$ ) versus low variety package ( $M = \$748.34$ ). When led to perceive their relationship as long, in contrast, participants were willing to pay more for the low ( $M = \$1343.42$ ) versus high variety package ( $M = \$918.13$ ).

Finally, study 3 demonstrates an important boundary condition of this effect. While perceived relationship length affects the variety chosen to share with one's partner, it does not change variety-seeking behavior for experiences consumed alone. Relationship length thus has a unique effect on variety chosen for shared consumption. Together, these studies demonstrate that consumers' romantic relationships exert a significant impact on the choices that they make. Consumers choose more variety, and prefer more varied products and experiences, when their relationships seem short versus long.

### **When choosing for others is more fun (and less depleting) than choosing for the self**

#### **EXTENDED ABSTRACT**

Decades of research show that people prefer activities that provide them with opportunities to make choices. However, empirical research shows that people describe their choices as difficult, paralyzing, and exhausting. This inconsistency is called the *paradox of choice*, whereby people have opportunities to make more choices than ever before, yet do not seem to benefit from them, psychologically (Schwartz 2004). Still, people insist on maximizing their choice opportunities, even when these opportunities lead them to perform worse and feel worse (Botti and Hsee 2010).

Prior work has shown that an implication of making choices is in the energy that people have to put toward acts of self-control. Research has found that making choices requires self-regulatory resources that deplete with use (Vohs et al. 2008). We studied people who make choices for other people, about whom little is known in terms of their self-regulatory capacity. We were drawn to this issue because decision making is rarely solitary and often involves including and thinking about others: Parents make decisions on behalf of their children, managers make decisions that affect their employees, graduate students delegate important decisions to their professors, and those with little experience in a domain delegate choices in that domain to those with more experience.

Research has shown that people think more "happy thoughts" when they choose for others. For example, people who decide for a friend to go on a blind date tend to fantasize about the possible

positive outcomes, like how exciting the date could be. In contrast, people who decide whether to go on a blind date themselves tend to imagine a pessimistic fate, like having an awful time with a boring partner (Beisswanger et al. 2003). Research has found that people's choices for others are more idealistic and pleasure seeking than choices people make for themselves (Laran 2010; Lu et al. 2012). Along these lines people make more creative and more assertive choices for others than they do for themselves (Kennedy and Ames 2013; Polman and Emich 2011). These lines of work suggest that people display less inhibited behavior when deciding for others, precisely the kinds of behavior that people find enjoyable and fulfilling (Apfelbaum and Sommers 2009; Grant and Gino 2010).

We report three experiments that test whether choices for others are less depleting than choices for the self. We also investigate a moderator, self-construal, and test whether choosing for others is less depleting for self-oriented, as compared to other-oriented, decision makers. In study 1, 450 participants responded to ten scenarios each describing a situation in which a choice has to be made. In the first nine scenarios, we asked participants to choose for themselves or for someone else indicated in the scenarios. We also included two no-choice, neutral conditions in which we asked participants to think about how hard it would be to make the choice as if it was for the self or someone else, respectively. The tenth scenario differed from the previous scenarios in that it described a choice where participants could recommend choosing the status-quo—an indicator of depletion that has been used successfully in past research (Danziger et al. 2011).

Our results showed that there was no difference between the two neutral conditions, so we collapsed these conditions into one neutral condition, where the proportion recommending the status-quo was .35. The proportions recommending the status-quo in the conditions where participants chose for themselves and for others were .52 and .38, respectively. A chi-square test revealed a significant difference among the three conditions,  $\chi^2(2, N = 450) = 10.45, p = .005$ . Planned comparisons revealed that there was significantly more preference for the status-quo when participants chose for themselves than when participants chose for others (which did not differ significantly from the neutral condition).

In study 2, 195 participants responded to ten scenarios in which participants made choices for a same-sex friend or for the self, and reported their enjoyment. Next, participants were asked to drink a relatively unpleasant mixture of water, vinegar, and drink mix. We carried out a bootstrapping procedure to determine whether enjoyment mediates the relation between choice and depletion (ounces of unpleasant drink mixture consumed). Results indicated that the indirect effect was estimated to lie between -1.23 and -0.35, confirming that enjoyment did act as a mediator. The overall chain thus supports the prediction that choosing for others is an enjoyable pursuit, which in turn buffers against depletion.

In study 3, 312 participants completed the Self-Construal Scale (Singelis 1994) that measures participants' self-orientation and other-orientation. Then, participants responded to nine scenarios in which participants selected a choice for a friend or for the self, and reported their enjoyment. Next, participants were asked to solve 5 unsolvable anagrams. The amount of time participants spend on the anagrams is indicative of ego depletion. We conducted a moderated mediation analysis to assess the indirect effect of choice on depletion through enjoyment at the different orientations of self-construal. The 95% confidence interval for the indirect effect of choice among other-oriented participants ranged from 23.72 to 100.25. In addition, the 95% confidence interval for the indirect effect of choice among self-oriented participants ranged from -73.06 to -5.99. Since neither

of these confidence intervals contain zero, we conclude that the indirect effects are statistically significant.

A broad range of behaviors has been identified to result from depletion. Depleted people behave more unethically, spend more money, and make riskier decisions – and since these findings have relied on depletion to obtain their results, an investigation that combines research on self-other decision with research on depletion is potentially fruitful. Given that people enjoy choosing for others, they are buffered against depletion, and hence they may make decisions that are, in keeping with the examples above, more ethical, tightwad, or risk-free. This possibility is encouraging for future research and our set of studies can set in motion a foundation for future work on self-other choice.

## Shared Decision Making and Power in Relationships

### EXTENDED ABSTRACT

Imagine three different team scenarios. In the first, you are on a team and you get to make all of the choices for the team. In the second, you are on a team and someone else makes all of the choices. And in the third, you are on a team and everyone shares in the decision making. Which scenario do you think you would feel the most power? In the present research, we find that individuals who relinquish some control and make a decision together, ironically, perceive greater power in their relationship than if they had made the decision entirely themselves. These findings suggest that shared decisions, even those as small as which soap to buy, can increase perceptions of power in the relationship.

Power can be defined as control over valued resources and the capacity to influence the behavior of others (Anderson and Galinsky 2006; Emerson 1962; French and Raven 1959; Keltner et al. 2003; Steil 1997), while resisting the influence of others over oneself (Cromwell and Olson 1975). Power in romantic relationships can similarly be thought of as the capacity to influence others, in this case partners (Huston 1985). As it stands, the existing literature makes competing predictions about whether making all of the decisions in the relationship should lead to more or less power in the relationship. Making all of the choices in the relationship should lead to greater influence over that relationship, and thereby greater power. However, making all of the choices necessarily implies that one is involved in the relationship, and Waller's (1937) principle of least interest suggests that the person who is less involved in the relationship has more power. By not making any of the decisions one is able to remain less involved in the relationship, and maintain greater power in the relationship.

On the one hand, by making all of the choices one has influence over their partner, which is associated with greater power; yet, on the other hand, by not making any choices one is less involved in the relationship which is also associated with greater power. The best option, then, would be for an individual to perceive oneself as having influence and for the partner to show interest. This is the case in shared decision making. Therefore, our theory posits that perceiving decisions as shared, which combines an individual's influence plus partner's interest, should lead to the greatest perception of power in the relationship. We test and find evidence for our theory across four studies.

In our first study we investigate whether greater shared decision making is associated with greater power in the relationship. 288 individuals from an online U.S. subject pool participated in the study. Participants completed the Personal Sense of Power scale (Anderson et al. 2012;  $\alpha=0.85$ ), a filler task, and then answered the Decision Making Measure, a series of 10 items capturing different types of

decisions made in the relationship. Participants were given three response options: I mainly decide, my partner mainly decides, or we decide together. We summed the number of shared responses to create a Shared Decision Score. In line with our prediction that greater overall shared decision making is associated with the most power in the relationship, a regression analysis revealed that as the number of shared responses increased, so too did perceptions of power in the relationship.

In our second study we manipulated shared decision making through a shopping recall paradigm. We hypothesized that individuals in the shared decision making condition would report the greatest perceptions of power. 290 individuals (80 men) from an online U.S. subject pool participated in the study. Participants were randomized to recall a time when either they, their partner, or they and their partner made a decision and purchased an item for they and their partner to use. Participants completed the same power measure as used before (Anderson et al. 2012;  $\alpha=0.88$ ). They were also asked to indicate how happy they currently were with their relationship on a 1 (extremely unhappy) to 10 (extremely happy) scale. In line with our hypothesis, planned contrasts revealed that individuals in the shared condition reported significantly greater power in the relationship, and also greater relationship satisfaction.

To extend the previous results, we conducted two field studies where both members of the couple participated. In the first field study, 59 couples participated in a procedure similar to study 1. We included a measure of overall relationship satisfaction (Rusbult et al. 1998). Using a multi-level modeling approach, we found a significant effect for shared decision making on power in the relationship. Specifically, as partners reported greater shared decision making, they also reported greater power in the relationship. Furthermore, we found that as shared decision making increased so too did relationship satisfaction. These results suggest that increasing power and relationship satisfaction as a result of shared decision making is not a zero-sum game as both partners could report increased power as a function of greater shared decision making.

In our second field study, 44 couples were each randomized to one of the three shopping recall conditions used in study 2. We tested our process theory that sharing decisions combines self influence plus partner interest, which in turn, leads to greater perceptions of power using a six-item measure. We included a measure of relationship satisfaction as our outcome variable. We predicted that self influence and partner interest mediate the relationship between shared decision making and satisfaction. In line with our hypothesis, a multiple mediation analysis demonstrated that shared decision making was associated with greater levels of self influence and partner interest, and these two constructs mediated the relationship between shared decision making and relationship satisfaction. Altogether these findings demonstrate how important making decisions and choices with others can be. Additionally, they highlight how important the role of consumer choices, even small ones such as recent purchases, can be for relational welfare.

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# What Makes People Happy? Antecedents and Consequences of Happiness

Chair: Jordan Etkin, Duke University, USA

## **Paper #1: Does Variety Increase Happiness?**

Jordan Etkin, Duke University, USA  
Cassie Mogilner, The Wharton School, USA

## **Paper #2: Emodiversity and the Emotional Ecosystem**

Jordi Quiodbach, Universitat Pompeu Fabra, Spain  
June Gruber, Yale University, USA  
Michael I. Norton, Harvard Business School, USA

## **Paper #3: Celebrate or Commemorate? When Material Purchases Lead to Stronger Memories and More Happiness**

Brittney L. Dalton, Washington University in St. Louis, USA  
Joseph K. Goodman, Washington University in St. Louis, USA  
Selin A. Malkoc, Washington University in St. Louis, USA

## **Paper #4: Neglect of Emotional Losses in Compensation Decisions**

Christopher K. Hsee, University of Chicago, USA  
Shirley Y. Zhang, University of Chicago, USA  
Sherry X. Yu, Washington University in St. Louis, USA

### **SESSION OVERVIEW**

Being happy is perhaps the most common and important goal consumers have. Over the past decade happiness has received increasing attention from psychologists, economists, sociologists, and consumer researchers alike – indeed, ACR has devoted their annual conference to the theme of getting “Back to Fun.” Findings from these literatures provide much insight into how to measure happiness and why happiness is important (Diener et al. 1995; Diener and Seligman 2002; Dunn et al. 2008; Kahneman et al. 2004; Lyubomirsky et al. 2005; Mogilner 2010; Mogilner et al. 2012; Van Boven and Gilovich 2003). Yet, several questions have received less attention: What makes people happy? Can consumers actively manage their happiness? And how does (un)happiness shape decision-making?

Our session sheds light on these questions. The first two papers focus on the antecedents of happiness, drawing on diverse methodology and theory. Paper 1 (Etkin and Mogilner) begins by discussing how the degree of variety among consumers’ activities affects happiness. Three experiments demonstrate that while doing more varied things increases happiness over moderate to long time intervals (an hour, a day, a week, etc.), doing less varied things increases happiness over short time intervals (10 minutes, 30 minutes). Paper 2 (Quiodbach, Gruber, and Norton) builds on these findings by discussing how the emotional diversity consumers experience affects their happiness. Two cross-sectional studies show that over and above emotional valence, greater “emodiversity” corresponds to improved wellbeing.

Moving past antecedents, Papers 3 and 4 focus on how happiness relates to decision-making. Paper 3 (Dalton, Goodman, and Malkoc) challenge the notion that experiential consumption leads to greater happiness than material consumption. Three studies show that when people recalled a happy event (e.g., getting married), commemorating that event with a material purchase (vs. celebrating it with an experience) improved long-term memory of it, and increased how happy people felt when they thought about it. Finally, Paper 4 considers how (un)happiness affects decision-making in jury contexts. Eight studies utilizing diverse methods demonstrate that consumers underweight emotional losses, which affects how they compensate injured parties.

Together, these papers shed light on what makes people happy (activity variety, emotional diversity) as well as how happiness shapes consumers’ decisions (experimental vs. material consumption, jury decision-making). Further, they suggest multiple ways to manage fun and happiness in our lives: changing the variety of activities one does, the emotions one experiences, or the way one marks happy occasions. Whereas limited research to-date has explored such antecedents and consequences of happiness, the work presented in this special session begins to address this gap. Given the increasing interest in happiness and having fun in various consumer disciplines, the session is likely to attract a wide audience. Attendees can expect to have fun and the speakers not to take themselves too seriously.

## **Does Variety Make People Happy?**

### **EXTENDED ABSTRACT**

Does variety increase happiness? Would an hour spent juggling emails, meetings, and data analysis or a workday focused only on data analysis lead to greater happiness? Would a Saturday spent bouncing from running errands, to cooking an elaborate dinner, to playing with one’s kids or a Saturday dedicated solely to playing with the kids lead to greater happiness? This research experimentally tackles this fundamental question of how best to spend one’s time—on more or less varied activities.

Prior research suggests that people generally value variety. People are stimulated by variety among thoughts (Pronin and Jacobs 2008), shapes (Berylne 1970), and food (Rolls et al. 1981), and they are drawn to highly varied product assortments (Kahn 1995; McAlister and Pessemier 1982; Simonson 1990). Furthermore, incorporating variety into positive experiences and relationships has been proposed as an effective means of countering hedonic adaptation (Bao and Lyubomirsky 2013; Lyubomirsky et al. 2005; Sheldon et al. 2012). It may thus be that integrating greater variety into people’s behavior more broadly will make them happier.

But, should variety always increase happiness? Although variety offers many benefits, it also imposes some costs. Variety is inherently complicated and complex (Berylne 1970). In fact, the very reason that variety may reduce hedonic adaptation is that it requires people to actively process dynamically changing information (Lyubomirsky et al. 2005; Sheldon and Lyubomirsky 2012). This complexity can be aversive. People are less satisfied with their choices, for example, when product assortments include too many varied options (Iyengar and Lepper 2000). Ultimately, varied sets demand more attention than similar sets, which can disrupt people’s ability to focus (Etkin and Ratner 2012; Folkes and Matta 2004; Redden and Hoch 2009). There may thus be times when infusing one’s schedule with variety feels too demanding to allow for happiness.

When, then, would incorporating more variety into one’s activities increase happiness, and when might it decrease happiness? The answer is likely tied to associated feelings of productivity. Doing more varied activities should generally make people feel as though more has been accomplished during that time period (Ahn et al. 2009; Zauberman et al. 2010). A day filled with varied activities, for example, should seem fuller than the same day filled with similar activities. When their time seems full, people feel more productive (Mogilner et al. 2012), and feeling productive is critical to happiness (Diener et al. 2009; Hsee et al. 2010; Seligman 2011).

This may backfire, however, when considering time intervals that are too short to accommodate high amounts of activity. Filling 30 minutes, for example, with highly varied activities may make people feel less productive, because there is too much to do to feel that anything has actually been accomplished. Consequently, although incorporating more variety into one's activities may increase happiness over most time periods (e.g., an hour, a day, a week, a month), it may instead decrease happiness over particularly short time periods (e.g., 30 minutes). We therefore suggest that whether variety makes people happier depends on the time interval over which people do more or less varied activities.

Three experiments test whether and when variety increases happiness. Experiment 1 examined how variety affects happiness over multiple periods of time. We varied whether MTurk participants recalled doing more or less varied activities during their past 10 minutes, 30 minutes, hour, day, week, month, and year, and then measured how happy they were over that time. A 2 (variety) X 2 (time interval) ANOVA revealed the predicted interaction ( $F(1, 595) = 5.14, p < .001$ ). As expected, recalling more (vs. less) varied activities did make people feel happier over an hour ( $M_{\text{high}} = 4.93$  vs.  $M_{\text{low}} = 4.30$ ), a day ( $M_{\text{high}} = 5.30$  vs.  $M_{\text{low}} = 4.45$ ), a week ( $M_{\text{high}} = 5.30$  vs.  $M_{\text{low}} = 4.73$ ), and a month ( $M_{\text{high}} = 5.07$  vs.  $M_{\text{low}} = 4.58$ ). This effect reversed, however, over the short time periods of 10 and 30 minutes. In these conditions, recalling less varied activities increased happiness (10 minutes:  $M_{\text{low}} = 4.90$  vs.  $M_{\text{high}} = 4.52$ ; 30 minutes:  $M_{\text{low}} = 5.01$  vs.  $M_{\text{high}} = 4.54$ ). These results held controlling for gender, age, and chronic need-for-stimulation.

The next two studies delve further into these findings by examining effects of actual (rather than perceived) variety among activities, and by manipulating whether a given time frame seems shorter or longer. Experiment 2 was a two-part study. Participants were recruited in the morning, assigned to do more or less varied activities over the course of the day, and then surveyed again at the end of that day, allowing us to test whether doing more or less varied things influenced change in happiness. To explore the underlying process, we also manipulated how long that day seemed (short vs. long), and measured productivity perceptions. Supporting our theorizing, doing more (vs. less) varied activities increased happiness when the day seemed long ( $M_{\text{high}} = .95$  vs.  $M_{\text{low}} = .04$ ), mediated by seeing time as more productive ( $ab = .11$ ; 95% CI: .03 to .24). This effect was attenuated, however, when the day was made to seem short ( $M_{\text{high}} = .46$  vs.  $M_{\text{low}} = -.05$ ).

Experiment 3 manipulated the variety of activities participants engaged in over a short amount of time (10 minutes), again varying whether that time seemed short or long. Contrary to the results for a long time interval, doing less (vs. more) varied activities increased happiness over 10 minutes ( $M_{\text{low}} = 4.76$  vs.  $M_{\text{high}} = 4.06$ ), mediated by increased productivity ( $ab = -.14$ ; 95% CI: -.40 to -.01), but this effect was attenuated when 10 minutes was made to seem short ( $M_{\text{low}} = 4.93$  vs.  $M_{\text{high}} = 4.73$ ).

In sum, this work provides the first empirical link between the variety of people's activities and their happiness, showing that doing more varied activities often makes people happier, but not always. For variety to increase happiness, a sufficiently long time period is required. Over particularly short time periods – namely, less than 30 minutes – doing a variety of different activities decreases feelings of productivity, resulting in less happiness.

## Emodiversity and the Emotional Ecosystem

### EXTENDED ABSTRACT

Compare three individuals: Person A experiences three moments of joy in a given day, Person B experiences two moments of joy and one moment of contentment, and Person C experiences two moments of joy and one moment of anxiety. If we sum the number of positive emotions (joy and contentment) and subtract the number of negative emotions (anxiety), A and B would be equally happy, and happier than C. Indeed, research suggests that high levels of positive emotion and low levels of negative emotion are an essential component of subjective well-being (Diener et al. 1999; Fredrickson 2001). Is subjective well-being simply the result of such simple arithmetic subtractions? We investigate whether not just the mean levels but also the *diversity* of emotions that people experience may have hidden benefits for their well-being. We show that the “emodiversity” of A, B, and C's emotions—the variety and relative abundance of the emotions they experience—is an independent and integral component of the human emotional ecosystem, one that predicts both mental and physical health.

We drew our prediction from research in the natural sciences on the benefits of biodiversity (i.e., the variety and abundance of different types of organisms within an ecosystem). Across habitats ranging from deep-sea to grassland through tropical forest, biodiversity has been repeatedly shown to foster adaptive functioning (e.g., Danovaro et al. 2008). Biodiversity promotes ecosystem resilience (Elmqvist et al. 2003) and fosters resistance to extreme and undesirable events such as diseases, pathogens, and invasive species (e.g., Knops et al. 1999).

Might diversity play a similarly critical role for the human internal emotional ecosystem? Certainly, the human mind is a natural system that shares important features with other natural systems (Johnston et al. 1998). In addition, biodiversity plays a key role in environmental health by enhancing adaptive flexibility (Heller and Zavaleta 2009; Rammel and Van den Bergh 2003); likewise, flexibility in human biological and psychological processes is associated with adaptive mental functioning and enhanced resistance to disease (Kashdan and Rottenberg 2010; Mikolajczak et al. 2010). As a result, we adapted the Shannon biodiversity index, which quantifies the number of species and the evenness of species in a biological ecosystem (Magurran 2004; Shannon 1948), to quantify emodiversity, or the richness (how many specific emotions are experienced) and evenness (the extent to which specific emotions are experienced in the same proportion) in the human emotional ecosystem.

In Study 1, 35,844 respondents reported their propensity to experience 9 specific positive and 9 specific negative emotional states, and completed a measure of mental health which assessed depression (MADR-S; Meites et al. 2008). We computed Shannon's biodiversity index for positive emotions, negative emotions, and all emotions and entered these emodiversity scores into a series of regressions predicting depression. Greater emodiversity, whether computed for positive emotions, negative emotions, or all emotions, was consistently linked to lower depression, independently of mean levels of positive and negative emotions. These associations were best characterized as linear and our findings remained robust after controlling for gender, age, and the five primary dimensions of personality.

In Study 2, we explored whether emodiversity also predicted physical health. We recruited a representative sample of adults through a large mailing conducted by a governmental health insurance service in Belgium ( $N = 1,310$ ). Respondents were asked to report their propensity to experience 10 specific positive and 10 specific negative emotional states, as well as a number of health-related

behaviors. In addition to these self-reported data, we obtained objective health measures from the health insurance service for each respondent over the last 11 years: number of visits to family doctors, number of days spent in hospitals, and the Defined Daily Dose (DDD), a typical indicator of medication consumption based on the average maintenance dose per day. Finally, we also obtained the total costs to the Belgian government for each of these expenses.

As before, mean positive emotion, mean negative emotion, and emodiversity scores were calculated for each respondent and entered into regressions predicting each health outcome. All measures of emodiversity were positively related to physical health, over and above mean positive emotion and mean negative emotion. The sizes of these effects were nontrivial: emodiversity was a stronger predictor of physical health than eating healthily, not smoking, and exercising frequently. These benefits were evident in decreased costs to the Belgian government as well: an increase of one standard deviation in overall emodiversity was equal to annual savings of 993.22 euros per person, per year, for the Belgian government.

Although the cross-sectional nature of this design precludes causal inferences, our findings dovetail with an emerging literature showing that a complete understanding of the impact of emotions on well-being requires more than an understanding of mere overall levels. For example, fluctuation around one's average level of emotion has been shown to be related to psychological-health above and beyond mean levels of emotions, while too much variability can be maladaptive (e.g., Gruber et al. 2013).

Why could emodiversity be beneficial for mental and physical health? As with research suggesting that biodiversity increases resilience to negative events because a single predator can't wipe out the entire biological ecosystem, it is possible that emodiversity prevents specific emotions—in particular detrimental ones such as acute stress, anger or sadness—from dominating one's emotional ecosystem (e.g., McEwen 2004). For instance, the experience of prolonged sadness might lead to depression but the joint experience of sadness and anger – although unpleasant – might prevent individuals from completely withdrawing from their environment. The same biodiversity analogy could be applied to positive emotion. Humans are notoriously quick to adapt to repeated exposure to a given positive emotional experience (Frederick and Loewenstein 1999); positive experiences that are diverse may be more resistant to such extinction.

While future research is needed to document the precise pathway by which emodiversity improves outcomes, our results taken together support the notion that emodiversity is a significant and previously unidentified metric for assessing the health of the human emotional ecosystem.

### **Celebrate or Commemorate? When Material Purchases Lead to Stronger Memories and More Happiness**

#### **EXTENDED ABSTRACT**

Imagine that you have just received a much-desired promotion and want to mark this milestone to make it more memorable for years to come. Should you celebrate the promotion with an experience (e.g., party or vacation) or commemorate it with a material purchase (e.g., watch or ring)? Recent research established an “experiential advantage,” demonstrating that when recalling past purchases, experiences lead to more happiness than materials (Nicolao, Irwin, and Goodman 2009; Van Boven and Gilovich 2003). These findings would lead to celebration (vs. commemoration) recommendation.

However, when honoring special life events, the purchase itself is not the main driver of happiness; instead, the purchase is made to help facilitate the memory of the event and to create positive affect

and happiness over time. One way to move an event into long-term memory is rehearsal, which reduces the natural decline in memory over time (Elster and Loewenstein 1992; Tulving and Thompson 1973; Thompson 1982). We argue that material items (vs. experiences) can enable this rehearsal better by serving as a reminder of the memory. That is material items might enhance a positive memory and allow for the consumer to extract more utility over time.

In this research, we propose when marking a special occasion, commemorating through material purchases (vs. celebrating with experiences) allows for rehearsal and thus lead to better memory for the event over time. Furthermore, rehearsal of an event not only increases vividness of ones' memory, but it also reduces the rate at which positive affect fades (Skowronski and Walker 2004). Accordingly, we predict that purchasing a material item to commemorate (versus an experience to celebrate) will lead to more vivid memory and stronger positive affect associated with a special event or achievement over a long period of time. However, since the rehearsal only influences long-term memory, we do not expect material advantage to emerge for short time intervals. Finally, since the advantage of commemoration appears over longer periods of time, we do not expect consumers to be able to predict the long-term advantage of commemorative purchases. Four studies provide support for these predictions.

In study 1 ( $n = 221$ ), we examined whether participants would predict a long-term memory advantage for commemorative (vs. celebratory) purchases in a 2 (purchase: celebrate vs. commemorate)  $\times$  2 (time horizon: 1 year vs. 2 year) between subjects design. We asked participants to imagine they are about to graduate and decide to spend \$300 to celebrate [commemorate] because they want to remember the day. We then asked how well and how vividly they expect to remember their graduation day in 1 [20] years, after making this purchase. Participants were accurate in predicting memory decay over time (i.e., they believed that their memory would fade over time,  $\beta = .18$ ,  $t(147) = 2.14$ ,  $p < .05$ ). However, they did not expect a memory advantage to commemorating over celebrating (*ns*), suggesting that consumers expect memory to decay similarly for both celebrations and commemorative purchases.

In study 2 ( $n = 151$ ), we examined if people predict that they will be happier with a commemorative (vs. celebratory) purchase to honor a special achievement. Participants imagined that they reached the end of their college career and received a \$1000 gift card to a jewelry store (commemorative) [to Travelocity (celebratory)]. They then indicated how happy they thought the purchase would make them and how much it would contribute to their life happiness. Contrary to the commemorative purchase advantage we show in the next two study, participants predict being happier with the gift card for a celebration than for a commemorative item ( $F(1, 148) = 61.84$ ,  $p < .001$ ). This shows that people are not aware of the higher level of happiness that commemorative purchases bring them (vs. celebratory purchases).

In study 3, we examined the memory for a special event when participants were primed either a celebration or commemoration. To control for the purchase type, we asked married participants ( $n = 151$ ) to describe either their wedding reception (a celebratory experience) or their wedding ring (a commemorative material good). Participants rated their memory of this special occasion, how well their purchase reminds them of this occasion, and how long they had been married. As expected, we found a significant type of purchase (celebration/commemoration) by time since marriage interaction for both the memory measures ( $\beta = .23$ ,  $t(147) = 2.74$ ,  $p = .007$ ). Immediately after the wedding, individuals had a more vivid memory when they thought about their celebration compared to their commemorative

item ( $p$ 's < .01). However, as time passed, people who thought about their commemorative purchase had a better memory of their wedding) than those who thought about their celebratory purchase ( $p$ 's < .05). This study shows that over time, material items can enhance memory compared to an experience.

In study 4 ( $n = 148$ ), we extended our findings to positive affect, by examining whether participants have (1) a better memory and (2) greater positive affect associated with their graduation day based on how they marked this special event (celebration vs. commemoration) We asked all participants to think back to their most important graduation, and then asked them to either recall how they commemorated or celebrated. Participants then responded to four measures: memory (how vividly they remember the day), purchase reminder (indicated how well the purchase reminds them of graduation), happiness (positive affect when recalling the day), and years since graduation. We found the same significant time by celebrate/commemorate interaction on memory of the day ( $\beta = -.61$ ,  $t(144) = -2.06$ ,  $p = .04$ ). Bootstrapping analysis showed a significant indirect effect through the purchase reminder mediator on memory (95% CI =  $-.26$ ,  $-.002$ ). Further, bootstrapping analysis also revealed a significant indirect effect of memory on happiness (95% CI =  $-.12$ ,  $-.003$ ), suggesting that a commemorative purchase can increase the positive affect associated with an event over time by serving as a better reminder of the event.

In sum, these results not only provide a key exception to the experiential advantage, but they also demonstrate an important role of material goods in consumer happiness. The results suggest that consumers should commemorate instead of celebrate special occasions, if they want to increase happiness and protect special memories of events and achievements.

## Neglect of Emotional Losses in Compensation Decisions

### EXTENDED ABSTRACT

Of the losses people suffer, many are emotional losses such as fear, grief and anxiety, and many emotional losses are inflicted by others. Emotional losses entail grim consequences, as they lower the subjective wellbeing of the affected persons. The current research studies how laypersons serving as mediators and jurors make compensation decisions for emotional losses. The research finds a general tendency in them to overlook emotional losses, especially when there are economic losses present.

Our theory builds on three propositions. First, most people believe that emotional losses should be compensated for. Second, people prefer to base their decisions on “hard” (objective, tangible, material and substantial) factors rather than on “soft” (subjective, intangible, immaterial, and unsubstantial) factors. Third, people perceive emotional losses to be soft relative they perceive economic losses. Thus, we propose that people will base their compensation judgments on emotional losses when the emotional losses are the only losses and will ignore emotional losses and base their compensation judgments on economic losses instead if there are both emotional and economic losses. Based on this analysis, we predict a counter-normative effect in compensation decisions: Holding the emotional loss constant, people will award less compensation to the victim of an emotional loss if the victim also incurs a small economic loss than if the victim incurs only the emotional loss. We refer to this anomalous effect as the less-for-more effect. According to our theory, the reason for the less-for-more effect is that emotional losses appear soft relative to economic losses. Therefore, we also predict that the less-for-more effect will disappear if the emotional loss is removed or replaced by an economic loss, or if the emotional loss is

“hardened” (e.g., monetized) before making a compensation judgment. In summary, we have the following hypotheses:

*Hypothesis 1* Holding the emotional loss a person incurs constant, people will award less compensation to the person if the person also incurs a small economic loss than if the person incurs no economic loss.

*Hypothesis 2* The less-for-more effect hypothesized in H1 will disappear if the emotional loss is replaced by an economic loss.

*Hypothesis 3* The less-for-more effect hypothesized in H1 will disappear if the emotional loss is monetized prior to making a compensation decision.

We tested these hypotheses in a set of seven experiments. Experiment 1 tested H1 and demonstrated the basic less-for-more effect using a car-accident scenario, in which a reckless driver hit an old woman and inflicted grave psychological distress on her. We found that participants awarded lower compensation to the victim if she also incurred a small economic loss than if she did not, regardless of whether the value of the economic loss was specified or not. The finding suggested that if there was no economic loss people based their compensation decision on the emotional loss, but there was a small economic loss people based their compensation decision on the small economic loss instead.

Experiment 2 and Experiment 3 replicated the less-for-more effect when compensation was service time (Experiment 2) or course credits (Experiment 3) rather than monetary payment. These results were important, because they ruled out stimulus-response compatibility as an alternative explanation for the less-for-more effect.

Experiment 4 tested H2 by manipulating the presence or absence of an economic loss. It found that the less-for-more effect occurred only if there was an emotional loss and disappeared if the emotional loss was removed. Experiment 5 further tested H2 by showing that the less-for-more effect disappeared when the emotional loss was replaced by an economic loss.

Experiment 6 and 7 tested H3 by exploring another moderator – monetization of the emotional loss. The results showed that monetizing the emotional loss before making a compensation decision removed the less-for-more effect and boosted compensations for the emotional loss.

This research makes multiple contributions. Empirically, it demonstrates a robust and counter-normative less-for-more effect and reveals the tendency to neglect emotional losses in the presence of economic losses. Theoretically, it corroborates existing research by showing a dualism in decision makers: they acknowledge the role of soft factors in well-being yet are unwilling to base decisions on such factors. This has implications not only for judgments involving emotional versus economic factors but also for judgments involving soft and hard factors in general. Prescriptively, this research suggests two strategies for emotional-loss victims to claim compensations: do not mention economic losses unless they are large, and nudge mediators to monetize the emotional losses before making their compensation decisions.

Like economic losses, emotional losses hurt the wellbeing of the injured person. The current research draws public attention to such losses, and suggests ways to make compensations for emotional losses fairer.

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# Political Ideology and Consumer Behavior

Chair: Adam Duhachek, Indiana University, USA

## **Paper #1: Political Ideology and Consumer Decision Making**

Adam Farmer, Mississippi State University, USA

Blair Kidwell, Ohio State University, USA

David Hardesty, University of Kentucky, USA

## **Paper #2: Stability vs. Change: The Effect of Political Ideology on Product Preference**

Adam Duhachek, Indiana University, USA

Zakary L. Tormala, Stanford University, USA

DaHee Han, McGill University, Canada

## **Paper #3: The Effect of Political Ideology on Reactions to Warning Labels and Consumption Regulations**

Mitchel R. Murdock, University of South Carolina, USA

Caglar Irmak, University of Georgia, USA

James F. Thrasher, University of South Carolina, USA

## **Paper #4: Conforming Conservatives: How Norms of Salient Social Identities Overcome 'Heartless Conservative' Tendencies**

Andrew M. Kaikati, Saint Louis University, USA

Carlos J. Torelli, University of Minnesota, USA

Karen P. Winterich, Penn State University, USA

### **SESSION OVERVIEW**

Political ideology refers to “the set of attitudes that explains how society should work in order to achieve social justice and social order (Jost 2006).” Political ideology not only influences individuals’ behavior in politically related contexts (e.g., voting) but also influences our everyday preferences and consumption behavior. For example, recent research shows that conservative consumers shop at Walmart more often while liberal consumers go to Starbucks more often (Gelman 2008). Despite the fact that political ideologies are one of the important drivers determining our daily life consumption behaviors, it is surprising that a few researchers in the consumer literature have recently begun to empirically examine how political ideology influences consumer behavior in daily life (e.g., Fernandes and Mandel 2013, Khan et al. 2013, Kidwell et al. 2013). To address this gap, the papers comprising this session proposal are designed to answer the following question: “How does political ideology affect a wide variety of consumers’ reaction and behaviors (i.e., choices, persuasion, unhealthy behavior, and donation)?”

The first paper by Farmer and his colleagues examines how differences in political ideology impact consumer choices. They found that liberals preferred hedonic, novel, and desirable options while conservatives preferred utilitarian, status quo and feasible options. They also showed the mediating role of deliberation. The second paper by Duhachek and colleagues investigates how political ideology affects persuasion depending on ad framing. They demonstrated that conservatives (liberals) showed greater preferences toward products when they were shown the ad highlighting “stability (change).” They also showed the mediating role of a stability (vs. change) mindset. The third paper by Murdock and colleague examines how political ideology influences consumer reactions to warning labels initiated by government agencies. They found that when the FDA is associated with the warning label, conservatives (vs. liberals) showed greater tendencies to engage in unhealthy behavior (e.g., decrease their intention to quit smoking, increase their intention to purchase unhealthy food and order unhealthy side dishes). The last paper by Kaikati and colleagues discusses the impact of political ideology in donation contexts. Specifically, they examine how conservatives

(vs. liberals)’ donation intention will vary depending on the salience of the unifying social identity. They found that when salient social identities increase the motivation for social approval, conservatives increase their donation.

Taken together, the papers presented in this session will make theoretical contributions because all four papers are closely related and well grounded in theory, consequently enhancing our broad and in depth understanding of the relationship between political ideology and a wide range of consumer behavior. Furthermore, each one reports several experiments and presents novel findings to consumer researchers as well as provides important insight for practitioners and public policy makers who are interested in marketing products or developing persuasive messages under the influence of political ideology.

## **Political Ideology and Consumer Decision Making**

### **EXTENDED ABSTRACT**

Recent research in psychology, genetics, and neurology have identified fundamental differences in the way people think and behave relative to their political ideology (Alford, Funk, and Hibbing 2005; Kanai et al. 2011). Given these fundamental differences, it is likely that liberals and conservatives vary in the way they make decisions (Kidwell, Farmer, and Hardesty 2012). Yet, surprisingly little attention has focused on understanding how political ideology influences the choices that consumers make.

Political ideology is defined as the set of attitudes that explains how society should function in order to achieve social justice and social order, and is best conceptualized as a unidimensional construct with liberals on the left and conservatives the right (Jost, Federico, and Napier 2009). In order to assess the effects of political ideology, this research focuses on choice preferences. Specifically, the choice preferences between hedonic and utilitarian options, novel and status quo options, and feasible and desirable options are examined.

Conservatives may have a stronger inclination for a status quo option as they are more likely to defend and justify existing systems (Jost et al. 2003). Conversely, liberals are more open to experience which leads them to exploring their environment for what is unique, such as a novel option (Carney et al. 2008).

Some choices require consumers to consider both the process (feasibility) and the outcome (desirability) of the choice. Feasibility follows a low-level construal and is perceived as more concrete, while desirability follows a high-level construal, and is perceived as more abstract (Trope and Liberman 2010). Liberals are more likely to appreciate and prefer the abstract, leading them toward a preference for desirable options, whereas conservatives’ dogmatic thinking leads them to focus on more specific, concrete characteristics (Shook and Fazio 2009).

Finally, consumers’ choices are often composed of deciding between hedonic and utilitarian options. Utilitarian attributes are more objective and easily justified (Shafir, Simonson, and Tversky 1993). This is appealing to conservatives as they seek an ease of justification (Jost et al. 2003). The experiential nature of hedonic options, instead, is better appreciated and more preferred by liberals, as they are more open to experience (Carney et al. 2008).

*Deliberation.* The one explanation that can synthesize the differences between liberals and conservatives is how much they deliberate when making decisions, where liberals are predicted to delib-

erate more than conservatives. This is supported by the difference in their brain structure, where liberals are more likely to override habitual processing and are more open to experience (Carney et al. 2008), while conservatives are more likely to rely on rules and structure when making decisions and to think in more black and white terms (Jost et al. 2003).

The selection of a status quo option relies more on familiarity and past experience, while deliberation is positively linked to trying something new (Eidelman and Crandall 2009). When comparing feasible and desirable attributes, the evaluation of feasible attributes is often consistent, where the weight assigned to desirable attributes often guides decisions, such that feasible options are chosen when the desirable options are not deemed to be as important (Todorov, Goren, and Trope 2007). Finally, by deliberating less, conservatives are more likely to focus on the objective nature of utilitarian options, where greater amounts of deliberation help liberals justify a hedonic indulgence (Kivetz and Simonson 2002).

*Studies Summary.* Five studies are conducted to examine political ideology's impact on consumer choice. In study 1 we investigate the reported and actual behaviors of adult consumers relative to their political ideology while controlling for the age and household income of participants. Conservatives were more likely to provide utilitarian reasons for purchasing a vehicle while liberals were more likely to provide hedonic reasons ( $\beta = .21, p < .05$ ). In a restaurant task, conservatives were more likely than liberals to go to nationally recognized restaurants ( $B = .32, p < .05$ ), and were less likely than liberals to try new things at these restaurants ( $B = -.26, p < .05$ ). Conservatives were also more likely to have Microsoft Windows installed as their operating system instead of more novel Linux or Apple operating systems ( $B = .44, p < .05$ ). Finally, conservatives were more likely to prefer feasible vacations which are closer to home and cost less, while liberals would rather go on more desirable vacations which involve traveling farther from home ( $\beta = -.22, p < .05$ ) and spending more money ( $\beta = .21, p < .01$ ).

Studies 2 and 3 provide a more scientific and robust examination of these differences by employing multiple measures of political ideology and choice sets. The results from these studies present evidence that liberals and conservatives make systematically different choices. In studies 2a and 2b conservatives were more likely to prefer utilitarian foods, status quo restaurants, and short but dull (feasible) books while liberals were more likely to prefer hedonic foods, novel restaurants, and long but interesting (desirable) books. In studies 3a and 3b conservatives were more likely to prefer a utilitarian apartment, a status quo mutual fund investment, and a feasible concert gift while liberals were more likely to prefer a hedonic apartment, novel mutual fund investment, and a desirable concert gift.

Study 4 then tests the process mechanism of deliberation underlying the influence of political ideology on decision making using the same choice set from studies 2a and 2b. Deliberation was found to underlie these differences in decision making where liberals deliberated more than conservatives. Deliberation, or the amount of thinking, was solely responsible for these effects and was shown to work apart from the type of thinking and other potential alternative explanations.

Finally, study 5 uses the same choice set from studies 3a and 3b while experimentally manipulating levels of deliberation. Participants in the high deliberation condition exhibited liberal decision making tendencies for all three tasks while those in the low deliberation condition exhibited conservative decision making tendencies regardless of their political ideology. These results provide further support for deliberation as the underlying mechanism.

## Stability vs. Change: The Effect of Political Ideology on Product Preference

### EXTENDED ABSTRACT

Political ideology influences individuals' behavior in the politically related contexts as well as influences individuals' everyday preferences and consumption behavior. In this context, prior research has shown the effect of political ideology on consumer behavior that has political implications (e.g., Crockett and Wallendorf 2004). Moreover, a few researchers have recently begun to examine how political ideology shapes consumer attitude toward products that are devoid of political content (Fernandes and Mandel 2013; Khan et al. 2013). However, little is still known how political ideology influences consumer attitude toward non-political products and how practitioners can apply these findings to their advertising campaigns to attract more consumers.

To fill these gaps, the present research identifies a new mechanism and a new boundary condition of the effect of political ideology on product preference. First, although Fernandes and Mandel (2013) showed that political ideology affects consumer choice for non-political products, they exclusively examined variety seeking. Hence, the current research extends the existing literature by testing a different dependent variable (i.e., product preference). Second, although Khan et al. (2013) showed that conservative consumers prefer national brands, they only looked at a correlation between two variables. From their findings, the causal relationship between two is inconclusive and it is hard to understand "why" political ideology affects consumer preference for non-political products. Therefore, the current research articulates and empirically tests a new mechanism through which political ideology impacts consumer preference for products described in the ads. Finally, scant research has examined how marketing firms can incorporate these findings to their communication campaigns to attract more consumers who have different political ideologies. To address these gaps, this research proposes a new moderator (i.e., ad frame) and tests how conservatives vs. liberals show different preferences for the products when they are shown different types of product ads (i.e., either highlight stability or change).

First, we propose that conservatives will be more likely to maintain their current choices while liberals will be more likely to switch their current choices because previous research has demonstrated that conservatives prefer what is familiar and stable because change produces greater unpredictability and chaos while liberals are more open to experience new environments and pursue the novelty (Jost et al. 2003; Thorisdottir et al. 2007). Second, we posit that conservatives will show greater preferences toward the product when the ad includes the words related to stability (e.g., maintain, keep) than when the ad contains the words related to change (e.g., change, move) while the pattern reverses for liberals because previous research found that conservatives showed implicit and explicit preferences toward words such as "stable," and "tradition" whereas liberals showed implicit and explicit preferences toward words such as "flexible," and "progress" (Jost et al. 2008; Jost et al. 2009). Finally, regarding the mechanism through which political ideology affects consumer preference for products, we propose that political ideology activates different psychological mindsets that might carry over to a variety of subsequent tasks, which drive the effect of political ideology on product preference. Specifically, we propose that conservatives will activate stability mindsets whereas liberals will provoke change mindsets because previous research has demonstrated that conservatives prefer what is stable whereas liberals are more open to what is new (Jost et al. 2003; Thorisdottir et al. 2007). These activated mindsets will subsequently influence consumer preference for products.



Study 1 examined the effect of political ideology on product preferences in the context of the diet program. Participants were asked to imagine that they were on a diet and worked out at the fitness club for last two months but they found that their weight hasn't been changed a lot although they followed the diet program strictly. They were then asked to rate the likelihood that they would renew the membership and that they would switch to the new diet program (1=not at all likely, 9=very likely). The political ideology was measured on a scale adopted from Jost et al. (2007). The result revealed that conservatives were more (less) likely to renew the membership (switch to the new diet program) as compared to liberals.

Study 2 investigated the effect of the match between political ideology and message frames (i.e., change vs. stability) on persuasion. Specifically, participants were presented the ad message regarding the car emphasizing either change or stability (Change condition: We've been changing for 100 years. We're the symbol of moving forward! Change your outlook! [Stability condition: We've been here for 100 years. We're the symbol of consistency! Keep your life great!]). Next, we measured their attitude toward the product and political ideology. We found that a stability (vs. change) appeal was more persuasive for conservatives whereas a change (vs. stability) appeal was more persuasive for liberals.

Study 3 examined the underlying process. If the change or stability mindsets constitute the underlying process, by manipulating this process directly, we should be able to wipe out the effects of political ideology and have only the effects of the ad message frame and the mindset. Thus, in this study, we strived to manipulate the change (vs. stability) mindset directly by adopting the method used by Wood (2010) to examine the role of the change (vs. stability) mindset in the proposed effects. In addition, in this study, we manipulated political ideology through a procedure used by Fernandes and Mandel (2013). The same procedure and instruction to manipulate the message frame (i.e., change vs. stability) were used as study 2. After viewing the ad regarding the car, participants rated their attitudes toward the car. The results indicated that when the change mindset was made accessible, participants preferred the product when the message frame emphasized change while the pattern reversed when the stability mindset was made accessible.

Overall, our findings contribute to the consumer literature by examining the effects of political ideology on consumer attitudes in the politically unrelated contexts and uncovering why conservatives and liberals show different preferences for the products depending on the ad messages. Furthermore, the results have implications for practitioners by showing how they develop better advertising campaigns to attract more customers.

## The Effect of Political Ideology on Reactions to Warning Labels and Consumption Regulations

### EXTENDED ABSTRACT

The escalating health problems stemming from unhealthy consumer behaviors (e.g., overeating, smoking) prompt government officials to use a variety of public policy tools. For instance, in order to deter smoking, the Food and Drug Administration (FDA) is attempting to require graphic health warnings on all packages of cigarettes (Mears 2012). However, such labels can have unintended effects (Wansink and Chandon 2006), inducing psychological reactance (Brehm 1966), a motivational state focused on restoring a restricted freedom, which can often have a boomerang effect where the restricted activities become more attractive (Fitzsimons and Lehmann 2004).

Research on reactance has shown that warning labels lead to high reactance especially when the label source is deemed as authoritative (Bushman and Stack 1996). For example, college students were less likely to agree with a message advocating teaching machines when the message came from a prominent professor versus a high school student (Brehm 1966). While recent research on reactance has demonstrated how government regulations result in psychological reactance (Laurin, Kay and Fitzsimons 2012), an important factor—individuals' political ideology—has not received much attention from research on reactance. Since political ideology is at the heart of how people react to governments (Jost et al. 2003), it is especially relevant to investigate its role in the context of public policy initiatives and government regulations. We draw on research on political ideology (Jost 2006; Kidwell et al. 2013) and reactance (Brehm 1989; Fitzsimons and Lehman 2004) to suggest that reactions to warning labels and regulations may be influenced by consumers' political ideology. Further, we investigate how the source of these initiatives (e.g., government agency vs. businesses) interact with consumers' political ideology (i.e., conservative vs. liberal) to impact consumer reactions to warning labels and regulations.

Across three studies we demonstrate that 1) conservatives (vs. liberals) are more likely to act counter to the warning label when it is associated with a governmental source (Study 1), 2) this reaction only occurs among conservatives that are high in trait reactance (but not in high-reactance liberals) (Study 2), and 3) the underlying process of this effect is that high-reactance conservatives draw implications from government regulations that possible additional restrictions are on their way (Study 3).

In Study 1, 525 smokers viewed a series of graphic health warnings. The source of the graphic warning label (FDA vs. no-source control) was varied between subjects. In the control (FDA) condition the health warning stated: "(FDA) Warning: Cigarettes are addictive." Political ideology was measured by using a modified version of the political attitudes scale (Nail et al. 2009). The results showed a significant two-way interaction between label condition and political ideology ( $p < .05$ ) such that in the FDA (vs. control) condition conservatives were significantly less likely to quit smoking ( $p < .05$ ) whereas the label source did not have an effect on liberals' quitting intentions ( $p > .70$ ).

In Study 2, 106 participants imagined themselves purchasing a pizza in a grocery store. Label (FDA vs. no-source control) was varied between subjects. The pizza had a front-of-package nutritional label that indicated an unhealthy amount of fat, saturated fat, and salt. In addition to political ideology, we measured participants' trait reactance (Hong and Faedda 1996). Replicating study 1, the results showed a significant two-way interaction between label condition and political ideology ( $p < .05$ ). Further, in line with our theorizing, a significant three-way interaction between political ideology, reactance, and label condition ( $p < .05$ ) showed that the effect was driven by conservatives who are high in reactance.

In Study 3, 156 participants imagined that they are at a local drive-through fast food restaurant, where due to high obesity rates large beverages had been removed from the menu by either the FDA (government condition) or the restaurant chain (business condition). Participants further imagined that they ordered Combo #1, which includes a cheeseburger and a small soda (no alternative size). Then they were asked which side dish they would prefer with their meal. The results showed that high-reactance conservatives were more likely ( $p < .05$ ) to order an unhealthy side dish when the source of the regulation was the FDA (vs. business), while this effect was not significant for liberals regardless of their trait reactance level. Further, this effect appeared to be mediated by high-reactance conserva-

tives' concerns about potential future government restrictions in the domain of the regulation.

This research adds to the reactance literature by examining the process through which authoritative sources lead to negative reactions to warning labels. Specifically, we show that, at least in the context of warning labels and regulations, political ideology of the consumer is an important factor in reactance. As such, the present research is the first to investigate how differences in the way various consumer groups view the influencing agent leads to reactance and, hence, limits the success of public policy initiatives. Further, our findings add to the political ideology literature by highlighting how threat to freedom can, under certain conditions, trump respect for authority for those with conservative political orientation. From a public policy perspective, these results are important as the FDA may ironically lessen the impact of its own initiatives if consumers know that it is the FDA that is behind the warning labels.

### Conforming Conservatives: How Norms of Salient Social Identities Overcome 'Heartless Conservative' Tendencies

#### EXTENDED ABSTRACT

Perceptions of bleeding heart liberals and heartless conservatives abound (e.g., Farwell and Weiner 2000), though some research has demonstrated that these perceptions are not always represented in actual behavior (Brooks 2006) and individuals of either political ideology are equally likely to donate, as long as the cause aligns with their values or moral foundations (Winterich, Zhang, and Mittal 2012). The current research moves beyond political ideology to consider how the multiple identities that consumers hold impact the extent to which political identity, and corresponding perceptions of giving, actually impact donation decisions.

While conservatives may have more individualistic and competitive orientations than liberals, who tend to have more prosocial orientations (Van Lange et al. 2012), research has also demonstrated that conservatives are more likely to conform to group norms (Cavazza and Mucchi-Faina 2008). Moreover, Jugert and Duckitt (2009, p. 698) argue that "the personality dimension of social conformity should increase group identification, since persons with a dispositional tendency to conform to their group's norms should be inclined to identify more strongly with their groups." This research suggests that conservatives will be more likely to conform to the donation tendencies of their group than liberals, but, notably, conformity is not limited to the political group with which one identifies.

Consumers hold multiple identities (Winterich et al. 2012), which may differ in salience at any given moment (Reed 2004). For instance, although students from the same university can define themselves in terms of liberal—conservative social identities, situational constraints can lead the same individuals to ignore these identities and to focus instead on the shared college identity for self-definition. Contextual activation of this common in-group identity heightens the need to maintain in-group cohesiveness and harmonious relations with other group members. Here, we expect that conservatives will be particularly motivated to comply with the norms and stereotypes of the salient in-group, even when this in-group consists of "bleeding heart liberals." In this context, conservatives faced with charitable decisions that would be discussed with *fellow college students* holding liberal views should be motivated to seek approval from the audience (Torelli 2006), and hence factor into their decisions the more generous expectation of their fellow students. In turn, this will boost their own generosity to fit with a liberal audience's norms for charitable giving. When a common social identity (e.g., fellow college students) is not salient, though, the effect of a liberal

audience on increasing conservatives' generosity will be attenuated. This conformity to group norms by conservatives is consistent with the personality trait of politeness, a sub-dimension of agreeableness, that is reflective of conservative beliefs (Hirsch et al. 2010). Moreover, the desire to conform to manage one's impressions among group members reflects a greater value on binding or group-focused moral foundations, which include group loyalty and duty, by conservatives (Graham, Haidt, and Nosek 2009). Notably, while liberals also hold multiple identities that may differ in salience, liberals do not value conformity to the same extent as conservatives.

The current research focuses on donation decisions in the case of needy people judged to be responsible for their plight (Reyna et al. 2005) for which behavior consistent with heartless conservatives has been previously demonstrated. Two studies show that conservatives who anticipate accountability to individuals who hold the opposing political ideology exhibit greater generosity in their charitable decisions, compared with those who anticipate interacting with individuals holding the same political ideology or those making charitable decisions in private, and that this effect is mediated by the desire to seek approval from the audience. This effect emerges only when a shared identity (i.e., college student identity) is salient and is only observed for conservatives rather than liberals. The effect disappears when the charitable cause involves a politically polarizing issue inconsistent with conservatives' moral foundations.

In study 1, students from a Midwestern university were divided in three groups and were asked about the amount of money they would donate to an individual in need. They were further told that they would later discuss their decision with *fellow college students* described as liberals (conservatives), or made a private decision. Half of the participants in each group were presented with a non-polarizing cause ("a person with medical problems due to obesity caused by poor diet and lack of exercise," Farwell and Weiner 2000), whereas the other half were presented with a polarizing cause ("a person with AIDS due to promiscuous homosexual relations—from pre-test). Results showed that conservatives (liberals) exhibited greater generosity (no change) toward the needy person in the non-polarizing condition when accountable to liberals versus when accountable to other conservatives or making decisions in private. Furthermore, this effect was mediated by the desire to seek audience approval (White and Peloza 2009). The effect was absent for the polarizing cause that was inconsistent with conservatives' moral foundations.

In study 2, we provided further evidence of mediation and, importantly, also showed that the effects dissipate when a common identity is not salient. Half of the college student participants were presented with the non-polarizing cause in Study 1 and made their donation decision under the expectation of discussing it with *fellow college students* (*salient social identity* condition) described as either liberals or conservatives, whereas the other half made a decision to be discussed with *others* described as liberals or conservatives (*non-salient social identity* condition). Results from this study replicated the findings in Study 1 in the salient social identity condition, but showed that the effects dissipated in the non-salient condition.

Drawing from the rich literature on conformity among conservatives, we show that while conservatives may be rigid in their beliefs (i.e., the rigid attitudes of the right, Jost et al. 2003), they may actually be more malleable in their behavior. Specifically, in order to manage impressions, conservatives motivated to comply with the norms and stereotypes of the salient in-group will alter their behavior, resulting in increased donations that conflict with perceptions of heartless conservatives. Future research should consider the extent to which such conformity in behavior can alter attitudes through self-perception.

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# The Importance of Perceived Control: Choice, Knowledge, and Controllability in Consequential Domains

Chairs: Rhonda Hadi, Oxford University, UK  
Simona Botti, London Business School, UK

## **Paper #1: “Control and Happiness: Knowing About the Future Hurts the Present”**

Ilona Friedman, Columbia University, USA  
Simona Botti, London Business School, UK  
Sheena S. Iyengar, Columbia University, USA  
Elona Gavazi, Columbia University Medical Center, USA

## **Paper #2: “Boundaries of the Heart: The Interplay of Personal Control and Emotion on Donation Decisions”**

Keisha Cutright, University of Pennsylvania, USA  
Gavan Fitzsimons, Duke University, USA  
Jim Bettman, Duke University, USA

## **Paper #3: “I Take Therefore I Choose? The Impact of Active vs. Passive Acquisition on Food Consumption”**

Rhonda Hadi, Oxford University, UK  
Lauren Block, Baruch College, USA

## **Paper #4: “Consumer Evaluations of Corporate Relief Efforts to Disaster Victims: When Controllability Matters”**

Diogo Hildebrand, Grenoble Ecole De Management, France  
Yoshiko DeMotta, Fairleigh Dickinson University, USA  
Ana Valenzuela, Baruch College, USA and Universitat Pompeu Fabra, Spain  
Sankar Sen, Baruch College, USA

### **SESSION OVERVIEW**

Perceived control refers to a belief that one can determine one’s own internal state and bring about desired outcomes (Nelson & Cohen 1983; Wallston et al. 1987). While people are generally highly motivated to attain and maintain a sense of control (deCharms 1968; Brehm 1966; Langer 1975), perceived control can be quite paradoxical in nature, with surprising antecedents and consequences (Botti et al. 2009). Accordingly, the role of the perceived control construct has not been fully explored in consumer research. This gap in our knowledge raises two important questions: 1) How might perceived control play a role within consequential consumer domains? and 2) What contextual factors influence the downstream effects of perceived control?

The proposed session addresses these questions by combining four papers that uncover important antecedents and consequences of perceived control within consequential consumer domains: health-care, charitable giving, food consumption, and corporate social responsibility. In the first paper, Friedman and colleagues shed light on an unexpected paradox of perceived control. They find that even though people desire information about undesirable future events (e.g. the development of an incurable genetic illness) and predict such information will increase their sense of control, acquiring such knowledge ultimately diminishes their feelings of control and satisfaction. In the second paper, Cutright and colleagues document the impact of perceived control on charitable giving. Specifically, the authors demonstrate that when people are low in control, they rely on their salient emotions in an effort to restore perceived control via more narrowly-defined and structured charitable behavior. In the third paper, Hadi and Block examine perceived control from a different angle, by documenting a means of artificially manufacturing feelings of control. They find that active food acquisition generates

a false impression of choice, leading to increased food consumption for individuals high in dispositional need-for-control. While these first three papers explore perceptions of personal control, the last paper explores judgments of another’s degree of control. Hildebrand and colleagues find that for disasters perceived to be controllable by its victims, monetary contributions produce higher company evaluations than in-kind contributions of equivalent monetary value. However, the reverse is true for disasters perceived to be uncontrollable.

Collectively, this session highlights the interesting and often unexpected ways perceived control can be enhanced and mitigated, and how it can play a role in societally relevant domains. Importantly, the collection of papers show that the impact of perceived control on downstream behavior depends on distinct contextual factors: information desirability (Friedman et al.) emotions (Cutright et al.), dispositional need-for-control (Hadi & Block), and donation type (Hildebrand et al.). Given the interesting juxtaposition of these papers and the consequential nature of the dependent variables examined, we expect this session to stimulate much discussion and appeal to a large group of conference attendees.

## **“Control and Happiness: Knowing About the Future Hurts the Present”**

### **EXTENDED ABSTRACT**

The sense of being in control, of perceiving experiences as caused by deliberate actions and not by external forces, is a basic individual need (deCharms 1968). Consumers who feel in control are usually happier, and when control is threatened they seek to reinstate it (Brehm 1966; Langer 1975). Recent research has investigated two different sources of perceived personal control, freedom of choice and power (Inesi et al. 2011), but classic literature cites information as yet another source (Averill 1973). For example, Schulz (1976) showed that freedom of choice is correlated with predictability, and that access to information about a future event leads to the same psychological benefit of control even in the absence of choice.

Research has however demonstrated that, although people strive to feel in control, the actual experience of control does not necessarily increase subjective well-being. For example, in conditions involving undesirable options, consumers prefer having freedom of choice but their affective reactions and outcome satisfaction suffer as a result (Botti, Orfali, and Iyengar 2009). In this paper, we predict a similar effect in the context of undesirable information. Specifically, we hypothesize that consumers prefer having information about an undesirable future event because they believe that they would feel more in control. However, the availability of this information will not improve their life satisfaction either before or after the occurrence of the event. We focus our investigation on future, undesirable events that are unavoidable, such as the development of some genetic diseases.

In the first study, participants imagined contacting their doctor after being told that some relatives had lost their sight. Participants also imagined the doctor explaining that some genetic diseases cause blindness and cannot be prevented, and that a genetic test could be conducted to ascertain the presence of the gene mutation. Participants were then asked whether or not they would undergo the genetic testing and why. Ninety percent of participants answered that they

would undergo the genetic test. Forty percent of the reasons provided were related to knowledge for the sake of it: these participants wanted to know because they attributed an intrinsic value to this information. Another 40% of the reasons revolved around the concept that knowing would allow for better preparation and coping. Only 8% of the reasons mentioned that knowing would be a motivation to enjoy life before the ensuing of the illness (12% were a mix of other reasons). Thus, about 80% of the justification for the willingness to know about an undesirable future was explained with the belief that this knowledge would improve control, either as a need in itself or as a way to better deal with the disease.

To investigate the psychological consequences of knowing about an undesirable future, we conducted a second study that meant to simulate in the lab a situation that was similar, although less consequential, to that illustrated in study 1. Participants were informed that they would take part in two unrelated studies and that the first study involved watching a video, which was pretested for being relatively neutral. Half of the participants was also informed about the subsequent study, which involved tasting a disgusting yoghurt flavour. The other half of the participants was told that the description of the second study would be provided only after they had concluded the first study. Thus, all participants went through the same two experiences, a neutral one and an unpleasant one, with the main difference that some knew about the pending unpleasant future and some did not. Results show that participants who knew about the undesirable future yoghurt liked the video less than those who did not know. Knowledge did not have a positive effect even after the undesirable event happened, as participants who knew about the undesirable future yoghurt liked it marginally less than those who did not know.

Study 3 employed a scenario that was more similar in content to that of study 1. After imagining a doctor recommending them to take the test, participants were randomly divided into two groups: the first group imagined that the test was positive and they would develop the illness; the second group imagined that the test was negative. We compared these two groups with a control group including participants who did not read any scenario. In the second part of the study, participants who took the test imagined that they either developed, or not, the illness while those in the control condition were told that they either developed the illness or that their life continued pretty much unchanged. After each study parts, participants were asked to estimate their general feelings and level of perceived control within the next year. Results showed that participants who knew that they would develop the illness because they took the test predicted more negative affect and less control than both participants who knew they would not develop the illness and those in the control group. After developing the illness, participants who knew in advance about the illness predicted more negative affect and less control than those who did not know.

Study 4 tested our hypotheses with patients who are legally blind. These patients were asked whether they knew that they would lose their sight before they experienced any symptoms and assigned to two groups on the basis of their answer to this question. We then asked them to assess their level of affect and sense of control during the first year following their vision loss using the same questions employed in study 3. About half of the data has been collected so far, so results are only preliminary but directionally confirm the findings of study 3.

This set of studies suggest that although consumers want to know about an undesirable future event because they believe this would increase control over their lives, this knowledge not only does not make them feel more in control but it also reduce present happiness, both before and after the occurrence of the event.

## “Boundaries of the Heart: The Interplay of Personal Control and Emotion on Donation Decisions”

### EXTENDED ABSTRACT

How do consumers respond when their sense of personal control over outcomes in life is threatened? More specifically, how does it change what they are willing to give to others? Building on prior research suggesting that low feelings of control lead individuals to seek greater structure in their lives, or the sense that ‘there’s a place for everything and everything is in its place’ (e.g., Kay et al. 2008, Cutright 2012), we expect that individuals will find it particularly important to keep their emotions ‘in place’ when control is low. In other words, they should be more likely to confine the traditional carry-over effects of emotions (e.g., Lerner et al. 2004) to specific, relevant areas. We expect this to be particularly important in the area of charitable giving, where emotions are often considered to be critical in determining outcomes (e.g., Small & Verrochi 2009). Specifically, we predict that when control is low, people will use their salient emotions to increase (or decrease) donations only for organizations that are highly relevant to the source of their emotions. For example, if individuals are sad after thinking about abandoned pets, those with low feelings of control should be the most likely to use this sad feeling—and the empathy and desire for connection that often stems from sadness (Mouilso et al. 2007; Small & Lerner 2008)—to concentrate their donations on pets. Conversely, high control individuals will be more likely to use their sad feelings to spread donations across a broad range of charities.

In our first study designed to test this idea, we assigned participants to one of two control conditions. Participants were asked to write about a (positive) time when they had low or high control over an outcome (e.g., Kay et al. 2008). They were then introduced to a standard emotion manipulation (Small & Lerner 2008). Specifically, they were asked to write about how one of two tragic events made them sad: either the Boston marathon bombing or the movie theater shooting in Aurora, Colorado. Participants were then asked to allocate \$200 across charities related to the victims in Aurora, Boston, or an unrelated topic. As expected, we found that when control was low, individuals preferred to direct their donations to organizations that were relevant to their current emotions. The low control individuals who wrote about the Boston tragedy donated more to Boston victims than those who wrote about Aurora ( $M_{\text{Boston}} = \$95.95$  vs.  $M_{\text{Aurora}} = \$75.42$ ;  $p = .03$ ). Similarly, the low control participants who wrote about the Aurora tragedy donated more to Aurora victims than those who wrote about Boston ( $M_{\text{Aurora}} = \$75.63$  vs.  $M_{\text{Boston}} = \$57.51$ ;  $p = .03$ ). Importantly, such differences did not exist in the high control conditions ( $ps > .37$ ).

In a second study, we sought to demonstrate that even fairly incidental experiences of sadness (e.g., sad situations that are not linked to the charities) will evoke similar patterns of behavior, such that low control participants will be the most interested in donating to organizations that are as relevant to the source of their sadness as possible. To test this idea, participants were first assigned to a low or high control condition as in Study 1. They were then asked to watch a sad movie clip. Individuals either felt sad about the death of a loyal dog (*I am Legend*) or because of the emotional pain of a young boy (*The Champ*). Participants were then asked to allocate \$200 to a series of charities related to dogs, children or unrelated topics. Results revealed that the low control participants who saw the sad dog clip were more likely to donate to dogs than those who saw the child clip ( $M_{\text{dog}} = \$45.66$  vs.  $M_{\text{child}} = \$26.20$ ,  $p = .01$ ). Similarly, the low control participants who saw the sad child clip were more likely to donate to children than those who saw the dog video ( $M_{\text{child}} = \$32.54$  vs.  $M_{\text{dog}}$

= \$19.87,  $p = .04$ ). These comparisons were not significant when control was high ( $ps > .32$ ).

In a third study, we sought to demonstrate that our hypotheses extend beyond sadness. We therefore aimed to conceptually replicate our results with an emotion that should lead to very different reactions than sadness. Specifically, we hypothesized that when consumers experience feelings of disgust and consequently have little desire to donate (given that they are motivated to move away from and expel things and ideas in their environment; Lerner et al. 2004), those with low control should reduce their donations only within relevant areas. To test this idea, participants were assigned to a low or high control condition. They were then asked to watch a very disgusting video, which either showed a dog eating feces or a child doing the same. Participants were then asked to allocate \$200 to child or dog-related charities (as in Study 2). As expected, the low control participants who viewed the disgusting dog donated less to dogs than those who viewed the child video ( $M_{\text{dog}} = \$23.21$  vs.  $M_{\text{child}} = \$46.25$ ,  $p = .02$ ). Similarly, the low control participants who viewed the disgusting child donated less to children than those who viewed the dog video ( $M_{\text{child}} = \$30.00$  vs.  $M_{\text{dog}} = \$46.31$ ,  $p = .06$ ). These differences did not hold in the high control conditions ( $ps > .28$ ). Thus, individuals in the low control condition were more likely to use the action-tendencies associated with disgust (the need to expel and move away) and apply it to the charity that was most relevant to the source of the disgust.

Together, these studies suggest that when control is low, individuals erect mental boundaries that dictate which charities are relevant to their current emotions and which ones are not. This allows them to allocate their money in a way that feels ordered and structured, and reject the notion that outcomes are randomly or chaotically determined, which is particularly comforting when feelings of control are low.

### **“I Take Therefore I Choose? The Impact of Active vs. Passive Acquisition on Food Consumption”**

#### **EXTENDED ABSTRACT**

In general, we tend to take things that we have chosen. We reach out and take our desired snack from a refrigerator, favorite book off a bookshelf, and preferred brand from a store shelf. On the other hand, we are often given things we do not choose. A loved one might hand us a gift they picked for us; a child might find unsolicited vegetables piled onto her plate. Perhaps then, this distinction between taking and receiving has built a blueprint in our minds: we take what we choose, but are given what we do not choose. If this is the case, might the mere gesture of reaching for and taking something make us feel as though we chose it?

This research investigates the consequences of physically taking (actively acquiring) vs. receiving (passively acquiring) equivalent food items. Specifically, we show that even when there is no true choice available, the act of physically taking food items can generate a false impression of choice, an effect we term “embodied illusion of choice,” which has meaningful consequences on consumers’ food evaluation and consumption.

A growing body of research has documented the ability of incidental cues to impact eating behaviors, both in terms of food evaluation and consumption volume. For example, packaging (Xiaoyan, & Srinivasan 2013) and portion sizes (Rolls, Morris, & Roe 2002) have been shown to unknowingly impact the amount of food people consume. In this research, we borrow from embodiment literature to propose a new extraneous factor that influences food consumption: active vs. passive acquisition. Embodiment research reminds us that

bodily situations can nonconsciously impact how we think and feel (Varela et al. 1991, Barsalou 2008). In this research, target objects are acquired under both conditions (both entail arm flexion), but the difference stems from the agent of initiation: in the active condition, individuals themselves initiate the acquisition; while in the passive condition, an outside agent acts as the initiator. We argue that it is this distinction, between initiated (active) acquisition and un-initiated (passive) acquisition, that drives differences in perceived choice, even when no actual choice available. If such physical gestures can indeed induce perceptions of choice, how would this illusion impact an individual’s evaluation and consumption of food items?

The ability to choose is valuable to most individuals, and thus providing choice generally leads to improved attitudinal outcomes (Ryan & Deci 2000, 2006; Leotti et al. 2010). Among other domains, this “pro-choice” effect has been documented in the area of food and beverage evaluation and intake (Botti & Iyengar 2004; Weber, King, & Meiselman 2004; Zeinstra et al. 2010). In fact, early research has demonstrated that people perceive aversive foods (e.g. grasshoppers) to be less disagreeable if they feel they have chosen to eat them (Zimbardo et al. 1965). In this research, we explore how the mere act of actively (vs. passively) acquiring food items may lead individuals to evaluate these items more highly and consume more, just like an offering of real choice might.

However, extant literature also suggests that the impact of providing choice may vary for different types of people, implying that not everybody has an equal desire to choose. For example, individuals who place low value on autonomy and the need to control seem to value choice less than those who place high value on such factors (Snibbe & Markus 2005), and measurable differences emerge in individuals’ need-for-control (Burger & Cooper 1979). Thus, we additionally suggest that the impact of acquisition on consumption is moderated by an individuals’ need-for-control, such that the difference between passive and active acquisition conditions is attenuated for individuals low (vs. high) in need-for-control.

Study 1 provides initial evidence of an embodied illusion of choice via a two-factor (acquisition: passive vs. active) between-subjects design. Respondents ( $N=96$ ) were told they would taste and evaluate candy. Participants in the passive condition were handed a piece of wrapped candy from a bowl by the experimenter, while participants in the active condition reached out and took a piece from the experimenter’s bowl (all candies were identical). Participants were offered to take another piece of candy upon exiting. Results produced significant effects of acquisition on product evaluation and on whether or not subjects took another candy: participants evaluated the candy better and were more likely to take another when they had actively taken the initial piece of candy than when it was handed to them.

Study 2 examined the impact of embodied choice on consumption of a chocolate bar, explored the mediational role of “feelings of choice,” and investigated the role of individuals’ need-for-control. The manipulation procedure was identical to study 1. After acquiring the chocolate, respondents ( $N=127$ ) completed a need-for-control scale, and were instructed to eat as much of the chocolate as they wished. Afterwards, they indicated their feelings of having chosen to consume the chocolate (e.g. “I felt as though I had a choice of whether or not to try this chocolate”). The remaining chocolate was weighed in order to calculate how much each participant consumed. Analysis results indicated a significant acquisition x need-for-control interaction on consumption. Participants at high levels of need-for-control ate more chocolate when they actively took it than when they passively received it. However, individuals low in need-for-control demonstrated no significant difference in consumption between ac-

quisition conditions. A bootstrapping moderated mediation analysis confirmed that for those high in need-for-control, feelings of choice mediated the effect of acquisition on consumption.

We contribute to extant literature by documenting uncovering an illusion of choice phenomenon, suggesting that mere physical gestures can foster feelings of choice in an individual via active (vs. passive) acquisition of food items. Thus, we contribute not only by documenting a new antecedent of food behavior, but also by addressing a recent call (Wansink 2004) to explore the psychological mechanisms that drive such effects. Our research offers public health implications accordingly. Given the childhood obesity epidemic, it may be beneficial to encourage children to self-serve themselves healthy foods (e.g. via a salad bar) at school cafeterias, but discourage self-service of unhealthy foods.

### **“Consumer Evaluations of Corporate Relief Efforts to Disaster Victims: When Controllability Matters”**

#### **EXTENDED ABSTRACT**

From forest fires to tsunamis, from Katrina to Sandy, companies have devoted billions of dollars, both in cash and in-kind, to disaster relief in just the last decade (U.S. Chamber of Commerce 2011). Yet, insights into how consumers react to corporate contributions to disaster relief remain scant. We draw on prior research about control attributions (Meyer and Mulherin 1980; Weiner 1980) to argue and demonstrate that consumers’ reactions hinge not on the nature of the contribution per se but rather on their assessment of its fit with the perceived controllability of the disaster.

Extant research (Meyer and Mulherin 1980; Weiner 1985) points to the attributions observers make about the controllability of an event as powerful drivers of the extent to which they react emotionally to it and those affected by it. Based on this, we contend that consumers tend to react more emotionally [rationally] to disasters they perceive to be less [more] controllable by victims. More importantly, we predict that a consumer’s reactions to a company’s disaster relief efforts will be based on the fit between the emotional level elicited by a given disaster and the nature of the corporate contribution.

Because controllable disaster elicits less emotional (and more rational) responses, the more rational monetary contributions will be perceived to be higher in contribution-controllability fit and thus will receive more positive evaluations than the emotional laden non-monetary contributions. In contrast, since an uncontrollable disaster elicits strong emotional reactions, the more caring and loving in-kind contributions will be perceived to be higher in contribution-controllability fit and receive more positive evaluations than monetary contributions. Moreover, because the perceived controllability of a disaster is central to our theorizing about consumer evaluations of monetary versus in-kind corporate relief efforts, different levels in controllability of a disaster should influence consumers responses only when consumers actually desire, and are therefore cognizant of control related issues, i.e., when controllability is situationally or chronically salient. We tested our basic hypotheses in 3 studies.

In study 1 we used a 2 (Contribution Type: Monetary vs. in-kind) x 2 (Disaster Controllability: High vs. low) between-subjects design. Participants first read a fictitious news account of a large-scale avalanche, and a logistics company’s subsequent disaster relief efforts. In the high [low] controllability condition, the article explicitly stated that the avalanche and consequent aftermath could [could not] have been prevented by the affected community. The article also reported that a logistics service company had contributed either a million dollars that would be used for logistics support [monetary] or logistics services worth a million dollars [in-kind] towards relief ef-

forts. After reading the article, participants provided their evaluation of the company and perceived controllability-cause fit. An ANOVA on Company Evaluation produced a significant two-way interaction; in the high [low] controllability condition, the firm’s monetary [in-kind] contribution produced higher evaluations than in-kind [monetary] contribution. The ANOVA on Fit presented a similar pattern. More importantly, mediated moderation analysis (Hayes 2013) demonstrated that Fit mediated the interactive effect of Contribution Type and Disaster Controllability on Company Evaluation.

Studies 2 and 3 were designed to demonstrate that controllability over a disaster influences consumers’ emotional reactions to it (study 2) and that consumers’ emotionality level underlies their perceptions of fit and evaluations of corporate contributions (study 3). In addition to demonstrating the first step of the proposed process, study 2 was also designed to provide support for the role of controllability salience by measuring participants’ Desirability of Control (Burger and Cooper 1979) and using it as a moderator. Thus, we examined the effect of disaster controllability on emotionality level with a 2 (Disaster Controllability: high vs. low) x 2 (Controllability Salience: continuous) between-subjects design. We assessed participants’ level of emotionality/rationality by measuring their reaction time to four focal words, two with strong emotional content (i.e., emotional, feeling) and two with strong rational content (i.e., rational, strategic). We created an Emotionality index by subtracting the natural log transformation of the reaction time for the two emotional words from that for the two rational words. As predicted, we found a significant interaction effect: Participants high in Controllability Salience presented higher Emotionality index scores in the uncontrollable (versus controllable) disaster condition. Participants low in Controllability Salience were no different in their Emotionality index scores across disaster controllability levels.

Study 3 examined the second step of the proposed process, i.e., people that are more [less] emotional perceive a stronger fit and evaluate more positively in-kind [monetary] types of help. This study employed a two-factor – Emotionality (high vs. low) and Contribution Type (monetary vs. in-kind) – between-subjects design. We first manipulated participants’ level of emotionality using a method developed by Hsee and Rottenstreich (2004). After performing the priming task, participants read a fictitious news report about an avalanche in California, along with information about a company’s contribution to disaster relief. Type of help was manipulated similarly to study 1. As expected, the ANOVA on Company Evaluation revealed a significant 2-way interaction. Specifically, participants in the low [high] emotionality condition evaluated the company more positively when the donation was monetary [in-kind]. As well, the ANOVA with Fit as the dependent variable revealed a similar pattern. More importantly, Fit mediated the interactive effect of Contribution Type and Level of Emotionality on Company Evaluation.

The findings reported make three important contributions. First, it advances our understanding of consumer responses to a company’s corporate social responsibility activities in the important domain of disaster relief (Ellen et al. 2000; Nestlé Waters 2013). Second, it provides evidence for the underlying psychological process, implicating consumers’ level of emotionality in their responses to firm actions in this domain. Third, it broadens our extant understanding of fit, a notion central to the CSR literature (Pracejus and Olsen 2004), by introducing a new type of fit (i.e., that between the perceived controllability of a disaster and the type of contribution) that is particularly germane to consumer judgments of companies’ contributions to disaster relief, and possibly even a broader range of social and environmental issues, wherein controllability perceptions loom large.



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# The Depths of Pleasure, the Throes of Despair: Exploring the Multifaceted Nature of Hedonic Emotional Experiences

Chair: Lawrence E. Williams, University of Colorado Boulder, USA

## **Paper #1: Crime...and Punishment: The Effects of Context on Signal Strength and the Consequences for Condemnation**

Kelly Goldsmith, Northwestern University, USA  
Hal E. Hershfield, New York University, USA

## **Paper #2: Emotions Shape Construal Levels: The Case of Guilt and Shame**

DaHee Han, McGill University, Canada  
Adam Duhachek, Indiana University, USA  
Nidhi Agrawal, University of Washington, USA

## **Paper #3: Beyond Funny Ads: Empirical and Theoretical Insights into Humorous Consumption and Marketing**

Caleb Warren, Texas A&M University, USA  
A. Peter McGraw, University of Colorado Boulder, USA

## **Paper #4: Prolonging the Search for Meaning: How Hedonic Versus Eudaemonic Consumption Experiences Shape Preference for Variety**

Erin Percival Carter, University of Colorado Boulder, USA  
Lawrence E. Williams, University of Colorado Boulder, USA

### **SESSION OVERVIEW**

The pursuit of pleasure shapes consumers' attempts to socially bond and fulfill their desires, as well as their responses to marketing activities. Indeed, hedonic pursuits guide choice (Dhar and Wertenbroch 2000), self-regulation (Fishbach and Labroo 2007), and brand preference (Hagtvedt and Patrick 2009). Recently, there has been renewed interest in understanding the mechanics of pleasure, and the role that hedonic pursuits play in consumers' lives (Alba and Williams 2012; Haws and Poyner 2008). Although it has been long assumed that the pursuit of pleasure is the hallmark for rational human behavior (Bentham 1789), such pursuits often feature a dark side, involving failures of impulse control (Loewenstein 1996) and their corresponding negative emotions (e.g., guilt; Giner-Sorolla 2001). As we prepare to turn our focus "back to fun," the papers presented in this session explore the complexity of hedonic pursuits and their consequences.

Goldsmith and Hershfield demonstrate that judgments of others' indulgent behaviors, such as overeating, overspending, and gambling, are sensitive to the context in which the behavior occurs. Judges are less harsh when the indulgent behavior occurs in an atypical (vs. familiar) context. Han and colleagues ask what are the consequences of guilt and shame, two negative feelings that often arise following hedonic pursuits. They find that these discrete negative emotions shift the way people construe their mental worlds. Warren and McGraw extend their examination of the nature of humor, demonstrating that humorous consumption and humorous marketing tactics involve both safety and pain. Finally, Carter and Williams distinguish between hedonic (fun) and eudaemonic (meaningful) consumption experiences, showing that consumers seek variety when exposed to the former, but prefer prolonged exposure to the latter.

Collectively, these papers seek to add to the literature on understanding the impact of the pursuit of pleasure, and its unintended (sometimes negative) consequences. The session should appeal to consumer researchers interested in indulgent consumption, mixed emotional experiences, the interplay between affect and cognition,

and consumer choice. We hope this session will stimulate future theory development on the complexities of hedonic experiences.

## **Crime...and Punishment: The Effects of Context on Signal Strength and the Consequences for Condemnation**

### **EXTENDED ABSTRACT**

It has been widely recognized that consumers attempt to justify their behavior, especially when the behavior is self-indulgent (Dhar and Wertenbroch 2000; Kivetz and Keinan 2006; Kivetz and Zheng 2006) and/or violates a personal goal (Goldsmith and Dhar 2013). However, far less is known about if and how consumers might pro-actively utilize elements of the behavioral context in an effort to justify their indiscretions *a priori*. For example, imagine an individual, Rob, who enjoys gambling; however, he and his wife have a goal to save money. One of his former gambling buddies comes to visit. What might Rob do in order to preemptively justify a gambling indiscretion? The current research takes the perspective of the consumer as a manipulative agent, and argues that consumers who seek to "sin" will pursue atypical contexts in which to do so, because atypical contexts deflect the behavioral attribution away from the self. Hence, the same indiscretion will lead to less harsh judgments from others when the behavioral context is atypical (vs. typical), due to a shift in the extent to which the behavior is seen as reflective of the self.

This prediction raises the important question of what constitutes an atypical (vs. typical) context. For example, if Rob and his friend were to gamble in Las Vegas this context might be atypical (provided Rob does not reside in Las Vegas); however, it also has unique behavioral norms regarding gambling, which should logically affect gambling behavior. However, we argue that consumers' judgment of others can vary even as a function of largely irrelevant contextual factors. Specifically, we examine how condemnation is affected by where the indiscretion took place (atypical: neutral location far from home vs. typical: neutral location near to home), the person's familiarity with the context (atypical: neutral unfamiliar context vs. typical: neutral familiar context), and the person's mental state at the time of the indiscretion (atypical: intoxicated vs. typical: sober). Across these studies, we find that observers judge others less harshly for their indiscretions when the behavioral context is atypical (vs. typical), and that this shift in judgment is mediated by the extent to which the behavior is seen as reflective of the self. Further, we show that the atypicality of the behavioral context also affects how individuals make choices for themselves, with atypical contexts (e.g., a "special day") sanctioning more self-indulgent behavior. This supports our contention that consumers may pro-actively pursue atypical contexts in order to engage in self-indulgence (comparatively) free from judgment.

We test these predictions in a series of nine lab and field studies. Study 1 tests if people perceive the behaviors of others to be less reflective of the self in atypical behavioral contexts by having them evaluate a vignette describing an actor who engaged in an indiscretion (e.g. over-eating) on one occasion and a neutral behavior (e.g., maintaining a diet) on another occasion. The behavioral context in which the indiscretion transpired (atypical: neutral location far from home vs. typical: neutral location near to home) was varied between participants. Participants were asked to indicate how similar they

thought the actor's authentic self was to the self who indulged using a measure derived from Aron et al.'s (1992) Inclusion-of-the-other-in-the-self scale. Results revealed that when the behavioral context was a-typical, because the actor was away from home, participants indicated there was less overlap between the "self who indulged" and the "authentic self," as compared to when the indiscretion took place near home ( $p = .016$ ).

Study 2 builds on these results by examining how an actor's familiarity with the behavioral context (a-typical: neutral unfamiliar context vs. typical: neutral familiar context) affected other's judgment of their indiscretion (over-spending) and found that when the behavioral context was a-typical, because the actor was in a local shopping mall she had not been to previously, the over-spending was judged less harshly than when the local mall was familiar ( $p = .032$ ). Further, in line with our theoretical mechanism, the over-spending was seen as less reflective of the actor's self when the context was a-typical as compared to when it was typical ( $p = .034$ ) and the shift in signal strength mediated the relationship between context typicality and judgment (95% CI = -.278, -.024).

Study 3 provides a conceptual replication for Study 2 by manipulating if the behavioral context was a-typical (vs. typical) by manipulating the description of the actor's mental state (intoxicated vs. sober). Again, we observed that when the behavioral context was a-typical, here because the actor was drunk, observers condemned the actor's indiscretion (gambling) less harshly as compared to when he was described as sober ( $p < .001$ ). Further, results show that the actor's behavior when intoxicated was seen as less reflective of the actor's self ( $p < .001$ ) and this shift in signal strength mediated the relationship between context typicality and judgment (95% CI = -.3901, -.1185).

Study 4 provides a direct replication for Study 3 in addition to demonstrating an important boundary condition. Even though observers may, by default, assume certain behavioral contexts (e.g., intoxication) are a-typical, they should correct these assumptions if the actor is described as having extensive familiarity with the context (e.g., a history of alcohol consumption). Study 4 demonstrates this is the case by revealing that prior exposure to the behavioral context moderates the effect of context typicality on judgment, in addition to ruling out other alternate accounts for the observed results. Study 5 builds on these results by demonstrating that when the observers' attention is occupied (e.g., due to cognitive load), context typicality has less of an effect on how others are judged. Study 6 uses data from real-world criminal sentencing trials and provides convergence with the observed results by revealing that judges allocated significantly shorter criminal sentences for crimes committed in a-typical (vs. typical) behavioral contexts. The remaining studies (7 – 9) suggest that context typicality has implications for the choices actors make as well, with a-typical (vs. typical) behavioral contexts facilitating more self-indulgent choices.

We conclude by discussing the theoretical and practical implications of these findings.

## Emotions Shape Construal Levels: The Case of Guilt and Shame

### EXTENDED ABSTRACT

Recent research has begun to demonstrate that discrete negative emotions affect consumer attitudes and decision-making. Consumers often experience feelings of guilt and shame in daily life and yet little is known about how guilt and shame affect decision-making. For example, consumers may feel guilty when they engage in overeating or they may feel ashamed after a night of binge drinking. Given their

prevalence in consumer experience and marketing communications, it is critical to understand how these discrete emotions affect how consumers process information and make subsequent decisions. However, scant research has explored how feelings of shame and guilt influence subsequent decisions unrelated to guilt or shame. The current research aims to advance extant consumer research by shedding light on how guilt and shame influence information processing, judgments and decisions.

Our research employs construal level theory (Trope and Liberman 2003, 2010) to illuminate one such psychological process triggered by the experience of these two emotional states. It has been speculated that emotional experiences may change how individuals construe information in a subsequent task. We build on this general assertion and propose that guilt and shame may influence judgments and decisions by systematically altering the level at which information is construed. Specifically, we posit that guilt leads consumers to construe subsequent situations at lower levels whereas shame leads them to adopt higher levels of construal. Guilt (shame) will systematically influence subsequent decisions by prompting a preference for lower- (higher-) level construal features. We also examine the psychological processes underlying these changes in construal level.

Both shame and guilt are negative self-conscious emotions that lead individuals to see themselves as the agent of socially undesirable outcomes. Recent research has begun to tease apart how these two emotions impact subsequent judgments and behaviors (Dearing et al. 2005; Duhachek et al. 2012). Previous research disambiguates discrete emotions of guilt and shame according to the unique appraisals that give rise to each (Lewis 1971; Tangney and Dearing 2002; Tracy and Robins 2004). In particular, guilt is experienced when individuals appraise negative outcomes to a specific action. In contrast, shame is experienced when individuals attribute the negative outcomes to the entire self. Guilt-laden individuals are likely to focus on the specific behavior or situation, resulting in behavior-specific appraisals whereas shame-laden individuals are likely to focus on the global self, leading to global-self appraisals when negative events occur.

Furthermore, building on the Appraisal-Tendency Framework (ATF; Lerner and Keltner 2001; Lerner et al. 2007), we posit that since guilt is caused by behavior-specific appraisals, individuals experiencing guilt may view subsequent events in a consistent way with their appraisals, activating local appraisal tendencies that lead individuals to give greater weight to specific aspects of subsequent situations. In contrast, individuals experiencing shame may view the subsequent tasks in line with their global-self appraisals, activating global appraisal tendencies that give greater weight to global aspects of events.

Next, we posit that these appraisal tendency-based differences between the two emotions may systematically alter the way individuals construe subsequent information. According to CLT, when considering the specific behaviors and situations, individuals tend to adopt lower levels of construal. In contrast, when considering personalities and dispositions, individuals tend to adopt a higher level construal (Nussbaum et al. 2003). Bringing the CLT framework into the emotions literature, we argue that individuals experiencing guilt may construe information at a lower level since individuals experiencing guilt are more likely to consider the context in which a specific behavior occurred than the global aspects of a subsequent task. Conversely, because individuals experiencing shame may consider global or dispositional aspects in a subsequent task to a greater degree, we propose that individuals experiencing shame may adopt higher level construals.

Based on our proposition, we predict a carry-over effect of guilt on subsequent judgments such that options with lower construal level features (i.e., high feasibility) are preferred to options with higher construal level features (i.e., high desirability). We predict that shame leads to the opposite pattern in subsequent decisions. Further, we posit that these effects operate through unique appraisal tendencies resulting from the emotion.

We tested the proposed effects and the underlying processes in three studies. In study 1, we manipulated emotions by having participants to recall an incident where they felt guilt or shame or what they did yesterday (i.e., control condition) and then measured construal level using the BIF scale (Vallacher and Wegner 1989), which measured the level at which individuals construe certain activities (i.e., lower score implies an activation of low construal mindsets). Results shows that that participants in the guilt (vs. control) condition activated lower construal levels ( $BIF_{score\_guilt} = 12.29$  vs.  $BIF_{score\_control} = 14.97$ ;  $p < .05$ ) while those in the shame (vs. control) condition activated higher construal levels ( $BIF_{score\_shame} = 18.25$  vs.  $BIF_{score\_control} = 14.97$ ;  $p < .02$ ). In studies 2 and 3, we extend our theorizing in the judgment context by presenting options varying in their feasibility and desirability (Study 2: choice of a concert varying in interest versus price; Study 3: choice of auction websites varying on product selection vs. user-friendly interface) and testing how emotions influence preference toward these options. Study 2 found that guilt increases preference for options with high feasibility whereas shame increases preference for options with high desirability. Study 3 replicated the findings of study 2 and illuminated the processes underlying these effects by finding mediation showing that guilt (shame) activates lower- (higher-) level construals via activation of local (global) appraisal tendencies (Please see Table for the results in studies 1-3).

Overall, our findings contribute to the literature on emotions and construal level by showing that discrete negative emotions of guilt and shame provoke distinct construal mindsets as well as by articulating theory and demonstrating empirical evidence to identify specific appraisal mechanisms through which emotions produce distinct mindsets.

### **Beyond Funny Ads: Empirical and Theoretical Insights into Humorous Consumption and Marketing**

#### **EXTENDED ABSTRACT**

Humor is a fun, hedonic experience enjoyed by consumers across the globe (Gulas and Weinberger 2006; Martin 2007). The marketing literature discusses humor in the context of advertising (Eisend 2009; Gulas and Weinberger 2006), yet consumers experience humor in a wide variety of other consumption-related activities. Consumers spend billions of dollars and countless hours seeking humor in films, television, websites, books, magazines, and even greeting cards. People share laughs with friends, lovers, acquaintances, and strangers on a daily basis (Martin 2007; Provine 2001). Humor helps improve relationships, increases enjoyment, boosts creativity, facilitates coping, and mitigates the perceived intensity of negative life events (Galloway and Cropley 2009; Isen et al. 1987; Keltner and Bonnanno 1997; Martin 2002). Humor can also improve social interaction, learning, and development by increasing tolerance for social differences and by facilitating approach towards novel, mildly stressful stimulation (Frederickson 1998; Gervais and Wilson 2005; Martin 2007).

A key reason for marketing's focus on humorous advertising is its reliance on incongruity-resolution theory, which argues that humor occurs when a person makes sense of (i.e., resolves) an

unexpected or abnormal stimulus (Alden et al. 2000; Suls 1972). Although incongruity-resolution theory predicts humor in situations in which there is a set-up followed by a punch line, as is often the case in advertisements, incongruity-resolution theory has a more difficult time predicting humor in other marketing and consumption contexts (see Martin 2007).

Recent research outside of marketing suggests an alternative perspective: humor occurs when a person simultaneously appraises something as both a violation (i.e., anything that threatens a person's wellbeing, identity, or normative belief structure) and benign (i.e., okay, acceptable, normative; McGraw and Warren 2010; McGraw et al. 2012; Veatch 1998). For example, play fighting, which frequently elicits laughter in both children and non-human primates, involves a physical attack (i.e., violation) that doesn't hurt (i.e., benign). Puns and wordplay, a source of humor for literate humans, similarly involve a benign violation, typically some a linguistic error that is correct according to another language rule. Our research draws on the benign violation theory (BVT) in order to gain new insight into the antecedents and consequences of humor across a broader range of marketing mix variables and consumption experiences.

Study 1 investigated when consumers experience humor. To see if the BVT offers an improvement over an incongruity-resolutions account, we asked participants ( $N = 126$ ) to find three YouTube videos: one humorous video, one inspiring video, and one frightening video. A good theory of humor should adequately discriminate between humorous and non-humorous consumption experiences. Therefore, we measured whether or not participants perceived a benign violation or whether or not they perceived a resolved incongruity in each of the videos. Participants received detailed definitions of benign and violation or incongruity and resolution, depending on between-subjects condition, before completing the measures. Incongruity-resolution did not differentiate humorous videos from non-humorous videos—participants were as likely to perceive a resolved incongruity in the inspiring (44%) and frightening (30%) videos as they were in the humorous videos (32%). In contrast, participants were more likely to perceive a benign violation in the humorous videos (47%) than in either the inspiring (17%) or frightening (17%) videos. Thus, BVT better distinguished humorous from non-humorous consumption experiences than the leading humor theory.

The BVT also makes new predictions about the consequences of being funny. One prediction is that consumers are more likely to share content that seems threatening, painful, insulting, taboo, illogical, uncomfortable, or just plain wrong (i.e., content containing a violation) compared to strictly benign content. If viewed from a benign perspective, a violation may counter-intuitively create a positive hedonic experience: humor. Humorous violations may be shared more than content that lacks a violation both because negative information attracts more attention than positive information (Baumeister et al. 2001) and because consumers are more likely to share content that elicits positive rather than negative emotions (Berger and Milkman 2012). We explored whether videos containing violations are more likely to be funny and be shared by consumers by having research assistants code a sample of 76 YouTube videos for violation severity and humor. Consistent with the BVT, violation severity was positively related to views ( $b = .46$ ), and this effect was mediated by the extent to which the videos were humorous (indirect effect = .31).

Although humor captures the attention of consumers (Madden and Weinberger 1982) and motivates content sharing (study 2), the BVT identifies humor's dark side. Specifically, because a violation is necessary for humor, humorous marketing can have a negative effect on brand attitudes by arousing negative feelings in addition

to perceived humor. We tested this idea by contrasting product, distribution, pricing, and promotion tactics depicting benign violations with similar tactics not depicting violations. For example, we compared reactions to a pricing policy that discriminates against wealthier, monolingual English speakers (i.e., a sign reads: Orange Juice \$5; Jugo de Naranja \$4) with reactions to a store that charges all customers the same price (the sign reads: Orange Juice \$5; Jugo de Naranja \$5). Most consumers consider blatant price discrimination unfair (i.e., a violation). However, the discrimination may simultaneously seem benign both because it can be justified by an alternative norm (the English speakers can probably afford to pay the extra dollar) and because the discrimination is psychologically distant (it's geographically distant and victimizes other people). Participants ( $N = 114$ ) rated perceived humor, negative affective reactions, and brand attitude in response to one of four marketing tactics (product, distribution, price, promotion). Consistent with the BVT, participants were more likely to perceive humor in the tactics containing benign violations than in the purely benign tactics (67% vs. 12%). However, the humorous benign violations were also more likely to offend participants (4% vs. 56%) and, consequently, led to less favorable attitudes towards the marketer compared to purely benign tactics ( $M = 2.8$  vs. 4.4; seven-point scale). Thus, although benign violations evoke humor and can help capture attention and prompt sharing, marketers need to be careful because benign violations can elicit negative responses in addition to humor.

### **Prolonging the Search for Meaning: How Hedonic Versus Eudaemonic Consumption Experiences Shape Preference for Variety**

#### **EXTENDED ABSTRACT**

Although the quest for pleasure guides many consumer decisions, consumers also obtain utility from non-hedonic sources. Indeed, people are able to derive positive affect from negative emotional experiences, exemplified by the consumption of entertainment that centers around tragic, horrific, or otherwise aversive content (Andrade and Cohen 2007). In the present research, we explore the extent to which consumers' preferences are differentially affected by exposure to fun versus meaningful consumption experiences.

Guided by re-emergent theorizing emphasizing the philosophical distinction between hedonia (the pursuit of pleasure) and eudaemonia (the pursuit of meaning; Oliver and Raney 2011; Baumeister et al. 2013), we find that people seek variety when consuming hedonic (but not necessarily meaningful) experiences, but prefer stability when consuming eudaemonic (but not necessarily fun) experiences. This pattern suggests that consumers experience a tradeoff between experiencing pleasure in the present, and collecting meaningful experiences over time (cf. Keinan and Kivetz 2011). While eudaemonic consumption experiences might not be as pleasurable in the moment, consumers nevertheless prefer to stick with these meaningful experiences for longer periods of time compared to hedonic experiences, because they believe that the benefits of meaningful experiences will take longer to develop and last longer into the future.

In an initial test (study 1;  $N = 90$ ), we assessed consumers' lay intuitions regarding the difference between hedonic and eudaemonic entertainment experiences. We examined people's beliefs regarding the minimal amount of time they would need to derive a benefit from consuming fun versus meaningful films. We pretested movie genres and identified three hedonic genres (comedies, action, horror) and three corresponding eudaemonic genres (documentaries, drama, art house). Participants were instructed to imagine that they were

presented with a two-hour movie from each genre and asked to indicate how many minutes of each movie they would need to watch before they would feel satisfied with the experience. Participants indicated that they would need to watch the meaningful films for a longer period of time to feel satisfied ( $M = 75.5$  minutes), compared to the fun films ( $M = 62.3$  minutes;  $F(1, 89) = 14.03, p < .001$ ). These results provided initial evidence that consumers seek to prolong their exposure to eudaemonic experiences.

We next examined in study 2 ( $N = 138$ ) whether people would prefer stay the course or switch to something new when their hedonic versus eudaemonic consumption experiences were interrupted. Participants recruited from Amazon's Mechanical Turk were randomly assigned to view either a fun or meaningful 10-minute film (selected on the basis of a pre-test). Four minutes into the film, participants were interrupted and told that the study included other films. As the primary DV, participants were asked to indicate whether they would prefer to (1) continue watching the film they had been initially assigned to, (2) switch to a different but similar film from the same genre, or (3) switch to a different and dissimilar film from a different genre. To examine our hypothesis that participants watching the meaningful film would be less likely to switch to a different film than subjects watching the fun film, we conducted a logistic regression. Subjects in the eudaemonic condition were significantly less likely to choose to switch to a different film than subjects in the hedonic condition (31% vs. 55%; Wald = 7.68,  $p < .01$ ).

In study 3 ( $N = 184$ ), we aimed to replicate and extend study 2 by examining the process by which exposure to hedonic versus eudaemonic experiences shapes consumers' variety-seeking preferences. Hedonic experiences should be more impactful in the present, whereas eudaemonic experiences (emphasizing a search for meaning and self-growth) should have a lasting impact into the future. Indeed, the utility of watching meaningful (but not necessarily pleasurable) films such as *Hotel Rwanda* and *Schindler's List* is often not felt immediately, but instead at a later point (e.g., after one reflects upon the movie watching experience). Such considerations led us to hypothesize that people would be less likely to seek variety when exposed to meaningful (vs. hedonic) experiences because they expect the benefit of meaningful experiences to persist into the future. Accordingly, we again find that those exposed to part of a meaningful (versus hedonic) film were less likely to switch to a different film (33% vs. 48%; Wald = 3.99,  $p < .05$ ). Importantly, we also find that this effect on stay-versus-switch decisions was mediated by participants' expectations that exposure to the meaningful (versus hedonic) film would have a lasting impact, changing who they are, how they think, and their outlook on life ( $b = -.16$ , 95% CI:  $-.27$  to  $-.07$ ).

Our final study (study 4;  $N = 94$ ) examines an important boundary condition for consumers' ability to derive deeper meaning from a consumption experience. The ability to find meaning should depend on consumers' level of expertise with the experience (LaTour and LaTour 2010). To illustrate, classically trained musicians should be in a better position to derive eudaemonic meaning from concertos, compared to musical novices. Hence, we predict that experts would find it easier to find meaning in a consumption experience, which in turn will reduce their desire for varied experiences. To test this prediction, we presented participants with a short video featuring a musical performance. Participants were instructed to try to derive either pleasure from the video (by focusing on what is most enjoyable and fun) or meaning from the video (by focusing on what is most purposeful and valuable). A moderated mediation analysis revealed that for experts, looking for meaning (versus pleasure) in

the video led them to request to view a similar (versus different) follow-up video, an effect mediated by experts' expectations that the watching the video would have a lasting impact ( $b = .62$ , 95% CI: .01 to 1.25). For novices, no such effect emerged. Thus it appears that expertise with consumption experiences permits the search for meaning, a search that consumers are then motivated to prolong.

We discuss the implications of these findings for understanding how and why consumers derive pleasure from unpleasant experiences, and for aiding consumers' search for different types of happiness (cf. Mogilner, Aaker, and Kamvar 2012).

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# Modern Strategies in Retailing: Choice Architecture and Purchase Decisions

Chairs: Evan Weingarten, Wharton, USA

Barbara E. Kahn, Wharton, USA

## Paper #1: When Consumers Prefer to Include: Consideration Set Construction Strategies from Large Product Assortments

Joseph Goodman, Washington University in St. Louis, USA

Rebecca Walker Reczek, The Ohio State University, USA

## Paper #2: More Than a Mental Barrier? The Effect of Perceived Product Distance on Consumers' In-Store Purchase Decision Processes

Vanessa Gartmeier, University of Cologne, Germany

Gunnar Mau, University of Regensburg, Germany

Werner Reinartz, University of Cologne, Germany

## Paper #3: The Desire to Acquire Wish List Items: The Ironic Effect of Choosing to Delay Aspirational Purchases

Deidre Popovich, Emory, USA

Ryan Hamilton, Emory, USA

## Paper #4: Deciding Now and Later: The Benefit of Delay in Staged Decision-Making

Evan Weingarten, Wharton, USA

Barbara E. Kahn, Wharton, USA

### SESSION OVERVIEW

Consumers face purchase decisions with large sets of possible options on a daily basis. To select an acceptable or desirable product amidst the overwhelming variety, consumers may employ sets of decision heuristics to simplify the decision (Bettman et al. 1998). These heuristics can determine whether consumers are satisfied with their purchase, or if the consumer even purchases anything at all.

But, what can the retailer do to structure consumers' choices to influence consumer decision strategies and bolster purchase likelihood? An enormous line of research has explored how changing the choice architecture or default option can drastically affect individual behavior (Johnson and Goldstein 2003), while other work has shown that various decision aids can affect search processes and choice (Dellaert and Haubl 2012; Haubl and Trifts 2000). Yet, there are still many modern innovations in retailing, in addition to the consideration of expanding assortment issues (Iyengar and Lepper 2000; Scheibehenne, Griefenender, and Todd 2010) that may have implications for consumer behavior. How may these innovations affect consumers' decisions, and can they inform the theory of consumer behavior? How might the size of the assortment otherwise influence how consumers consider what to buy? Can providing consumers with wish-lists on which to place desired goods increase the likelihood they'll ultimately return to purchase those items? Does allowing consumers the opportunity to try on a smaller set of options at home improve purchase likelihood? How may in-store layouts affect purchase abandonments?

This session addresses how various modifications in assortment structure and choice architecture can influence consumers' decisions in both in-store and online settings. **Goodman** and **Naylor** investigate how large assortment sizes cause consumers to use inclusion-based (vs. exclusion-based) selection strategies as a method of minimizing choice difficulty. **Gartmeier**, **Mau**, and **Reinartz** explore how perceived product distance in the store can reduce purchase abandonments by increasing target-orientation in the decision-making process. However, this perceived product distance may also cut unplanned purchases unless purchase impulse is simultaneously increased. **Hamilton** and **Popovich** study the use of wish-lists in online retail

settings. Contrary to theories that might predict these wish-lists would increase purchase likelihood, they instead find that the wish-lists segment purchase choices into multiple stages and ultimately depressed purchase intentions. **Weingarten** and **Kahn** study how imposing a delay between the assortment viewing stage and the consideration set stage can affect purchase likelihoods. Counter to lay intuitions that the delay or waiting hurts satisfaction, they find an improvement in purchase satisfaction and likelihood after a delay between the decision stages. These projects examine how both assortment structure and decision aids across both in-store and online settings may affect consumers' purchase decisions, and have substantial implications for retailers in terms of how to structure their choice architecture.

Given the range of topics in this session, it should appeal to researchers who are interested in choice overload, consumer choice behavior, choice architecture, time preference, variety, and heuristic decision-making more broadly.

## When Consumers Prefer to Include: Consideration Set Construction Strategies from Large Product Assortments

### EXTENDED ABSTRACT

When visiting both online and brick-and-mortar retailers, consumers are bombarded with an overabundance of choice, and research has documented the costs associated with choosing from large assortments (e.g., Iyengar and Lepper 2000; Kuksov and Villas-Boas 2010; Scheibehenne, Griefenender, and Todd 2010). Yet, little attention has been given to how consumers manage choice from retailers offering large assortments. Many consumer choices are made in a hierarchical fashion (Kahn and Lehmann 1991), and consumers often narrow down the choice set to a more manageable consideration set (Chakravarti, Janiszewski, and Ülkümen 2006). But how do consumers narrow large assortments to smaller sets? And what factors affect the strategy consumers use to form a narrower set?

There are two strategies consumers use to narrow down a set—include and exclude. From a normative perspective, an include strategy should lead to the same outcome as an exclude strategy; however, research shows that strategy selection can bias the decision process (e.g., Chakravarti et al. 2006; Heller et al. 2002; Irwin and Naylor 2009). In this research we investigate how the choice context affects the strategy consumers use to narrow the choices offered by a retailer. We provide evidence that consumers are more likely use an include (vs. exclude) strategy when faced with larger assortments and when they are in a maximizing mindset, and this strategy can bias choice.

In study 1a we presented participants with a planogram of either a small (6) or large (30) assortment of chocolates and asked them to narrow down their options by either circling the options they like or crossing out options they do not like. Participants were more likely to use an include (vs. exclude) consideration set strategy in the large ( $M=56\%$ ) compared to the small assortments ( $M=31\%$ ,  $\chi^2(1, N=72)=4.48$ ,  $p < .05$ ). Further, this strategy affected consideration set size: Participants had considerably smaller consideration sets after using an include ( $M=5.61$ ) compared to an exclude strategy ( $M=8.14$ ,  $F(1,68)=55.04$ ,  $p < .001$ ), and this was especially the case when faced with a large assortment ( $F(1,68)=50.06$ ,  $p < .001$ ).

Study 1b replicated these findings using a different procedure and product category. Participants viewed a display of pens via com-



puter and narrowed down a set of 32 (6) by dragging-and-dropping pens that they want to either include or exclude for/from further consideration. Again, participants were more likely to use an include strategy in the large ( $M=77\%$ ) compared to small assortment ( $M=62\%$ ,  $\chi^2(1, N=153)=4.48, p < .05$ ).

These results suggest that consumers shift to an include strategy when faced with a large assortment because large assortment change the decision process. In addition to creating more difficulty, large assortments also raise expectations (Diehl and Poyner 2010) and lead decision makers to focus on positive reasons to justify their choices (Sela, Berger, and Liu 2009). Thus, we expected maximizers to be especially likely to use an include strategy because maximizers will be more likely to raise their expectations and feel the need to justify their choice.

Study 3a used the same pen paradigm as study 1b, but participants in the lab were asked to sort pens into a bag that they would either consider (include) or not consider (exclude) for purchase later in the study. After narrowing down the set, they made a final choice, received their pen, and responded to the the 13-item maximize/satisficer scale (Nenkov et al. 2008). Again, participants were more likely to use an include strategy in the large assortment condition ( $M=.50$ ) compared to the small ( $M=.36$ , Wald  $\chi^2(1, N=208)=4.02, p < .05$ ). There was also a marginal assortment by maximize/satisficer interaction (Wald  $\chi^2(1, N=208)=3.14, p = .077$ ), whereby maximizers were more likely to use an include strategy in large assortments ( $M=.59$ ) compared to small ( $M=.33$ , Wald  $\chi^2(1, N=208)=6.81, p < .01$ ). Study 3b was the same design using pens and chocolates with the procedure in study 1a, and found the same results: Participants were more likely to use an include strategy in the large assortment condition ( $p < .05$ ), and there was the same assortment by maximize/satisficer interaction ( $p < .05$ ).

Study 4 manipulated maximizer/satisficer mindset (Ma and Rose 2014) and assortment size. We asked MTurk participants to narrow down vacations that they were considering from either a large (30) or small (6) set. Participants dragged-and-dropped potential vacation destinations into a box labeled as either include or exclude. Again, those in the large assortment were more likely to include ( $M=.86$ ) than those in the small ( $M=.72$ , Wald  $\chi^2(1, N=287)=4.21, p < .05$ ). There was also a marginal interaction with maximize/satisficer, consistent with study 3 (Wald  $\chi^2(1, N=287)=3.16, p = .075$ ), whereby maximizers were more likely to use an include strategy in large assortments ( $M=.92$ ) compared to small ( $M=.79$ , Wald  $\chi^2(1, N=208)=9.90, p < .01$ ).

Study 5 examined the downstream consequences of an include strategy on the decision process. To establish causality, we manipulated the type of strategy (include vs. exclude). Analyzing written thought protocols, we found that participants using an exclude strategy expressed fewer positive thoughts ( $F(1, 127)=16.97, p < .001$ ) and more negative thoughts ( $F(1, 127)=15.70, p < .001$ ), and they deliberated more on alternatives that were not in the consideration set ( $M_{Include}=.31$  vs.  $M_{Exclude}=.45, F(1, 127)=15.45, p < .001$ ). In addition, these participants focused more on negative attributes ( $F(1, 126)=4.67, p < .05$ ) compared to those using an include strategy.

In sum, this research shows how decision context systematically effects consideration set construction strategies used by consumers, biasing the decision process towards an include strategy. Consumers are more likely to use an include strategy when faced with larger assortments, and when consumers are in a maximizing mindset. Thus, consumers in a maximizing mindset and facing large assortments will process the choice differently—they will focus more on positive attributes and thoughts, and elaborate less on alternatives outside of the consideration set.

## More Than a Mental Barrier? The Effect of Perceived Product Distance on Consumers' In-Store Purchase Decision Processes

### EXTENDED ABSTRACT

Retailing managers regularly face decisions regarding distances, such as temporal distances in the context of when to launch a new product or spatial distances in terms of how to present a product in the physical store environment. For example, in a grocery retailing context, retailers increasingly use refrigerator units equipped with glass doors in order to achieve energy and cost savings. Moreover, in a series of pre-studies that we have conducted in cooperation with two leading German grocery retailers, we find that having customers choose from refrigerators with glass doors increases their perceived distance to a particular product because the consumer is not able to immediately and directly experience the product. This example shows that consumers make increasingly purchase decisions involving physical and psychological distance in the store. As consumers' physical and psychological distance from a product strongly influences consumers' preferences and decisions, the impact of distance looms large at the point-of-sale (POS).

Interestingly, despite the fact that there is growing interest among practitioners and researchers alike to understand the antecedents and consequences of psychological distance in a retail setting, there is virtually no insight how consumers' in-store decision behavior, such as unplanned buying, changes depending on the actual and psychological distance at the POS. Instead, most research analyzing psychological distance in retailing mainly focuses on the relationship between psychological distance and price perceptions, assortment size preferences, and product preferences. Specifically, Bornemann and Homburg (2011) show that with increasing psychological distance, people are more likely to construe price according to its high-level and desirability implications for quality and less likely to focus on its role as monetary sacrifice. Goodman and Malkoc (2012) find that while consumers prefer large assortments when choices take place in a psychologically proximal situation, they are more likely to prefer small assortments when choices pertain to psychologically distant situations. But this effect reverses when consumers consider desirability/feasibility trade-off information inherent in the assortment size decision. Mogilner, Aaker, and Pennington (2008) show that consumers prefer prevention- (vs. promotion-) framed products in psychologically close situations whereas promotion- (vs. prevention-) framed products become more appealing in a psychologically distant situation. Although these empirical studies have made important contributions to the topic, they do suffer from the following limitations: First, the studies focus on well-established antecedents of psychological distance, such as temporal, social, and geographical distance. However, this focus does not capture the diversity of psychological distances occurring in a retail setting. Second, the studies do not cover the link between psychological distance at the POS and in-store decision-making—although construal level theory (CLT) almost predicates that psychological distance will influence purchase decisions at the POS. Third, the studies address consumers' preferences and behavior solely in fictitious purchase scenarios in which participants have to imagine the purchase situation. Participants are fully aware of this situation and make their decisions consciously—a circumstance that might not be representative for in-store purchase decisions.

Therefore, in contrast to existing research on psychological distance, our study examines how the perceived product distance influences consumers' purchase decision processes at the POS. In particular, our contributions to the literature are as following: First, we identify a new antecedent of psychological distance, i.e., physical

barrier—an instrument that is commonly used in retailing. Second, we examine the well-established phenomenon of psychological distance in a new context, i.e., in-store decision-making. Specifically, we investigate the effect of psychological distance on purchase decisions at the POS, such as unplanned buying and purchase abandonments, and hence, examine new consequences of psychological distance that are of monetary importance to retailers. Third, we explain the underlying process of this effect by including process measures that we obtain from observations at the POS. Fourth, we show a mechanism that plays a major role in daily purchase decisions and hence, influences the effect of perceived product distance on in-store purchase behavior, namely purchase impulse. Fifth, in contrast to existing research that mainly uses laboratory experiments, we additionally conduct a field study which allows us to examine natural purchase decisions that are made unconsciously in the complexity of reality—an important extension when investigating psychological factors in daily purchase decisions, especially in the context of unplanned buying. Nevertheless, a laboratory experiment serves to validate and generalize our main findings.

Based on CLT, we propose that the decision-making process is more focused and goal-oriented under conditions of a high level of perceived product distance. Our dependent variables are amount of purchase abandonments, i.e., whether a product, once considered, is rather purchased than returned to the shelf, and amount of unplanned purchases, i.e., whether products are being purchased that were not part of the original shopping list. Using a quasi-experimental between-subjects design that involves one factor with two levels—low vs. high level of perceived product distance—our field study ( $N = 1172$ ) shows that a consumer's perceived product distance influences his or her decision behavior at the POS: Consumers in the high distance condition, i.e., choosing from refrigerators with glass doors, have significantly less visual and physical product contacts compared to those in the low distance condition, such as choosing from refrigerators without glass doors. Further, the amount of purchase abandonments significantly decreases in the high distance situation meaning that consumers are indeed more goal-oriented and focused. Moreover, the increased target-orientation of consumers leads to a significantly decreased number of unplanned purchases in the high distance condition compared to the low distance condition; an effect that can have negative monetary consequences for retailers. These findings point to important outcomes of psychological distance in a real store environment. Further, the laboratory experiment shows that the negative effect of psychological distance on unplanned purchases can be reduced by increasing a consumer's purchase impulse, a variable that could easily be incorporated by retailers using, for example, in-store coupons or product tastings.

### **The Desire to Acquire Wish List Items: The Ironic Effect of Choosing to Delay Aspirational Purchases**

#### **EXTENDED ABSTRACT**

Consumers have always had the ability to defer certain purchases, but doing so has gotten easier over time. Most major retailers including Amazon, Target, and Barnes and Noble have a wish list option integrated into their websites which gives consumers the ability to save products for future consideration. This research focuses on the increasingly popular use of wish lists to keep track of the consumer's own potential future purchases.

By encouraging reconsideration of attractive options, wish lists facilitate a type of choice deferral that has not been thoroughly investigated in previous research on deferral. Previous work has primarily examined the factors that increase the likelihood of postponing a

choice, including incomplete information (Greenleaf and Lehmann 1995; Gunasti and Ross 2009), the lack of a clearly dominant option (Chernev 2006; Dhar and Simonson 2003; Iyengar, Huberman, and Jiang 2004), and search difficulty (Putsis and Srinivasan 1994). In contrast, wish list usage often entails the selection of a most preferred alternative—it is only the purchase itself that is deferred.

Previous research points to two possible ways that wish list usage could impact consumer decision making. One possible effect of wish lists is to serve as an interruption of the goal to acquire a desired item. According to this view, placing an item on a wish list is likely to increase the likelihood that it will eventually be purchased. This goal-directed choice account predicts that this shift in preference is caused by an increase in the importance of desirability attributes, relative to feasibility attributes, after the wish-list interruption.

In contrast, we propose that wish lists serve as choice partitions, segmenting a unitary purchase decision into a two-stage decision: First, whether to place an item on a wish list, and second, whether to subsequently purchase the wish listed item. We predict that, contrary to conventional wisdom and the predictions of some goal-directed choice theories, the use of wish lists can decrease likelihood of purchase, relative to a decision making process without the use of a wish list for desired offerings. We predict that desirability attributes (e.g., why consumers want a product) are relatively more important in the first stage, in which consumers are considering whether to put an item on a wish list. Conversely, in the second stage when consumers decide whether to purchase a wish-listed item, feasibility attributes (e.g., how the product will be acquired and used) should be relatively more important.

Five experiments tested these predictions. The first study demonstrates decreased purchase intent for items placed on a wish list relative to a scenario in which they are given an equivalent choice without a wish list. A product placed on a wish list was less likely to be purchased than an item in an otherwise similar purchase decision context without a wish list ( $F(1, 100) = 5.58, p < .05$ ). In a related study, willingness to pay was also significantly lower in the wish list condition than in the purchase condition ( $F(1, 88) = 4.17, p < .05$ ).

The second study revealed that using a Wish List, Shopping Cart, or Saved for Later list to defer a purchase for later consideration will each similarly induce a two-stage decision-making process, regardless of the specific label of the delay device. The mean purchase likelihood in the purchase (without delay) condition was significantly higher than each of three delay mechanisms (e.g., purchase vs. wish list  $t(78) = 2.42, p < .05$ ). Thus, decreased purchase likelihood seems to be driven by delay rather than by the aspirational nature of labeling the delay mechanism a "Wish List" vs. another often-used label (e.g., Shopping Cart, Saved for Later list).

The third and fourth studies examine the underlying process, demonstrating a primacy of desirability over feasibility in initial wish list product evaluations. In experiment 3, desirability attributes were more important relative to feasibility attributes for the decision to put the item on the wish list, as compared to the decision to purchase the item after it had been on a wish list ( $F(1, 51) = 46.95, p < .001$ ). In experiment 4, a repeated measures MANOVA revealed that there was a significant interaction between the two factors of desirability/feasibility and decision stage (pre- vs. post-wish list;  $F(2, 127) = 5.40, p < .01$ ). The importance of desirability attributes was significantly higher and the importance of feasibility attributes was significantly lower for the pre-wish list decision than the importance of feasibility attributes for the post-wish list decision.

The fifth study shows the effect of wish list usage on choice, revealing a within subjects preference reversal, with different options selected for a wish list and chosen for purchase. Participants

were relatively more likely to place a more desirable item on a wish list, and relatively more likely to choose a more feasible item from a wish list to purchase ( $\chi^2(1) = 19.49, p < .05$ ). In addition, many of the participants who initially chose the more desirable option switched their preference to the more feasible option ( $z = 3.75, p < .0001$ ).

These five experiments demonstrate that, contrary to conventional managerial wisdom, placing items on a wish list can lead to decreased purchase likelihood. We propose that a wish list effectively partitions a one-stage purchase decision into a two-stage decision: first placing the item on the wish list and later reevaluating the item for possible purchase. We proposed and provide evidence for a greater focus on desirability attributes in the first stage of the decision and a greater focus on feasibility in the second stage as the process driving the observed decrease in purchase likelihood. Our results suggest that deferring a purchase by using a wish list can function as a means of consumer self-restraint when shopping, whereas retailers may face a potential danger in providing a wish list, particularly for highly desirable products. Wish lists are an important aspect of adding ease and convenience to the online purchase experience. However, retailers may ultimately need to work on reestablishing consumers' desire for their wish listed items.

### Deciding Now and Later: The Benefit of Delay in Staged Decision-Making

#### EXTENDED ABSTRACT

One advantage of online assortments is that without the physical constraints, the assortments can be quite large. Although these large assortments can increase variety perceptions (Broniarczyk, Hoyer, and McAlister 1998; Kahn and Wansink 2004) and hence attract consumers, too much variety can potentially damage satisfaction and purchase (Iyengar and Lepper 2000; Scheibehenne, Greifeneder, and Todd 2010). Further, for some categories it is difficult to determine preferences without examining the physical product. To solve these problems, many retailers have offered consumers the opportunity to "try on" products that might consider buying at home. We investigate how the structure and timing of such consideration sets, or "home try-on sets," can have on ultimate purchase likelihoods and satisfaction from large online assortments.

With "home try on programs," customers can select a consideration set of products from a virtual assortment to try on at home free of charge. However, under this set up there is a delivery delay that separates when the customers views the assortment from when they consider the smaller choice set. The delivery can potentially take up to a few days, which may either have a positive or negative effect on ultimate purchase likelihoods. Past research has offered evidence that the delay can affect decision making positively because of anticipation effects (Loewenstein 1987) or unconscious thought operations (Dijksterhuis 2004), or negatively due to the stress of waiting (Buell and Norton 2011), or indeterminately because of changing preferences over time (Frederick, Loewenstein, and O'Donoghue 2002).

We hypothesize that the delay between a home try-on set and the initial viewing of a large assortment will increase satisfaction and purchase intentions for two reasons. First, the delay may influence consumers' decision strategies in constructing their consideration sets. Knowing about the delay may shift the set of strategies used in screening during the assortment step that may have downstream consequences on satisfaction during the try-on step post-delay (Beach 1993; Bettman, Luce, and Payne 1998; Chakravarti and Janiszewski 2003). Second, the delay may decontextualize the choice to minimize regret (Kahneman and Miller 1986; Ritov and Baron 1995) for

unselected options (that would otherwise depress satisfaction and purchase intentions) from a previous stage because those options will be less accessible after the passage of time.

We first demonstrate that most consumers' intuitions lie counter to our hypotheses. Participants responded to a scenario regarding buying either shoes or glasses with a new company that enables customers to try the product at home before purchase. This service was described to have a few-day delay in delivery. This new company was also said to be considering introducing a service with immediate delivery (within an hour); some participants also learned this company would charge a small fee for this service. Participants were asked to indicate if they would prefer the few-day delivery or the immediate delivery (or indifference), and how likely they would be to buy with three or five pairs and with or without a delay. Finally, participants selected from a list of decision strategies that would best describe what they would do with three pairs, with five pairs, and with a few-day delivery or with immediate delivery. No differences in patterns were seen between shoes vs. glasses, so we collapsed their results.

Participants indicated a preference for immediate delivery over a few-day delivery (and indifference) when there was no fee (69.23%, 8.33%, and 22.44%, respectively; (2) = 95.12,  $p < .001$ ), but were fine with a few-day deliver over immediate delivery or indifference when there was a fee (46.50%, 33.76%, and 19.74%, respectively; (2) = 16.87,  $p < .001$ ). Participants also thought they would be likelier to buy with immediate delivery ( $F(1, 312) = 88.12, p < .001$ ) and with five pairs to try ( $F(1, 312) = 58.43, p < .001$ ). Participants also believed they would use different choice strategies depending on if they had three or five pairs to try ((1) = 8.97,  $p = .003$ ) and if they had an immediate vs. a few-day delivery ((1) = 5.91,  $p = .015$ ). This initial study suggests that contrary to our hypotheses, consumers would prefer immediate delivery (no delays) and to have more options to try. However, consumers indicated they would employ different decision strategies based on a delay and try-on set size, which may have implications for their actual satisfaction.

We also conduct two lab studies that suggest, contrary to consumer beliefs, the benefit of a delay between assortment and try-on. In study one, participants simulated selecting pairs of glasses from an online assortment in the lab. Participants first picked either three or five pairs from a large virtual assortment of glasses that they were instructed they would try on in the lab. Some participants then received the pairs they selected and could try them on before indicating their satisfaction with their chosen set and likelihood of purchase. Other participants, upon selecting pairs for their consideration set, experienced a brief delay and completed an unrelated filler task before receiving their consideration set. Participants who experienced the delay were more satisfied with their consideration set ( $F(1, 114) = 9.03, p = .003$ ), and indicated higher purchase intentions ( $F(1, 114) = 5.46, p = .021$ ). This study provides initial evidence, with a simulated delay in the lab, that a delay in decision-making can improve satisfaction and purchase intentions.

In study two, the delay was lengthened such that participants either selected a consideration set of three or five pairs of glasses a few days in advance or in the lab before receiving their consideration set in person. When controlling for category involvement (Zaichowski 1994), we found an interaction: delay improved consideration set satisfaction for those who picked five pairs, but not for those who picked three pairs ( $F(1, 219) = 4.14, p = .043$ ). These participants who had a delay also more positively anticipated their try-on when they selected five rather than three pairs ( $F(1, 79) = 7.74, p = .007$ ). We thus find confirmatory evidence with a real delay that under some conditions, a delay can improve product satisfaction.

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# The Tricks of Time: The Impact of Time on Consumers' Decisions, and Consumers' Decisions Impact on the Perception of Time

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## Paper #1: The End-of-Decade Effect

Hal Hershfield, New York University, USA  
Adam Alter, New York University, USA

## Paper #2: Feeling Older and Giving Back: The Impact of Felt-Age on Pro-social Behaviors

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## Paper #3: Picturing Time: How Taking Photos Affects Time Perception and Memory

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## Paper #4: "Present" for the Future: The Unexpected Value of Rediscovery

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### SESSION DESCRIPTION

Our goal in this session is to extend research on the influence of time perception on consumers' decisions, and conversely the influence of consumers' decisions on time perception. In this session, we focus on two variations of time perception. One way to alter time perception is by shifting people's sense of where they stand in the timeline of their lives (Montepare, 2009). Another way to alter time perception is by varying the context and framing of the time period (e.g. peak-end effect; Fredrickson & Kahneman, 1993). Extending the research on time perception, this session examines two important questions.

First, we explore how feeling younger or older than our actual age (time-perception with respect to oneself) influences the decisions we make. Hershfield and Alter present work on end-of-decade effects (i.e. being of an age that ends in 9). They show that as people get close to markers (end of a decade) associated with the passage of life, they feel subjectively older and have a greater need to search for meaning. These feelings increase consumers' likelihood to make extreme decisions such as pursuing extramarital relations and taking part in marathons. Rozenkrants and Huang extend the idea of the disassociation between one's felt-age and actual age. They show that people who are made to feel older versus younger are more likely to focus on the needs of others, and thus are more likely to partake in pro-social behaviors, such as donating and saving the environment. Understanding how time perception influences subjective experiences and, subsequently, influences decision making is key in overcoming decision making barriers such as the desire for immediate reward and temporal discounting.

Next, we explore how the decisions consumers make regarding an experience can influence their perception of time. Barasch, Diehl, and Zauberman show that taking pictures during an experience creates a greater sense of immersion, a sense that time is passing quickly, and a greater subjective memory of the experience. Interestingly, taking pictures actually leads to worse objective memory perception of the experience. Zhang, Kim, Brooks, Gino, and Norton continue the explorations of how consumers' decisions to capture their experi-

ences influence time perception. They show that people forgo the option to document experiences (e.g., create a time capsule) and instead choose to partake in alternate activities. Interestingly, at a later point, people actually prefer to retrieve the documentation (vs. partaking in an alternate activities). This suggests that people have a flawed lay theory about the value of preserving their experiences in the present for future enjoyment. Given people's mispredictions about how time will affect their experiences, these papers provide useful interventions to help consumers make decisions that maximize their enjoyment of experiences.

Collectively, the four papers shed light on how time perception influences consumers' felt-age, choice, pro-social behaviors, and how one's decision to freeze time and record experiences can impact one's perception of time and the experience itself. These counterintuitive yet fun findings demonstrate that even constants like age and time can be shifted by context and "tricks."

### The End-of-Decade Effect

#### EXTENDED ABSTRACT

Chronological age is obviously associated with the passing of time. Yet, people often fail to identify with their true age (e.g., Montepare, 2009), with younger adults feeling subjectively older than they actually are, middle-aged adults feeling roughly their own age, and older adults feeling younger than they are (Montepare & Lachman, 1989). Recent research suggests that the non-linearity of subjective age can also be found at a more granular level. Namely, Galambos, Albrecht and Jansson (2009) find that when older adolescents advance from one age-related social-developmental bracket to another, they experience a "bottom-dog phenomenon" in which they have moved from comparing themselves to a reference group of late adolescents to a reference group of older individuals. In the present paper, we suggest that such feelings occur throughout the human life span, specifically as individuals move from one personal decade to the next. We propose a model in which reaching the end of a decade is associated with increased subjective age, a greater search for meaning in life, and actions that can be either destructive or productive.

One salient driver of subjective age may be the place that people occupy within their decade. The round numbers that signify the start of a subsequent decade are common, and valued in societies that operate on base-10 systems. For example, round numbers (e.g., 10, 20) were mentioned significantly more often than other numbers in a two-year sample of Dutch op-eds (Jansen & Pollmann, 2001), and they serve as goals, whether for baseball players trying to reach a batting average of .300, or SAT takers trying to progress to the next score bracket (Pope & Simonsohn, 2011).

With a salient round number marker every ten years, people are likely to first assess their subjective age in the context of their own personal decade, and then the overall life span. To examine this possibility, we analyzed archival data in which participants were asked whether they felt younger (coded as 1), the same age (coded as 2), or older than they actually were (coded as 3). People whose age ends in a '9' felt subjectively older ( $M = 1.51, SD = .88$ ) than people of other ages ( $M = 1.29, SD = .70$ ),  $t(931) = 3.01, p = .003$ , and this held true even when controlling for actual age,  $F(1, 930) = 4.17, p = .04$ . As a follow-up, we had Mechanical Turk participants ( $N = 164; M_{age} = 30.83, SD = 10.32$  years) read one of two articles that appeared

to come from the *New York Times*. Control condition participants were shown an article that suggested the presence of 3 distinct eras in the human lifetime, commencing at birth, age 7, and age 68. In the experimental condition, participants read about one additional era that commenced at their age plus one year (e.g., if the participant was 35, the next era started at 36). All participants were then asked how subjectively old they felt (3-point scale). Experimental condition participants felt subjectively older than control condition participants ( $M_{\text{experimental}} = 2.19, SD = 0.70; M_{\text{control}} = 1.86, SD = 0.66; t(162) = 3.12, p < .01$ ).

Approaching the end of a personal decade may do more than just increase feelings of subjective age. To the extent that salient endings intensify emotional experiences (Ersner-Hershfield, Mikels, Sullivan & Carstensen 2008) and promote introspection (O'Brien & Ellsworth 2012), we posit that facing the end of a decade will also be associated with a heightened search for meaning in life. To examine this idea, 155 participants were randomly assigned to one of three conditions, in which they completed a brief writing exercise and then answered questions that assessed whether they were searching for meaning in their lives (e.g., "At this moment I am thinking about my life more deeply than I normally do"; 1-7 scale). In the baseline condition, participants wrote about what they were going to do with their day tomorrow; in the control condition, participants wrote about what they thought the day before their next birthday would be like; in the experimental condition, participants wrote about what they thought the day before their last birthday in their decade would be like (e.g., 20-somethings wrote about the day before their 30<sup>th</sup> birthday). Results indicated that participants who imagined entering a new decade on their next birthday were more eager to seek meaning ( $M = 4.45, SD = .82$ ) than were participants in the control ( $M = 4.10, SD = .72$ ) and baseline conditions ( $M = 3.98, SD = .87$ ),  $F(2, 152) = 4.57, p = .01$ ; only follow-up pairwise differences between the experimental and baseline condition, and experimental and control conditions, were significant,  $ps < .02$ .

Finally, when individuals face the end of a decade and search for meaning, we hypothesize that they will seek to find fulfillment in a variety of ways. Indeed, Baumeister (1991) has suggested that when a spotlight is placed on the self, people seek escape through either destructive, numbing activities or productive, transcendent ones. To this end, we examined the relationship between facing the end of a personal decade and a variety of outcomes. Across three archival datasets, compared to people with non-9-ending ages, those with an age ending in 9 were more likely to sign up for a dating site geared toward extramarital affairs,  $\chi^2 = 28686.75, p < .001$ , and commit suicide,  $F(1, 526) = 9.28, p < .01$ ; but they were also more likely to sign up for marathons ( $\chi^2 = 12.28, p < .001$ ) and to run faster marathons,  $t(99) = 3.63, p < .001$ .

In sum, people who are approaching a new decade in age tend to feel older, to seek out meaning more earnestly, and to commit both destructive and productive acts that signify a failed or ongoing search for meaning. These results add to a growing literature suggesting that people experience aging in fits and starts, and that the experience of advancing on a new chronological milestone activates a search for meaning.

### Feeling Older and Giving Back: The Impact of Felt-Age on Pro-social Behaviors

#### EXTENDED ABSTRACT

"Age is just a number" is an adage used to maintain feelings of youth. But, what does it mean to dissociate your actual age from how old you feel? What are the downstream behavioral consequences?

Prior research suggests that actual age has an impact on the choices we make (e.g., William & Drolet, 2005); surprisingly, actual age has little correlation with how old people feel (Barak & Schiffman, 1981). Despite physical and cognitive changes that come with actual age, people have to identify with a particular age for their "felt age" to align with actual age (Blau, 1956). Recent work shows that felt age can shift depending on feedback received from strength tests (Stephan et al., 2012) and memory tests (Hughes, Geraci, & De Forrest, 2013). We extend this research, and propose that, because felt age and actual age do not always align, how old people feel at the moment can drive behavior, independent of their actual age.

In this project, we examine the impact of people's felt age on their pro-social behaviors, such as saving the environment and making donations. Prior literature suggests that as people get older, there is a greater benefit to focusing on being helpful and useful to others (Krause, Herzog, & Baker, 1992). Pro-social orientation also tends to increase with age (Van Lange, Otten, De Bruin, & Joireman, 1997). We propose that, even for those within the same actual age group, subjective feelings of age – which can easily be manipulated by marketers – can influence their pro-social behaviors. Specifically, we hypothesized that relative to people who felt younger, those who felt older would focus more on the welfare of others, and thus be more likely to partake in pro-social behaviors.

We first pre-tested ways to manipulate people's felt age, to establish that felt age is indeed different from actual age, and can be influenced through various stimuli. For instance, in one stimulus we asked participants (mean<sub>age</sub> = 31, range<sub>age</sub> = 25-45) to enter their demographic information, and then show them distribution information about others who were also taking the survey – the distribution of ages either had a mean of 55 years, or a mean of 21 years. Participants then rated how old they felt. We found that seeing a distribution of previous participants' ages with the mean of 55 years old made people feel younger than a distribution with the mean of 21 years old ( $p < .01$ ). In both studies 1 and 2, we used this manipulation of felt age.

Study 1 tested our main hypothesis – whether changes in felt age influence people's tendency to partake in pro-social behaviors. Participants in the same age group as the pre-test filled out demographic information, which included the felt age manipulation. Next, participants viewed an advertisement for a fictional charity called LifeNet, which provides mosquito nets to help prevent malaria. Participants then indicated on a scale, from \$0 to \$100, how much money they were willing to donate to the charity. We found that participants in the felt-old condition pledged more money than those in the felt-young condition ( $p = .04$ ).

In study 2, we tested the proposed mechanism of focus on others. Participants entered their demographic information, which included the felt-age manipulation. Next, stated their likelihood to partake in four environmentally friendly behaviors. We employed behaviors that would impose inconvenience to the self (e.g., unplugging appliances after each use), so that taking part in these actions would suggest putting aside one's own interests. Then participants completed the self-other interest inventory to measure how much they focused on others (Gerbas & Prentic, 2013).

We averaged the four pro-environmental behaviors in the survey ( $\alpha = .62$ ), and then submitted this composite measure to analysis. We found that participants in the felt-old condition were significantly more likely to take part in pro-environmental behaviors than those in the felt-young condition ( $p = .02$ ).

More importantly, a bootstrapped mediation analysis confirmed that the effect of felt-age on people's commitment to pro-environmental behaviors was indeed due to the changes in their focus on

others (95% CI: [0.023, 0.238]). That is, participants in the felt-old (vs. felt-young) condition showed greater focus on others, and this greater focus on others led to a greater likelihood to partake in pro-environmental behaviors.

In our final study, we tested whether the observed pattern could be reversed if people who feel younger are drawn to focus on others as well. Participants read a real campaign letter from United Way. To manipulate felt-age, we presented participants with pictures of teenage volunteers (felt-old condition) or pictures of late-middle-aged volunteers (felt-young condition). Furthermore, we manipulated the self-vs-other focus through the Call to Action statement that focused on the self (“Find out how YOU can help”) or on others (“Find out how to help A PERSON in need”). Our dependent measures were intentions to volunteer, donate, and share information about this charity through social media channels and word of mouth ( $\alpha = .96$  across 9 measures).

Because feeling older leads to greater focus on others, we predicted that participants in the felt-old condition would not be affected by the Call to Action frame, whereas those in the felt-young condition would become more pro-social when they were led to focus on others. A significant interaction of Felt-Age x Call to Action Focus confirmed our hypothesis ( $p = .03$ ). While participants in the felt-old condition were not influenced by the Call to Action frame, those in the felt-young condition were significantly more likely to support the organization when they read the other-focused (vs. self-focused) Call to Action statement ( $p = .02$ ). The results suggested that the other-focused Call to Action frame successfully led participants who felt young to act like those in the felt-old conditions; that is, they became more willing to volunteer, donate, and spread the word about United Way. In summary, we provide preliminary evidence that “how old people feel” reflects more than a psychological state; it has a profound impact on whether one decides to donate money, volunteer, and save the environment.

### **Picturing Time: How Taking Photos Affects Time Perception and Memory**

#### **EXTENDED ABSTRACT**

Until recently, pictures were taken sparsely and predominantly at special occasions (e.g., weddings, graduations); however, picture-taking has now become ubiquitous in everyday life. While consumers have different motivations for taking pictures, from strict documentation to sharing the moment with others, in some shape or form, pictures are taken in order to hold on to experiences that people want to preserve.

How will the act of taking pictures affect experiences and memory? On one hand, being behind a camera may distance individuals from the experience and shift their perspective from a participant to an observer (Storms 1972). Being less immersed in the situation, they may enjoy the experience less and time may seem to pass more slowly (Sackett et al. 2010). On the other hand, taking pictures may draw people into the event, causing them to feel more immersed. Research on mindfulness and “flow” has shown that this leads to the feeling that time seems to pass without notice (Csikszentmihalyi 1988). As such prior literature provides support for predicting that taking pictures can increase as well as decrease immersion and time perception.

Prior work on memory and photography has focused on the role pictures, once taken, can play in cueing past memories. However, one recent paper (Henkel 2014) showed that compared to simply observing, being directed to take pictures can impair object recognition. However, prior work has not investigated how freely taking pic-

tures affects memory, particularly for non-visual information (e.g., explanations provided by guides).

In this work we examine how taking pictures will affect experiences, as well as objective and subjective memories of the event. In one field study and two lab experiments, we find that the act of taking pictures can speed up subjective experiences of time, creating the experience that time is flying. Further, people feel they remember the experience better than if they had not taken pictures, a quality of memory not previously studied. However, this boost in subjective memory is opposite to the effect picture taking has on objective memory: picture-taking actually decreases how much information one remembers in the long run.

In a field study examining the effect of photo taking, we recruited 100 individuals at a local archaeology museum. Before entering one of the galleries, half the participants were instructed to “take as many photos as possible,” while the other half was instructed to “view the exhibit as you normally would.” Immediately after viewing the exhibit, participants filled out a short questionnaire (Time 1). 37% also completed an online follow-up survey four days later (Time 2). An ANOVA revealed that taking photos significantly increased the extent to which participants felt immersed in the experience ( $F(1,96)=8.22, p=.005$ ). Further, at time 2 we found that while participants who took photos *felt* they remembered their experience better ( $F(1,35)=8.08, p=.002$ ), they were actually less likely to correctly answer a question about the exhibition ( $X^2=4.50, p=.035$ ).

In order to study the act of taking pictures in the lab, we developed a unique computer interface that allows respondents to “experience” by watching a first-hand video of an event and taking pictures by clicking a button. In our studies, participants watched several sightseeing bus tours which ensured that every participant had the same experience and also exposed participants to verbal information (i.e., information provided by the tour guide) which formed the basis for our objective memory examination.

In one study 236 participants were assigned either to take pictures or to simply experience these bus tours. Measures of immersion and time perception were taken immediately after the experience. Participants were also contacted again a week later (67% response rate) and responded to subjective and objective memory questions. Replicating our findings from the field we find that taking pictures heightens feelings of immersion in the experience ( $F(1,232)=22.87, p<.001$ ) and also creates the feeling that time passes more quickly ( $F(1,232)=3.77, p=.05$ ). Further, taking pictures slightly increased subjective memory perceptions ( $F(1,219)=2.91, p=.09$ ) but significantly reduced how many questions participants could answer correctly ( $F(1,219)=7.29, p<.01$ ).

Across both studies, we find that taking pictures heightens immersion in an experience and the sensation that time flies. We predict these effects will depend on whether taking pictures is an intrusive versus seamless part of the experience. When picture-taking is intrusive (e.g., large lens camera) people may take more of an observer role: they feel less immersed and time passes more slowly. However, when taking pictures is unobtrusive (e.g., ski goggles that take pictures) taking photos may heighten immersion and speed up time perception.

In order to test this prediction, in a study with 561 participants, we tested whether the extent to which picture taking is intrusive affects immersion, time perception, and memory. In the previous study participants could take pictures by simply clicking a button. We retain that condition, as well as the “no photo” condition, and add two more intrusive photo taking conditions. In one, participants had to “drag” a camera cut-out with their mouse and align the camera’s viewfinder with the center of the video. In another, in addition to

dragging the camera, participants could “delete” photos as they proceeded through the tours. Replicating our findings, taking photos, regardless of the interface, sped up time perceptions ( $F(1,556)=14.89$ ,  $p<.0001$ ). Moreover, taking vs. not taking photos again increased subjective memory perceptions when the photo interface was low or moderately intrusive ( $F(1,556)=14.72$ ,  $p<.0001$ ). However when the interface was more distracting, participants rated their memory lower and comparable to not having taken pictures ( $p>.15$ ). For objective memory performance, a similar pattern emerges: taking photos easily or with limited disruption leads to worse objective memory performance than not having taken pictures ( $F(1,556)=3.77$ ,  $p=.05$ ) or when having the ability to delete photos ( $F(1,556)=8.77$ ,  $p<.01$ ).

In sum, across these different experimental settings we find causal evidence that taking vs. not taking pictures can heighten the extent to which people feel immersed in the experience and can create a sensation that “time is flying”. Further, while taking pictures heightens the belief that one remembers more, taking pictures tends to reduce how much one actually remembers.

## A “Present” for the Future: The Unexpected Value of Rediscovery

### EXTENDED ABSTRACT

Many moments in everyday life, from breakfast choices to iTunes playlists, seem too mundane to be worthy of preservation, or are so salient in the moment that it seems hard to imagine forgetting them. Should we forget those mundane moments, however, documenting the present offers one clear benefit: it allows for rediscovery in the future. Across three longitudinal studies using a “time capsule paradigm,” we show that individuals underestimate the future value of rediscovering today’s seemingly mundane experiences. Consequently, individuals forgo opportunities to document the present, but prefer to rediscover that present in the future.

A large body of research documents a host of errors in predicting future affective reactions. People have difficulty in predicting how they will feel in the future (Gilbert, Gill, & Wilson, 2002; Gilbert, Pinel, Wilson, Blumberg, & Wheatley, 1998; Kermer, Driver-Linn, Wilson, & Gilbert, 2006; Wilson & Gilbert, 2005) and in estimating the emotional impact of both negative and positive events (Frederick & Loewenstein, 1999; Fredrickson & Kahneman, 1993; Gilbert, Morewedge, Risen, & Wilson, 2004; Gilbert et al., 1998; Wilson & Gilbert, 2005). Whereas prior research has focused on how people mispredict their affective responses to future experiences, we explore people’s mispredictions of how they will feel in the future when they *rediscover past* experiences.

In Study 1, undergraduates created time capsules capturing a range of everyday experiences, including a recent conversation, three songs to which they had recently listened, and an inside joke. For each item, individuals predicted the extent to which they would be curious to read what they had documented and find their time capsules interesting in the future. Three months later, we compared these predictions to their actual reactions before and after opening their time capsules. We found that people mispredict how their future selves will feel when they rediscover their past experiences: they not only underestimate how curious they will feel to open their time capsules, but also how interesting they will find the process of rediscovery.

In Study 2, we explore whether people are more likely to underestimate the value of rediscovering the simpler, more mundane experiences of everyday life, as compared to the extraordinary experiences, which they likely expect to enjoy remembering. In a longitudinal study across seven months, participants rated the extent to which the conversation they documented was ordinary and predicted

the curiosity and interest they would feel while rediscovering these conversations. Our results reveal that the unexpected value people receive from rediscovery stems at least in part from the pleasure of reflecting on the simpler aspects of ordinary life; in contrast, the pleasure of rediscoveries is better anticipated or even overestimated for memories that are already extraordinary and memorable.

Studies 1 and 2 document when and how individuals mispredict the pleasure of rediscovering the past. In each study, however, participants were given no choice: they were required to both document and reflect on their experiences. Thus, while we have shown that people underestimate the value of rediscovery, we have not yet shown that this misprediction also leads them to forgo engaging in behaviors that allow for future rediscovery: documentation itself. Furthermore, we examined whether overconfidence in memory is a possible psychological driver of the failure to appreciate the value of rediscovery. In this longitudinal study, participants at Time 1 chose between documenting an experience and engaging in an alternative fun activity (watching an interesting video). Regardless of their choice, participants completed both tasks and then predicted the extent to which they would find the experience of opening the time capsule and watching a similar video curiosity-provoking and interesting in the future. As part of our measure of overconfidence in memory, they also predicted the percentage of the documentation they would remember. One month later (Time 2), they chose between rediscovering the experience they had documented and engaging in an alternative fun activity (watching a similarly interesting video). Regardless of their choices, participants did both and then rated their actual memory, curiosity, and interest for both the time capsule and the similar video.

Study 3 demonstrates that underestimating the joy of rediscovery leads individuals to make time-inconsistent choices: they choose to forgo opportunities to document the present, only to find themselves preferring to retrieve those past records in the future. Although they were inaccurate in predicting their enjoyment of rediscovering the past, participants did accurately predict the extent to which they would enjoy watching a similar video in the future. In sum, these results show that our participants are not universally poor predictors, but instead seem to underweight the value of rediscovery in particular. Finally, our results suggest that people’s misprediction of their memory in part drives their misprediction of the pleasure from rediscovery.

Across three longitudinal studies, we find that people underestimate the extent to which they will find today’s experiences curiosity-provoking and interesting, leading them to forgo the opportunity to document the present even though they later choose to rediscover it. At least in part, the phenomenon arises because individuals fail to realize that they will forget the mundane details of their current experiences, such that the misprediction of the value of rediscovery occurs particularly for ordinary, rather than extraordinary, experiences. As one participant put it: “Re-reading this event of doing mundane stuff with my daughter has certainly brightened my day. I’m glad I chose that event to write about because of the incredible joy it gives me at this moment.” By recording ordinary moments today, the present can become a “present” for the future.

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# How Extraneous Time Frames Bias Consumer Judgment and Choice

Chairs: Anastasiya Pocheptsova, University of Maryland, USA  
Meng Zhu, John Hopkins University, USA

## **Paper #1: Too Attractive to Pass: A Peculiar Appeal of Shorter Redemption Windows of Daily Deals**

Yogesh Joshi, University of Maryland, USA  
Anastasiya Pocheptsova, University of Maryland, USA

## **Paper #2: The Urgency Bias**

Meng Zhu, Johns Hopkins University, USA  
Yang Yang, Carnegie Mellon University, USA  
Christopher Hsee, University of Chicago, USA

## **Paper #3: More Time, More Work: How (Incidental) Time Limits Bias Estimates of Project Time and Scope**

Indranil Goswami, University of Chicago, USA  
Oleg Urminsky, University of Chicago, USA

## **Paper #4: The Effect of Default Time Units on Budget Estimation**

Bora Min, University of Southern California, USA  
Gülden Ülkümen, University of Southern California, USA

### **SESSION DESCRIPTION**

Consumers are frequently uncertain about the value of product offerings and features of tasks at hand (Bettman, Luce and Payne 1998; Slovic 1995) and they often make inferences and construct meanings based on information available in the local decision context (Ariely, Loewenstein and Prelec 2003; Kardes, Posavac and Cronley 2004; Kamenica 2008; Leszczyc, Pracejus and Shen 2007; Prelec, Wernerfelt and Zettelmeyer 1997). An omnipresent feature of consumer decision context is time. From units of measurement to time limits, reference to time is a salient feature in the decision context, yet it is often arbitrary and not informative to the decision itself.

This symposium takes a close look at the relationship between references to time in the decision context, inferences constructed from them and their effects on consumers' judgment and choice. Across four papers we find that consumers over-interpret and over-weight time frames when making decisions, which biases their judgments in systematic manners. The papers document these effects using time references that range from potentially useful (coupon redemption times) to completely irrelevant (explicitly randomly assigned time limits) and across several important consumer judgments (such as budget estimates and purchase decisions).

First, Joshi and Pocheptsova show that consumers deviate from an optimal preference for deals with longer redemption windows in favor of deals that expire sooner for hedonic and highly desired products. They provide evidence that such effect is driven by perceptions of scarcity and need to justify the purchase. Zhu, Yang and Hsee continue to explore the connection between time reference and scarcity and demonstrate that consumers exhibit "urgency bias", preferring to work on tasks with shorter (vs. longer) completion window but involving smaller (vs. bigger) payoff. They find support for an attention-based account and rule out task difficulty and outcome scarcity as alternatives. Next, Goswami and Urminsky suggest that incidental time limits affect people's beliefs about tasks, such that longer time limits lead to higher estimates of the scope of the task. This leads to shifts in preferences between fixed versus variable time frames for task completion when available time is salient in the decision environment. Finally, expanding our understanding of the connection between time reference and perceptions of difficulty, Min and Ülkümen examine whether budgets elicited in one's typically used time unit vs. in a non-default unit influences the estimation difficulty and magni-

tude of budget estimates. They find that using non-default units can increase or decrease estimated budgets, depending on how consumers interpret and respond to feelings of metacognitive difficulty.

Taken together, the four papers (all in advanced stages) elucidate the nuanced relationship between time references in the decision context and consumer judgment and choice, noting when and why time references may lead to suboptimal decisions or fruitless behaviors. As the session integrates diverse research to highlight newest theoretical developments in this important yet understudied area, it is expected to appeal to a broad audience, including those interested in time perception, inference making, judgment and decision biases, planning and budgeting, and consumer preference and choice.

## **Too Attractive to Pass: A Peculiar Appeal of Shorter Redemption Windows of Daily Deals**

### **EXTENDED ABSTRACT**

Daily deals, such as Groupon and Living Social, have fast become a popular sensation among consumers, with both websites boasting millions of users and billions in revenues. For example, Groupon (2013) reported an active customer base of 44.9 million; and a revenue increase of 31% North America alone. Such websites typically offer a few local "daily deals" for products or services that can be purchased at a substantial discount (40-60%). For example, consumers may buy a parking pass for \$12 instead of \$24, or a massage for \$49 instead of \$115. Interestingly, such deals come with different redemption windows, ranging from as short as 30 days to as long as one year. Longer redemption windows provide clear benefits to consumers by allowing them more flexibility regarding when to use their deal and increasing opportunities for consumption. A priori, one might expect that consumers would anticipate some uncertainty regarding when they would have an occasion to redeem a particular deal, preferring deals with a longer (vs. shorter) redemption windows. On the contrary, in a series of studies including both experimental data and data on deals from the LivingSocial website, we identify conditions under which consumers are more likely to purchase deals that have shorter rather than longer redemption windows.

We argue that consumers interpret shorter redemption windows as a signal that the deal is more scarce (see also Innman, Peter & Raghuram 1997 for a similar notion of the relationship between coupon availability time frame and perceptions of scarcity). Further, consistent with the findings that buying hedonic (vs. utilitarian) goods require more justification (Khan and Dhar 2010; Kivetz and Simonson 2002b; Kivetz and Zheng 2006; Okada 2005), we show that consumers use short redemption windows to justify the purchase of hedonic deals. Specifically, while consumers express preference for longer redemption windows for deals for utilitarian goods or services, the opposite holds for deals involving hedonic goods and services.

To test this proposition, in Study 1 ( $N = 136$ ) we offered students an opportunity to participate (using their own money) in daily deals offered by a campus website. The participants were assigned to one of the cells in a 2 (redemption window: 1 month vs. 3 months)  $\times$  2 (deal: hedonic service vs. utilitarian service) between subjects design. As predicted, we find an interaction between the two manipulated factors ( $F(1,132) = 3.56, p < .06$ ). Specifically, participants were more likely to purchase a deal for hedonic service when it was offered with a one month vs. three months redemption window ( $M_{\text{short}}$

= 5.03 vs.  $M_{\text{long}} = 4.38$ ), but directionally were more likely to prefer the reverse for utilitarian service ( $M_{\text{short}} = 6.46$  vs.  $M_{\text{long}} = 6.64$ ). We replicated this effect in Study 2 ( $N = 211$ , interaction effect  $F(210) = 8.63$ ,  $p < .01$ ), using a general population and varying the type of product purchased (hedonic vs. utilitarian) while keeping the service provider the same (hedonic:  $M_{\text{short}} = 4.26$  vs.  $M_{\text{long}} = 3.78$  and utilitarian:  $M_{\text{short}} = 3.77$  vs.  $M_{\text{long}} = 5.22$ ).

Next, we test a potential moderator of our effect – the desirability of the product. We reasoned that highly attractive hedonic products should elicit higher level of guilt and therefore would require higher level of justification before making a purchase. The products in Studies 1&2 were all highly attractive and therefore we were not able to test this hypothesis. In study 3, we analyzed purchase data of 2349 deals on Living Social (by supplementing a dataset of deals data from Byers, Mitzenmacher & Zervas 2012 with information on the redemption window for each deal). The data included the redemption window, the time that the deal was available, the level of discount and, importantly, the number of “likes” given to the product on Facebook. We used the number of likes (which ranged from 0 to 880) as proxy for desirability of the product. Two coders, blind to the hypotheses, coded the deals into hedonic vs. utilitarian category. Controlling for the factors described above, there was a significant three-way interaction between the number of “likes”, the redemption window and the hedonic vs. utilitarian nature of the deal ( $b = -1.27$ ,  $t(2348) = 8.46$ ,  $p < .001$ ). As expected, a follow-up spotlight analysis revealed that for hedonic products consumers were more likely to buy deals for highly desirable products when the redemption window was short vs. long ( $M_{\text{short}} = 1214.5$  vs.  $M_{\text{long}} = 798.8$ ,  $t(1657) = 9.61$ ,  $p < .001$ ), but the reverse was true for less desirable products ( $M_{\text{short}} = 251$  vs.  $M_{\text{long}} = 453.7$ ,  $t(1657) = 5.50$ ,  $p < .001$ ). In contrast, for utilitarian products consumers were more likely to buy deals with longer redemption windows, even for highly liked products ( $M_{\text{short}} = 1286$  vs.  $M_{\text{long}} = 1074$ ,  $t(678) = 4.56$ ,  $p < .001$ ).

In Study 4 ( $N = 80$ ), we focused on underlying process by (a) measuring perceptions of scarcity as a function of short vs. long redemption windows and (b) by asking half of participants to justify their preference for the deal. All participants were asked to evaluate a deal from their highly preferred retailer (hedonic or utilitarian, manipulated between subjects). A three-way interaction between justification, nature of the deal and redemption window on ratings of scarcity emerged ( $F(72) = 8.63$ ,  $p < .01$ ). While redemption window had no effect on perceptions of scarcity for utilitarian deals ( $F_s < 1$ ), participants judged deals with shorter (vs. longer) redemption windows to be more scarce ( $M_{\text{short}} = 5.33$  vs.  $M_{\text{long}} = 4.33$ ,  $F(72) = 6.3$ ,  $p = .014$ ). Further, this effect was even more pronounced under justification ( $M_{\text{short}} = 5.83$  vs.  $M_{\text{long}} = 3.64$ ,  $F(72) = 11.87$ ,  $p < .001$ ).

Across several studies, we find that consumers deviate from an optimal preference for deals with longer redemption window in favor of deals that expire sooner for hedonic and, ironically, highly desired products. We provide initial evidence that such effect is driven by perceptions of scarcity and need to justify the purchase. Our findings provide an interesting insight into how time frames can bias consumer behavior in the daily deals market.

## The Urgency Bias

### EXTENDED ABSTRACT

Some tasks that we face are urgent and require immediate attention and others are important and involve great significance. When faced with multiple tasks of varying urgency and importance, how do we decide which task to perform? People may prefer working on urgent rather than important tasks, because important task are

often more difficult, or because important tasks are often further away from goal completion (Kivetz, Urminsky, and Zheng 2006). Additionally, the missed outcome or opportunity for an urgent task may be perceived as more scarce and valuable (Brock 1968; Cialdini 2009). Finally, urgent tasks are often dependent of each other- missing one urgent task may result in series of losses in the future.

We propose that consumers will prefer working on urgent tasks over importance tasks, even when task difficulty, goal gradient, outcome scarcity and task interdependence are held constant. We term this tendency to prefer urgency over importance as “urgency bias”. Specifically, we define urgency (importance) as the state that requires immediate attention (involves great significance). Urgent tasks are characterized by short vs. long completion windows, and important tasks are characterized by big vs. small outcome magnitude. Urgency bias predicts that people are more likely to perform urgent tasks of less importance, rather than more important tasks of less urgency. Further, we propose an attention-based account to explain the urgency bias. That is, while deciding which tasks to work on, people pay more attention to urgent tasks with short completion window, instead of important tasks involving bigger outcomes.

Study 1 is designed to test the proposed main effect employing a simplified game. Participants saw one big ball and some small balls on the computer screen, and they could earn points by clicking on the balls. Relatively speaking, clicking on the small (big) balls is an urgent/not important task (important/not urgent) in the game. Specifically, participants were given one chance to click every other second throughout the 1-minute online game. Each click on the big (small) ball gave them 8 points (6 points). In the *urgency* condition, participants were told that they could click the big ball to earn points at any time, but they could only click a small ball to earn points when the small ball was active (i.e., when there was a counting down number 5, 4, 3, 2, or 1, on it). In the *control* condition, the game was identical except that both the big and small balls were active throughout the game. All participants were told that their task was to earn as many points as possible and they would be paid 1 cent for every 5 points earned at the end of the game. We calculated cumulative probabilities of clicking the big ball every other second. A 2(Condition) x 25(the cumulative probability in each period) mixed ANOVA revealed a significant interaction, suggesting that participants in the *urgency* condition were less likely to click the big ball than those in the *control* condition, and that the likelihood of clicking the big ball increased faster over time in the *urgency* condition than in the *control* condition. These results provide an initial demonstration of urgency bias. In Study 2, we replicated these findings using a different game in which (1) we used probability rather than a countdown window to produce urgency; and (2) not working on the important task results in a bigger loss, rather than working on the important task leading to bigger gain.

Study 3 generalizes the findings from simplified games to a real-life consequential choice context. Specifically, 119 Mturkers signed up for this study for a fixed payment of 50 cents. They were told that they could choose one of two tasks to take, Task A or Task B. They were told that in both tasks they would be given 3 minutes to type as many as possible out of 100 randomly generated 6-letter strings in the reversed order. All participants were told that they would earn a bonus that would be added to their mturk account by completing either of the tasks, and the level of bonus for each task would be randomly determined by a randomizer. All participants were assigned to earn a bonus of 12 cents by completing Task A, or a bonus of 16 cents by completing Task B. In the *urgency* condition, participants were further told that the two tasks also differed in their availability which would be randomly determined. They were then shown

a dynamic randomizer which always told them that Task A would expire in 5 minutes, and Task B would expire in 50 minutes. In the *control* condition, participants were told that both tasks would expire in 50 minutes instead. As predicted, participants were significantly more likely to choose Task A (the low-payoff option) in the *urgency* condition than in the *control* condition (36.4% vs. 11.9%,  $p = .002$ ).

To test the proposed attention-based account, employing the same game as in Study 1, Study 4 asked participants to indicate at the end of the game whether they thought more about the small balls or the big ball when playing the game. The indirect effect differs from zero at the 95% CI: [-.29, -.14], indicating that attention mediates the effect of urgency manipulation on the likelihood to click the big ball.

Finally, employing the same task as in Study 3, Study 5 manipulated participants' attentional focus by showing them a reminder (which reads as "Note: If you choose Task A, you will lose the opportunity to earn 16 cents. If you choose Task B, you will lose the opportunity to earn 12 cents") or not, in addition to manipulating urgency. Replicating previous findings, when no reminder was shown, participants were more likely to choose Task A (the low-payoff option) in the *urgency* condition than in the *control* condition (48.5% vs. 1.9%,  $p < .001$ ). However, when the reminder was shown, no difference in choice share was found.

In sum, we find that people exhibit the urgency bias, preferring urgency over importance.

### More Time, More Work: How (Incidental) Time Limits Bias Estimates of Project Time and Scope

#### EXTENDED ABSTRACT

People have been shown to consume more time to do a specific job when more time is available to them (e.g. "Parkinson's Law" 1955; Bryan and Locke 1966). The increased effort can lead to better objective performance in the presence of both self-imposed as well as externally-imposed deadlines (Ariely and Wertenbroch, 2002). In this research, we investigate people's beliefs about others' performance on tasks, depending on the task time limit. Across five completed studies, we find evidence that such beliefs are consistent with a general scope perception account wherein longer time limits are naively associated with a larger scope of work.

In Study 1, *judges* read about an actual pretest in which all *workers* solved a 67 piece jigsaw puzzle in an untimed condition and took 31 minutes or less. Jigsaw puzzles were chosen for this controlled experiment because it is easy to quantify the amount of work, and assuming there is only one way to 'solve' it correctly, quality of work is not relevant. In an incentive-compatible setting, *judges* estimated how long it would take the average *worker* in a new experiment assigned randomly (using a coin toss) to different timed conditions (35 minutes vs. 60 minutes) to solve the jigsaw puzzle. Between subjects, the estimated average time in the long (60 minutes) vs. short (35 minutes) time limit conditions was 34 vs. 26 minutes ( $p < .001$ ), compared to 29 minutes in the control (unlimited time) condition. The results could not be explained by incidental anchors, informational or quality inferences, or intrinsic motivation.

In Study 2, *judges* were given the same background information and one of three time limits (30 mins, 45 mins, unlimited time control), but were told that the *workers* themselves would not know about the time limits as they worked on the puzzles. Again, *judges* estimated more time in the longer time limit condition (31 vs. 28 minutes,  $p < .05$ ). These finding cannot be explained by the *judges'* anticipating the effects of time limits on workers and accurately applying Parkinson's Law.

In contrast, we propose that longer time limits are simply associated with "larger" tasks, and therefore people will estimate not only longer completion times, but also larger scope of the task. In the next two studies, *judges* were asked to estimate the number of pieces in the puzzle (as a proxy for the scope of work) and were provided with the average time (Study 3) or an exact distribution of times (Study 4) taken to solve the puzzle under untimed conditions. *Judges* estimated more puzzle pieces in the 45 minutes condition than in the 30 minutes condition (Means: 177 vs. 131,  $p < .05$ ; 122 vs. 103,  $p < .10$  respectively).

Lastly, in an incentive-compatible game *judges* budgeted for a task to be conducted by a sub-contractor who would be paid based on time spent and did not know about time limits. *Judges* allocated significantly more money for the task (\$6.09 vs. \$5.26,  $p < .05$ ) when more time was available to complete it, despite having the same distribution from which the actual time would be drawn, which impacted their own earnings.

The studies suggest that people overgeneralize rules about the relationship between time limits and work, which they have learned in relevant contexts and over-apply them, resulting in systematically biased decisions. The perceived association between scope of work and time can result in suboptimal choices by an economic agent responsible for sub-contracting tasks with pre-decided time limits which are exogenously determined. This can lead to shifts in preferences for a fixed rate contract versus a variable rate contracts when available time is salient in the decision environment, and therefore can have serious financial implications.

### The Effect of Default Time Units on Budget Estimation

#### EXTENDED ABSTRACT

Consumers are often called upon by financial institutions or advisors to estimate budgets over different recurring time intervals. For instance, a consumer who normally uses a week frame to plan her activities may be asked to provide a budget estimate in a week frame (default unit), or a month frame (non-default unit). While it is well established that judgments and decisions can be influenced by the unit in which quantitative information is expressed (e.g., Ülkümen & Thomas, 2013; Zhang & Schwarz, 2012), the specific notion of *default* units has received sparse attention (Lembregts & Pandelaere, 2013). In this project, we investigate the effect of default units on consumers' spending estimates.

We expect that estimating budgets using a non-default (versus default) unit will lead to lower budget estimates, for two reasons. First, in line with previous findings suggesting that lack of familiarity with a unit can increase estimation difficulty (e.g., Block, Hancock & Zakay, 2010), we expect non-default (versus default) units to increase the perceived *difficulty* of budget estimation. This is because providing budget estimates in a non-default (versus default) unit should make it more difficult for consumers to unpack the relevant expenses contributing to their total budget. Consequently, such inadequate unpacking of future expenses should bias estimates downward, leading to smaller budgets (Fiedler, 2007).

Second, using non-default (versus default) units may also influence the perceived *importance* of budget estimation. Specifically, we hypothesize that consumers would consider the task of estimating their budget to be less important when the estimation is done in non-default (versus default) units. Since perceived importance of a task determines the amount of effort invested (Eklöf & Nyroos, 2013), we expect non-default (versus default) units to result in less elaborate, and ultimately smaller budgets.

While we always expect smaller budgets, the process should depend on whether consumers prioritize difficulty or importance considerations. If this is the case, then we would expect construal level to determine which of the aforementioned two processes mediates the effect of default units on budget estimation. Cheema and Patrick (2008) demonstrated that the perception and interpretation of stimuli depends on construal level. Research on goals (Ülkümen & Cheema, 2011) found that goal difficulty becomes salient in low-level construal, whereas goal importance becomes salient in high-level construal. In line with this, we predict that for low-level (high-level) construers, estimation difficulty (estimation importance) would mediate the effect of non-default units, leading to smaller budget estimates.

*Study 1.* We asked 202 participants to estimate their total budget in a randomly assigned unit: week or month. To assess their personal default unit for budget planning, we asked them to indicate which time frame they usually use to plan their budget: weekly, monthly, or other. We categorized participants into the default (non-default) unit condition if the experimentally assigned estimation unit was consistent (inconsistent) with their personal default unit. We converted estimated budgets into a comparable, monthly basis, log-transformed, and submitted them to a 2 (Estimation unit: default, non-default) x 2 (Personal unit: week, month) ANOVA. Participants using a non-default unit provided *smaller* budget estimates ( $M = \$954.4$ ) than those using their default unit ( $M = \$1,156$ ),  $F(1, 188) = 4.38$ ,  $p < .05$ ,  $\eta_p^2 = 0.02$ , regardless of whether their personal preference was to budget for a week or a month ( $F = .87$ ,  $p > .1$ ).

*Study 2.* To replicate the finding and explore initial evidence of estimation difficulty engendered by non-default units, we recruited 198 participants to complete a task identical to Study 1, and also included three items to assess the difficulty, confidence, and certainty they experienced while estimating their budgets ( $\alpha = .87$ ). Replicating Study 1, participants using non-default units estimated *smaller* budgets ( $M = \$1,048$ ) than those using default units ( $M = \$1,411$ ),  $F(1, 178) = 3.10$ ,  $p = .08$ ,  $\eta_p^2 = 0.02$ , regardless of the preferred unit ( $F = .68$ ,  $p > .1$ ). Moreover, participants who used non-default (versus default) units experienced *greater* cognitive difficulty ( $M_{\text{non-default}} = 3.41$  vs.  $M_{\text{default}} = 3.02$ ),  $t = 1.83$ ,  $p < .01$ ,  $d = 0.27$ .

*Study 3.* To test our underlying processes, we recruited 230 participants and manipulated construal level using a thought exercise (adapted from Freitas, Gollwitzer & Trope, 2004) where half of them in the high (low) construal level condition thought about why (how) they maintain and improve their physical health. Then, they made budget estimates as in the previous studies. Next, they responded to 7 items ( $\alpha = .961$ ) that measure estimation difficulty (e.g., “How easy or difficult was it for you to include all relevant expenses in your budget estimate for the next week (month)?”) and 5 items ( $\alpha = .873$ ) that measure estimation importance (e.g., “How important is it for you to have a budget plan for the next week (month)?”).

As well as replicating the main findings ( $M_{\text{non-default}} = \$1,240$  vs.  $M_{\text{default}} = \$1,480$ ), we found (marginally) significant moderated mediations for both estimation difficulty ( $\beta = -1.049$ ,  $p = .023$ ) and estimation importance ( $\beta = -.52$ ,  $p = .09$ ). For low-level construers, the effect was mediated by estimation difficulty (LLCI = .0086, ULCI = .3546), whereas for high-level construers, the effect was mediated by estimation importance (LLCI = -.4980, ULCI = .0218).

Three studies demonstrate whether budgets are estimated in one's default or non-default time unit influences the experienced difficulty (importance) of budget estimation, which in turn biases these estimates downward for participants in low (high) construal level. These findings help reconcile seemingly conflicting prior findings regarding the direction in which metacognitive feelings influence

judgments (Fiedler, 2007; Ülkümen & Thomas, 2013). We demonstrate that estimation difficulty and importance do not influence budgets in a straightforward manner. The direction in which perceived difficulty and importance influence estimated budgets depends on the source of these metacognitions, as well as consumers' interpretation of them.

Our research is the first exploration of default units at the individual level and in the context of budgeting. In continuing research, we examine how estimation units can be used to improve accuracy of budget estimation.

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# Hit Me, Baby, One More Time: The Ups and Downs of Social Exclusion on Consumer Motivation

Chair: Katherine E. Loveland, Xavier University, USA

## **Paper #1: “Becoming More Sensitive to the Source of Social Exclusion”: When Self-Affirmation and Type of Social Exclusion Influences Excluded Consumers’ Preferences**

Sara Kim, University of Hong Kong, China  
Echo Wen Wan, University of Hong Kong, China  
Ke Zhang, University of Hong Kong, China

## **Paper #2: You Broke Our Contract!: Social Exclusion Differentially Influences Independent and Interdependent Consumers’ Impression Management Goal Pursuit**

Jessie J. Wang, Indiana University, USA  
Ashok K. Lalwani, Indiana University, USA

## **Paper #3: Can Broken Hearts Lead to an Endangered Planet? Social Exclusion Reduces Willingness to “Go Green”**

Iman Naderi, Fairfield University, USA  
Nicole L. Mead, Erasmus University, the Netherlands

## **Paper #4: “We Don’t Think You’re Important”: Exploring the Effects of Loyalty Programs on Those Excluded from Benefits**

Sara Loughran Dommer, Georgia Institute of Technology, USA  
Katherine E. Loveland, Xavier University, USA  
Jaehoon Lee, Southern Illinois University, USA

### **SESSION OVERVIEW**

Every day, consumers cope with the unpleasant experience of social exclusion. They don’t get that important call, wait in line while others are bumped to the front, or learn through social-media they were not invited to the big party. Understanding social exclusion and its consequences for consumer behavior is an emerging area of interest that this session advances to the next level by showcasing the most recent work on the topic. All the papers in the proposed session seek to provide answers to the important yet understudied question: when do socially excluded people look past the sting of rejection and continue to pursue social bonds, and when does exclusion cut too deep, causing demotivation and withdrawal? The first two papers focus on personal and situational factors that determine when exclusion leads to reconnection versus withdrawal. The second set of papers tackles that question in relatively novel contexts: pro-environmental consumption and consumer-loyalty programs.

The first paper demonstrates that the reason for rejection plays a powerful role in shaping willingness to forgive and forget. When the reason for rejection is ambiguous, consumers are not hostile toward a rejecter’s recommendations, so long as they have previously bolstered self-perceptions. However, if consumers know they have been rejected for personal reasons, then any recommendation made by the rejecter will be negatively viewed, regardless of prior self-affirmed. These findings suggest that, while consumers’ need to connect with others generally allows them to “forgive and forget,” at least when they are already in a positive state of mind, they are not so willing to overlook exclusion when it is personal.

The second paper examines how interpersonal orientation shapes consumers’ reactions to social exclusion. Individuals with a relatively more independent orientation to social relationships are fairly insensitive to social exclusion. However, among individuals with a relatively more interdependent orientation, social exclusion is a serious breach of their social contract, thereby reducing their willingness to engage in impression management for the sake of so-

cial connection. These results suggest that those with the strongest desire to be accepted are the most likely to become demotivated and withdraw after exclusion.

The third paper demonstrates that exclusion reduces people’s inclination to engage in pro-environmental behavior, because it makes them reluctant to incur personal costs for the benefit of others. However, when pro-environmental behavior confers direct social benefits for excluded individuals, negative effect is mitigated, suggesting that social exclusion elicits a, “What’s in it for me,” response, wherein consumers focus on their own needs at the expense of others.

The final paper explores loyalty programs, which while designed to build lasting bonds with consumers, inevitably exclude consumers who do not qualify for program benefits. Results demonstrate that if managers carefully match program benefits with the efforts required to achieve benefits, that excluded consumers are actually willing to exert greater effort on behalf of the excluding organization. These findings suggest that consumers can find exclusion motivating, provided the exclusion does not pose a breach of the social contract.

## **“Becoming More Sensitive to the Source of Social Exclusion”: When Self-Affirmation and Type of Social Exclusion Influences Excluded Consumers’ Preferences**

### **EXTENDED ABSTRACT**

This research examines how product recommendations by excluders (vs. non-excluders) influence excluded consumers’ preferences toward a recommended product. Previous work on social exclusion has shown that excluded individuals want to avoid and be disconnected from perpetrators of exclusion (Buckley et al. 2004; Maner et al. 2007). According to this finding, we can simply predict that excluders’ recommendations will negatively impact excluded consumers’ product preferences. However, we suggest that excluders’ recommendations do not always reduce preferences toward products. Rather, the effect of excluders’ recommendation depends on consumers’ sense of self and the type of exclusion.

We propose that self-affirmation (e.g. reflecting on one’s long-held values) can increase sensitivity toward the type of social exclusion by reducing the focus on self-evaluative aspects of social exclusion and broadening a perspective about social cues. We examined two types of exclusion. One is intentional exclusion (e.g., excluder did not like the person), and the other is situational exclusion (e.g., the excluder had to leave early for personal reasons). Although recent studies have examined the role of self-affirmation on excluded consumers’ product choice (Wan, Xu, and Ding 2014), their choice context was not related to the prior social exclusion. In contrast, the current research investigates the influence of product recommendation by excluders versus non-excluders on consumers’ preferences. Moreover, in Wan et al. (2014) when the study manipulated self-affirmation, it did not inform participants about why they were excluded.

We hypothesize that when the reason for exclusion is ambiguous, non-affirmed consumers tend to focus more on self-evaluative aspects of the situation; in turn, they will be more likely to attribute social exclusion to intentional factors (e.g., “they must dislike me”). As a result, non-affirmed consumers will display a less favorable attitude toward a product when excluders (vs. non-excluders) recommend the product. However, self-affirmation will increase the

attribution to situational factors (e.g., “they misunderstood the instruction”), and accordingly reduce the negative effect of excluders’ recommendation.

We also suggest that when the type of exclusion is evident (intentional or situational), affirmed consumers’ preferences will be more sensitive to the type of social exclusion. More specifically, we predict that non-affirmed consumers will evaluate products recommended by excluders (vs. non-excluders) less favorably, regardless of the type of exclusion. However, affirmed participants will be able to differentiate situational exclusion from intentional exclusion and take the type of exclusion into consideration when judging the target product. We predict that for affirmed consumers excluders’ recommendation will still have a negative impact on excluded consumers’ preferences when the exclusion is intentional. However, for situational exclusion, excluders’ recommendation will have less of a negative impact.

We tested our predictions in two studies. In study 1, we employed a 2 (affirmation: high vs. low)  $\times$  2 (product recommenders: excluders vs. non-excluders) between-subjects design. Participants first engaged in a self-affirmation manipulation task (Fein and Spencer 1997; Sherman et al. 2000; Sherman and Cohen 2006). Participants in the high affirmation conditions first ranked 12 values according to their importance. Then they wrote an essay about the most important value and why it was important and meaningful to them. In the low affirmation conditions, participants first listed food items from the previous day and wrote an essay about one specific meal. Then we manipulated social exclusion using a three-person cyber ball game. In the game, all participants were excluded from the other two players. After the game, using an open-ended question, participants were asked to write down why they thought the other two players had excluded them. Then, ostensibly for a different study, participants read information about some products and indicated their preference for each product (e.g., a toaster). Half of the participants evaluated products recommended by excluders, while the other half evaluated products recommended by non-excluders.

The content analysis of the open-ended question indicated that affirmed participants (60.6%) were more likely to attribute exclusion to situational factors (e.g., “the other two players already know each other”) than non-affirmed participants (32.4%,  $z = 3.4$ ,  $p < .01$ ). Consistent with the attribution pattern, non-affirmed participants evaluated the products less favorably when the products were recommended by excluders ( $M = 5.72$ ) than non-excluders ( $M = 6.41$ ,  $t(138) = 2.57$ ,  $p = .01$ ). However, excluders’ recommendation did not reduce the evaluation of affirmed participants ( $M_{\text{excluders}} = 6.01$ ,  $M_{\text{non-excluders}} = 5.92$ ,  $t(138) = 0.34$ , NS).

The second study examined the interactive effect of self-affirmation and exclusion type on excluded consumers’ preferences. We employed a 2 (affirmation: high vs. low)  $\times$  2 (exclusion type: intentional vs. situational)  $\times$  2 (product recommenders: excluders vs. non-excluders) between-subjects design. First, participants engaged in the same self-affirmation manipulation task and then the cyber ball game, as in experiment 1. However, different from experiment 1, at the end of the game participants were informed why they had been excluded in the game. Half of the participants were told the other two players intentionally did not pass the ball because they did not consider the participants to be good co-players (intentional exclusion), while the other half were told the other two players happened to be in a bad mood and became less cooperative (situational exclusion). Then, as in experiment 1, participants evaluated products recommended by either excluders or non-excluders.

Consistent with our prediction, the findings show that for non-affirmed participants, a 2 (exclusion type: intentional vs. situational)

$\times$  2 (product recommenders: excluders vs. non-excluders) between-subjects ANOVA revealed only a main effect of product recommenders ( $F(1,84) = 3.53$ ,  $p = .06$ ). That is, excluders’ recommendation reduced evaluation of the products regardless of the type of exclusion ( $M_{\text{excluders}} = 5.87$ ,  $M_{\text{non-excluders}} = 6.39$ ). More importantly, however, affirmed participants reacted to different types of exclusion differently. Excluder recommendation reduced preferences only when the exclusion was intentional ( $M_{\text{excluders}} = 5.72$ ,  $M_{\text{non-excluders}} = 6.45$ ,  $t(171) = 2.57$ ,  $p < .05$ ). Our findings indicate that, different from the previously documented buffering account, self-affirmation does not always buffer social exclusion, eliminating social exclusion effects. When exclusion is explicitly intentional, affirmed participants still respond to social exclusion negatively.

## **You Broke Our Contract!: Social Exclusion Differentially Influences Independent and Interdependent Consumers’ Impression Management Goal Pursuit**

### **EXTENDED ABSTRACT**

The present work examines how social exclusion (vs. inclusion) influences the relation between self-construal and consumers’ impression management goals. Previous research suggests that interdependents value relationships and belongingness, and dislike being isolated from their groups (e.g., Markus and Kitayama 1991; Kim and Markman 2006). Other research suggests that excluded individuals sometimes engage in more impression management to reconnect with others (Maner et al. 2007; Mead et al. 2011). If so, interdependents would be expected to intensify the pursuit of impression management following social exclusion (vs. inclusion).

Contrary to this intuitive hypothesis, we propose that social exclusion (vs. inclusion) leads interdependents to pause in pursuing impression management goals. As a result, they are less motivated to expend time, money, and effort in search of publicly (but not privately) consumed products. This pattern is not expected among independents. We base these predictions on consumers’ belief in a social contract, due to which they comply with societal norms with the expectation of rewards in return.

Social contract theory delineates the relation between citizens and society (Mayer and Beltz, 1998). The theory postulates that people who behave according to the rules specified in the social contract (e.g., being socially appropriate) are provided certain benefits in exchange by society (Mayer and Beltz, 1998). Research suggests that interdependent people have a greater expectation to be included by close others than independent people (Miller et al. 1990; Triandis 1998). Hence, we propose that interdependent (vs. independent) consumers will more readily view being excluded by close others as a breach of social contract. Consequently, when excluded (vs. included), interdependent consumers are less motivated to continue upholding their side of the social contract such as managing their impression in front of others.

Four studies using a variety of operationalizations of all key variables (cultural self-construal, social exclusion, impression management) provide robust support for our hypotheses. Specifically, in the inclusion (but not exclusion) condition, interdependence was associated with the tendency to engage in impression management and the amount participants were willing to pay, the distance they were willing to travel, and the time they were willing to spend searching for publicly consumed products. In contrast, independence was not associated with these tendencies in both the inclusion and exclusion conditions (Studies 1 to 4). Hence, our findings suggest that social exclusion profoundly influences interdependent consumers’ pursuit of impression management goals. Specifically, interdependent con-



sumers are less motivated to pursue their impression management goals when excluded (vs. included) by close others. In contrast, independent consumers' impression management goal pursuit is not affected by social exclusion.

In addition, we found support for the mediating role of social contract in the interactive effect of social exclusion and self-construal on impression management goal pursuit, both by measuring social contract (Study 2) and by manipulating it (Study 3). Finally, because a social contract is an implicit agreement between a person and others in society, we theorized and found that it will affect interdependents' behavior when it has implications for how they are viewed by others (i.e., in public settings). However, when the behavior cannot be viewed by others, we did not expect and did not find social contract to influence interdependents' tendency to pursue impression management goals (Study 4).

This paper makes a number of contributions. First, we offer important qualifications to previous research which has robustly demonstrated self-construal differences in impression management goal pursuit. We conceptually replicate the general findings of Lalwani, Shavitt, and Johnson (2006) and Lalwani (2009) that interdependents are more likely to pursue impression management goals than are independents, but only when they perceive that others adhere to the social contract. When interdependents perceive that the social contract is violated (e.g., when they are socially excluded by close friends and others), they discard the pursuit of impression management goals. Second, our results dispel the notion that, when excluded, interdependent consumers more vigorously pursue impression management goals to reconnect with others. Instead, we find that exclusion causes interdependents to abandon their desire to be socially appropriate. In so doing, we shed unique insights on the mindset of the interdependent consumer, and on the extent to which they are willing to pursue their social goals. Third, we introduce social contract theory to consumer research, and contribute to that theory by unveiling how social exclusion can cause consumers to view a social contract to be breached. Fourth, while some previous research shows that excluded individuals may engage in withdrawal and avoidance behaviors (Predmore and Williams 1983; Tice et al. 2002; Williams et al. 2000), the downstream consequences of such behaviors are less clear. We identify an important consequence of exclusion, namely decreased impression management goal pursuit, and shed light on the mechanisms underlying the behavior, as well as on its implications.

### **Can Broken Hearts Lead to an Endangered Planet? Social Exclusion Reduces Willingness to "Go Green"**

#### **EXTENDED ABSTRACT**

Consumers are lonelier than ever before. At the same time, it is becoming more pertinent than ever before to stimulate environmentally-friendly consumption. Given the prevalence of social exclusion, and given the increasing necessity of pro-environmental behavior, understanding the relationship between the two is a critical endeavor for consumer researchers.

Previous research suggests that consumers buy pro-environmental products to signal their status to others (Griskevicius, Tybur, and Van den Bergh 2010). While this costly signaling may impel some consumers toward "green" purchases, that very same process may repel yet others. A sizeable body of literature suggests that social exclusion reduces engagement in prosocial and interpersonally beneficial behaviors, in part because it reduces empathic responding (e.g., Baumeister, Brewer, Tice, and Twenge 2007). This line of research suggests, then, that social exclusion may reduce consumers'

willingness to engage in pro-environmental consumption because it reduces their empathic concern for others. However, when excluded consumers are given a viable chance for reconnection, socially excluded individuals engage in more prosocial than antisocial behavior (Maner et al. 2007; Mead et al. 2011). We therefore expected that the negative effect of exclusion on pro-environmental consumption would be attenuated in cases where green purchases confer direct social benefits for the consumer. Four experiments tested and provided support for these hypotheses.

Experiment 1 tested our basic hypothesis; it also investigated empathic responding as a potential mechanism. To manipulate social exclusion, participants were given bogus feedback about the future implications of their personality-test results (Twenge et al. 2001). Participants were told that their future would be full of social relationships (social acceptance), devoid of social relationships (social exclusion), or full of mishaps and misfortune (misfortune control). The latter group was included as a control for negative feedback that was not social in nature.

To measure the putative mediator -- empathic concern -- participants read and responded to an essay that was ostensibly written by another student and which described a recent romantic-relationship breakup; participants indicated their feelings toward the peer using 6 adjectives (e.g., sympathetic, compassionate; Batson et al. 1995). To measure green-consumption preferences, participants indicated their preference between two backpacks that were of the same brand and price: a regular backpack, which was superior on performance, and a "green" backpack, which was environmentally superior. Willingness to sacrifice to protect the environment (WTPE) and the society (WTPS) were also measured (Stern et al. 1999).

Results supported predictions. Socially excluded participants reported a lower preference for the "green" product relative to the acceptance and control conditions; the latter groups did not differ. The same pattern emerged for measures capturing participants' willingness to make self-sacrifices for the sake of the environment and society. Additionally, empathic concern mediated the effect of exclusion on those measures. Mood was examined and could not account for obtained effects.

Results from Experiment 1 supported the hypothesis that social exclusion reduces pro-environmental concern through empathic responding. To provide convergent evidence for this possibility, Experiment 2 tested the hypothesis that social exclusion reduces green-consumption preferences among individuals low (but not high) in empathic concern. Experiment 2 therefore measured emotional empathy (Caruso and Mayer 1998) and manipulated social exclusion using a recall task (Maner et al. 2007); participants wrote about a time they were either rejected or accepted. Preference for a "green" versus a regular car was the dependent measure.

Hypotheses were tested using a series of planned simple slope tests. As predicted, social exclusion (versus acceptance) decreased preference for the "green" car, but only among low-empathy individuals. Also consistent with predictions, exclusion (versus acceptance) did not decrease pro-environmental preferences among those high in empathic concern for others.

Experiment 3 presented participants with "green" products that could or could not be used while interacting with peers and therefore could (or could not) be used as an affiliation tool. Because socially excluded individuals are particularly keen to forge bonds with others, purchase intentions for pro-environment products that facilitate interpersonal interactions should not be eroded by social exclusion. To test this hypothesis, participants were excluded or accepted using the feedback procedure described in Experiment 1. Participants then viewed either an environmentally friendly desktop computer (for

personal use at home) or a green laptop (for doing group projects with classmates at school); the products were identical on quality and performance.

Results indicated that excluded individuals were less willing to purchase the green desktop as compared to accepted individuals. However, the detrimental effect of exclusion was not apparent in the laptop condition. Looked at a different way, excluded participants reported higher purchase intentions for the publicly visible laptop than the private desktop. Among accepted participants, however, purchase intentions did not differ as a function of the product's public visibility.

In Experiment 4, we framed the same "green" product in terms of its social or utilitarian benefits, expecting that excluded consumers would be particularly interested in a "green" product when the social benefits were made salient. To test this hypothesis, we presented a green car as a fuel-efficient model whose owners were *nice*, *caring*, and *altruistic* (social benefits) or *economical*, *money-wise*, and *value-shopper* (utilitarian benefits). The social exclusion manipulation was the recall task used in Experiment 2 (Maner et al., 2007).

Results supported predictions. Participants who recalled a time they felt excluded reported higher intentions to purchase the car when the benefits were social than utilitarian. In contrast, the opposite pattern was found among participants who recalled a time of acceptance. These results emerged when controlling for individual differences in pro-environmental attitudes (Haws et al. 2010).

In summary, four experiments provide novel evidence that social exclusion has profound consequences for consumers' pro-environmental consumption. When green consumption incurred costs to the self for the benefit of others, exclusion reduced people's willingness to shoulder those costs. However, when green consumption promised the chance of social rewards, socially excluded individuals were enticed. Overall, the current work provides new insight into the complex interplay between social motivations and green consumption and suggests novel avenues for future research.

### **"We Don't Think You're Important": Exploring the Effects of Loyalty Programs on Those Excluded from Benefits**

#### **EXTENDED ABSTRACT**

Consumer loyalty programs have been seen as an important tool for reinforcing desirable behaviors such as repeat purchase and increased brand loyalty among most valuable consumers. While previous research has explored both the benefits and pitfalls of offering loyalty programs, the focus has been on consumers who receive benefits while ignoring the impact of these programs on consumers who are excluded from receiving rewards (Henderson, Beck, and Palmatier 2011).

We focus on the impact of loyalty programs on those ineligible for reward benefits. By rewarding one group of consumers, loyalty programs, by definition, exclude another group of consumers. Social exclusion has profound, and often contradictory (Lee and Shrum 2012), effects on behavior and research on social exclusion has attempted to gain a better understanding of when exclusion results in pro- versus anti-social behaviors (Williams 2007). Managers, therefore, could benefit from knowing how to structure loyalty programs in a way to increase patronage among excluded consumers.

While there are many different facets of loyalty programs that organizations have control over, we focus on two aspects that are relevant to theory related to both social exclusion and loyalty programs: type of benefit (social vs. financial) and type of effort required to receive the reward (opting-in vs. accumulating "points").

Requiring consumers to actively opt in to a loyalty program indicates a clear desire on the part of the consumer to forge a stronger bond with the organization. At the same time, exclusion from benefits after active relational effort on the part of the consumer is likely to be perceived as rejection, which is associated with a decrease in pro-social behaviors (Twenge et al. 2007). Using effort-reward congruity (Kivetz 2005), we expect that social benefits will lead to increased motivation on the part of consumers excluded from opt-in loyalty programs because the social benefits are congruent with the social commitment made by the consumer. Exclusion from financial benefits in an opt-in system, however, will be particularly negative from the consumer's point of view, as not only has their relational effort been seemingly rejected but there is a mismatch between the effort (social) and the offered reward (financial).

In contrast, when points are accumulated automatically, with no formal opt in required, consumers may perceive inclusion or exclusion as an indication of "fit" with the company because the accumulation of "points" is a clear indication of the economic utility the consumer provides to the organization. Consequently, we expect a better fit (Kivetz 2005) between points based systems and financial rewards in which consumers see a clear relationship between their effort and potential reward. In sum, when the reward has financial benefits, we expect an accumulated points effort requirement to be more motivating than an "opt-in" effort requirement. When the reward has social benefits, we expect the opposite pattern.

Study 1 was a field experiment conducted using MTurk. MTurk has an existing reward program in which workers (those who respond to surveys or piece work requests) can earn eligibility for the "Master Workers" program based on both the frequency and quality of their work. We used this existing Master Workers program as the basis for our manipulation. After screening out potential participants who either currently are or have been Master Workers, thus ensuring that all participants were "excluded," we presented them with one of four versions of the program using a 2 (effort requirement: opt-in then earn points vs. automatically eligible once enough points have been earned) x 2 (benefit: purely financial vs. social and financial) between-subjects design.

Participants read one of the four versions of the program and then responded to a variety of measures, including how many HITs (work requests) they anticipated completing in the next 24 hours, which served as our measure of motivation. The interaction of benefit with effort requirement significantly predicted motivation ( $F(1, 203) = 4.96, p < .03$ ). When the benefits included social aspects, an opt-in effort was more motivating than earning points ( $M_{\text{opt-in}} = 81.33$  vs.  $M_{\text{points}} = 44.48; F(1, 203) = 3.47, p < .04$ , one-tailed test). When the benefits only included financial elements, however, we observed the reverse pattern ( $M_{\text{opt-in}} = 33.73$  vs.  $M_{\text{points}} = 59.14; F(1, 203) = 1.66, p < .10$ , one-tailed test). While these results are in line with our predictions, there were two limitations to the study. First, we only looked at excluded consumers. Including included consumers as well will provide a more complete picture of how loyalty programs affect motivation. Second, the social benefit condition included a financial benefit as well. This was due to the fact that we used an established loyalty program for which the financial benefit could not be removed without arousing suspicion. Study 2 addresses these limitations.

Study 2 was conducted with undergraduate students who were randomly presented with one of four descriptions of a basketball ticket distribution method (social benefit) from a 2 (effort requirement: opt-in vs. earn points) x 2 (exclusion: yes vs. no) between-subjects design. Those in the points condition were told students must earn entries into the lottery by attending non-basketball sporting events on campus (e.g., women's softball game). Those in the

opt-in condition were told students must opt-in to the lottery before a specific date. We asked participants in the included (excluded) condition to imagine they had (not) been able to enter the lottery. Participants then completed a variety of measures, including the number of non-basketball sporting events they anticipated attending on campus next year, which served as our measure of motivation. We found a significant interaction of exclusion with effort requirement ( $F(1, 129) = 6.95, p < .01$ ). In line with our predictions, exclusion resulted in greater motivation for the social benefit when the effort required was opting-in compared to earning points ( $M_{\text{opt-in}} = 3.02$  vs.  $M_{\text{points}} = 2.65$ ;  $F(1, 129) = 2.62, p = .05$ , one-tailed test). When the benefit was social and the program was structured as opt-in, exclusion led to greater motivation than inclusion ( $M_{\text{exclusion}} = 3.02$  vs.  $M_{\text{inclusion}} = 2.54$ ;  $F(1, 129) = 4.79, p < .04$ ).

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# The Meaning Behind the Action: Processes Driving Embodiment Effects

Chair: Adam Duhachek, Indiana University, USA

## **Paper #1: Protect or Hide Your Thoughts: The Meanings Associated With Actions Matter**

Tae Woo Kim, Indiana University, USA  
Adam Duhachek, Indiana University, USA  
Pablo Briñol, Ohio State University, USA  
Richard E. Petty, Ohio State University, USA

## **Paper #2: Facial Feedback Hypothesis Revised: Frequent Smiling Can Reduce Wellbeing**

Aparna Labroo, Northwestern University, USA  
Anirban Mukhopadhyay, Hong Kong University of Science and Technology, Hong Kong  
Ping Dong, University of Toronto, Canada

## **Paper #3: Elaborative Thinkers Are More Susceptible to Metaphor-Driven Effects of Heaviness on Judgments of Importance**

David J. Hauser, University of Michigan, USA  
Norbert Schwarz, University of Southern California, USA

## **Paper #4: The Interaction Effect of Bitter Taste and Mood on Consumers' Saving Decision**

Fengyan Cai, Shanghai Jiao Tong University, China  
Zhiyong Yang, University of Texas at Arlington, USA  
Robert S. Wyer, Jr., Hong Kong University of Science and Technology, Hong Kong

### **SESSION OVERVIEW**

Emerging evidence from various streams of research supports the notion that cognition is embodied (e.g., Clark 1997; Barsalou 2008; Wilson 2002). The embodied view of cognition posits that one's bodily experience produces systematic effects on cognition (Barsalou 2008). Recent research in this area has produced a range of interesting effects, including the use of embodied metaphors. However, most of this research has been agnostic as to the processes responsible for these effects. This session presents four papers that together examine how the meanings associated with behaviors determine their impact on subsequent cognition. The four papers in this session examine different embodied behaviors and different outcomes in theorizing their results, yet the papers share an emphasis on detailing the conditions under which classic embodiment effects hold and are moderated by the meanings consumers attach to their actions.

The first paper in this session (Kim, Duhachek, Briñol and Petty) investigates whether the effect of behavior on cognition depends on the meanings consumers attach to their own behavior. Kim, Duhachek, Briñol and Petty examine whether the behavior of keeping one's self-generated thoughts in a place that has semantically different meanings influences consumers' reliance on these thoughts. Similarly, Labroo, Mukhopadhyay, and Dong examine how consumers construe the meaning of smiling behavior influences their wellbeing in different directions. The findings from these two papers suggest that the process of embodiment is largely dependent on the construal of the meaning of behavior rather than the behavior per se. The third paper by Hauser and Schwarz sheds further light on these processes by showing that embodiment effects are stronger among high need for cognition consumers, indicating the importance of the degree of thought surrounding embodied cognition and indicating that embodiment effects involve elaborative thinking. The final paper by Cai, Yang, and Wyer documents how the experience of bitter taste elicits metaphorical thinking and influences consumers' saving behavior.

Importantly, they find that mood is a key moderator in these effects, thereby demonstrating the validating role mood plays in assisting consumer ascribe meanings to their actions.

The four papers in this session offer interesting converging perspectives on how our cognition interacts with our sensorimotor experience. The papers identify meaning-based embodiment mechanisms that link behavior to cognition and highlight both the role of the type of and extent of thoughts consumers have linking their behavior with subsequent cognition.

## **Protect or Hide Your Thoughts: The Meanings Associated With Actions Matter**

### **EXTENDED ABSTRACT**

Previous research has shown that materializing thoughts allows consumers to lessen their influence on subsequent cognition (Briñol et al. 2012). The current research builds on this notion and identifies ways in which these materialization effects on cognition can be amplified. In so doing, we identify the role of naïve theories in driving these effects through the meanings consumers ascribe to their behaviors. In the present research, participants wrote down either positive or negative thoughts about a given object (e.g., doing exercise) and placed their written thoughts at a location (e.g., their pocket) that is tagged with semantically different meanings (e.g., safe vs. out-of-sight). Past research in consumer behavior (e.g., Roster 2001) shows that the location of a possession is correlated with its importance such that less important possessions are put at a further away or out-of-sight places (e.g., basement) whereas more important possessions are put at a nearby and more secure places (e.g., in a drawer). We hypothesize that this effect is not limited to material objects but also can be extended to immaterial entities such as our own thoughts. Further, we hypothesize that different effects can emerge from the very same behavior depending on how the behavior is construed. Specifically, our findings show that the participants embody the meaning of a place (or, the meaning of the behavior of putting their thoughts into a place) into their cognition such that placing one's thought at place that is tagged with safety amplifies the original valence of the thoughts whereas placing one's thought at a place that is tagged with insecurity attenuates the original valence of the thoughts. Since we assigned different meanings to the very same place, it is indicated that what is important in the process of embodiment is the meaning of the behavior, not the behavior per se. That is, the very same behavior can produce varying impact depending on how its meaning is construed. This research provides evidence for a driving factor in embodiment effects related to the consumers' naïve theories regarding the meanings associated with their behavior.

Our research is consistent with the recent findings of embodied cognition which show that cognitive appraisal of the behavior is important in embodiment process. Recent studies show that labeling a behavior differently can reverse the standard effect of body movement on cognition (e.g., Cesario McDonald 2013; Eder and Rothermund 2008). For example, Cesario McDonald (2013) showed that adopting an expansive body posture can actually decrease perceived power if it is construed as having different meanings (e.g., being frisked by a police). Elder and Rothermund (2008) showed that the standard arm bending and extending effect (e.g., Chen and Bargh 1999) can be reversed if the behavior is associated with different meanings. Our findings indicate that the effect of the construal

of behavior on cognition is strong such that it can even influence the thoughts that are self-generated. Our research is also consistent with the self-validation hypothesis (Petty, Briñol, and Tormala 2002) which emphasize meta-cognitive aspect of thinking. Self-validation hypothesis suggests that how consumers validate or invalidate their thoughts is an important determinant of attitude. Therefore, the extent to which placement of a thought into different locations is construed as validation or invalidation can alter the valence of thoughts as well as consumer reliance on it. In our research, placement of thoughts in a location with semantically different meanings can be characterized as validation or invalidation of one's attitude by behavior.

*Study 1:* Seventy six students were randomly assigned to one of the conditions in a 2 (thought valence: positive, negative)  $\times$  2 (thought treatment: disregard, expand) between subject design. Participants were first instructed to write down either positive or negative aspects of exercise and then all participants put their written thoughts into the same box. Importantly, the meaning of this behavior was randomly assigned and described as either disregarding or expanding their thoughts. The dependent measure was stated exercise intentions. As hypothesized, an ANOVA revealed a significant 2-way interaction ( $F(1,72) = 7.96, p < .05$ ) between thought valence and thought treatment. Specifically, planned contrasts revealed that within the expand condition, those who generated positive thoughts indicated greater intentions to exercise than those who generated negative thoughts ( $M_{\text{positive}}=7.29, M_{\text{negative}}=6.13; F(1,72)=5.02, p < 0.05$ ). However, there was no effect of valence within the disregard condition ( $F(1,72)=3.04, p > 0.05$ ) indicating that classifying the embodied behavior as disregarding one's thoughts attenuates the expansion effect.

*Study 2:* In study 2, 127 participants were randomly assigned to one of the conditions in a 2 (thought valence: positive, negative)  $\times$  2 (thought treatment: out-of-sight, safe) between subject design. The procedure of study 2 was identical to study 1 except for the two changes. First, participants placed their thoughts into their own pocket instead of a box. Second, the meaning of box varied as either out-of-sight or safe place. Our dependent measure was a choice between a healthy and unhealthy snack (1: chocolate cake --- 9: a salad). An ANOVA revealed that the two-way interaction between through valence and through treatment is significant ( $F(1,123) = 9.46, p < .005$ ). In safe condition, those who generated positive (vs. negative) thoughts indicated greater intention to choose a salad than chocolate cake ( $M_{\text{positive}}=6.24, M_{\text{negative}}=4.84; F(1,123)=4.08, p < 0.05$ ), replicating the result of study 1. In out-of-sight condition, however, those who generated negative thoughts indicated greater intention to choose a salad than those who generated positive thoughts ( $M_{\text{positive}}=5.22, M_{\text{negative}}=6.89; F(1,123)=5.41, p < 0.05$ ), indicating that placing the thoughts into an unsafe location can even reverse the original direction of the thought.

*Discussion.* Our studies show that a simple behavior of treating thoughts as a material object can change the valence of our own thoughts. This finding indicates the importance of cognitive appraisal of behavior in the process of embodiment.

## Facial Feedback Hypothesis Revised: Frequent Smiling Can Reduce Wellbeing

### EXTENDED ABSTRACT

Happiness boosts long-term wellbeing, improving thinking, immune health, social engagement, and coping (Lyubomirsky, King, & Diener, 2005). Happiness also boosts immediate wellbeing, because consumers interpret their positive feelings as implying that life is good (Schwarz & Clore, 1983). Nations want to improve wellbeing

of their citizens, and most people want, and try, to be happy (Gross, 1998). Researchers believe simple way to increase positive feelings is to adopt a smile-like expression (Ekman & Davidson, 1993; Strack, Martin, & Stepper, 1988), because consumers infer their attitudes from their actions just as an observer might (Bem, 1972; Koriari, Ma'ayan, & Nussinson, 2006), and facial expressions provide feedback to a person regarding how he is feeling (Larsen, Kasimatis, & Frey, 1992).

We posit that the link between facial-feedback from smiling on wellbeing is moderated by consumer's naive theories regarding why they smile. Consumers believe they smile when they are happy (reactively), but also to become happy (proactively), or to mask negative emotion. Depending on which of these beliefs is momentarily or chronically accessible to a person at the time he smiles, the act of smiling may increase or reduce a person's current happiness. Smiling will increase happiness only when a person's accessible theory is that smiling is reactive. When the accessible theory is that smiling is proactive, frequent smiling will reduce happiness. Here, smiling may evoke inferences that one is experiencing negative emotion and feel physiologically unpleasant. Thus, smile-theory and smile-frequency will jointly influence current happiness. As judgments of wellbeing are constructive and assimilate with a person's momentary happiness (Schwarz & Clore, 1983), they are likely to incorporate these experiences of happiness or unhappiness caused by smiling. We tested our premise in three experiments.

Study 1 employed a longitudinal field design ( $n = 126$ ). Participants completed two short 15-minute surveys exactly two weeks apart. Both surveys were identical. Participants first provided measures of smile-frequency for that day ("I smiled a lot today," "I smiled very frequently today," 1 = strongly disagree, 7 = strongly agree;  $r_{\text{survey1}} = .90, r_{\text{survey2}} = .95, p_s < .001$ ) and smile-theory (1 = people smile to feel good; 7 = people smile when they feel good), embedded in a series of demographic measures to reduce experimenter demand. They then reported wellbeing on the 5-item Satisfaction with Life Scale ([SWLS], Diener et al. 1985). For survey1 ( $n = 126$ ), a regression analysis revealed a main effect of smile-frequency,  $b = .44, SE = .07, t(122) = 6.66, p < .001$ , and the predicted interaction between smile-theory and smile-frequency,  $b = .18, SE = .04, t(122) = 4.29, p < .01, \eta^2 = .24$ . Among reactive-smile participants ( $\pm 1SD$ ), frequent ( $M = 6.39$ ) compared to infrequent ( $M = 3.12$ ) smiling resulted in higher wellbeing,  $b = .54, SE = .17, t(122) = 3.26, p < .01$ , but among proactive-smile participants, frequent ( $M = 2.48$ ) compared to infrequent ( $M = 5.62$ ) smiling resulted in lower wellbeing,  $b = -.52, SE = .13, t(122) = -4.13, p < .001$ . As replication, survey2 ( $n = 108$ ) regression analysis also revealed a main effect of smile-frequency,  $b = .44, SE = .07, t(104) = 6.01, p < .001$ , and the predicted interaction between smile-theory and smile-frequency,  $b = .12, SE = .09, t(104) = 1.32, p = .07, \eta^2 = .10$ . Among reactive-smile participants, frequent ( $M = 5.94$ ) compared to infrequent ( $M = 4.09$ ) smiling resulted in higher wellbeing,  $b = .30, SE = .15, t(104) = 1.98, p < .05$ ; among proactive-smile participants, frequent ( $M = 3.84$ ) compared to infrequent ( $M = 4.88$ ) smiling resulted in directionally lower wellbeing,  $b = -.11, SE = .07, t(104) = -1.53, p = .14$ . Cross-lagged panel analysis showed autocorrelation between wellbeing1 and wellbeing2,  $r = .45, p < .01$ , between interaction1 and wellbeing1,  $r = .18, p < .05$ , and between interaction2 and wellbeing2,  $r = .12, p = .07$ . Establishing our causal directionality, interaction1 predicted wellbeing2,  $r = .21, p < .05$ , but wellbeing1 did not predict interaction2,  $r = .04, ns$ .

In study 2 ( $N = 85$ ), we primed smile-theory (by a recall task) and manipulated smile-action (by asking participants to engage in smile-like or not smile-like facial muscular exercises), and then

measured SWLS. An ANOVA on SWLS yielded only an interaction between theory and action,  $F(1, 77) = 12.44, p = .001; \eta^2 = .13$ . Participants primed with reactive smile-theory reported higher well-being after smile ( $M = 4.99, SD = 0.95$ ) rather than the non-smile exercise ( $M = 4.19, SD = 1.26$ ),  $F(1, 77) = 4.07, p = .04$ . In contrast, participants primed with proactive smile-theory reported lower well-being after smile ( $M = 3.77, SD = 1.40$ ) than non-smile exercise ( $M = 4.93, SD = 1.23$ ),  $F(1, 77) = 9.53, p = .003$ . Thus, the effect of smile-like facial action on wellbeing was moderated by primed theory, as we predicted.

In study 3 ( $N = 63$ ) we manipulated smile-frequency (by asking people to smile at one or ten funny ads) and measured smile-theory (same as study 1), then measured spontaneous happiness and SWLS. Regression analysis on SWLS revealed a significant interaction,  $b = .41, SE = .08, t(59) = 4.95, p < .01$ . As predicted, among participants who believe smiling is reactive (reflecting happiness), wellbeing was higher after frequent ( $M = 5.47$ ) rather than infrequent ( $M = 4.17$ ) smiling,  $b = .66, SE = .21, t(59) = 3.15, p < .01$ . Among proactive smilers, ironically, frequent smiling resulted in less wellbeing ( $M = 3.55$ ) than infrequent smiling ( $M = 5.73$ ),  $b = -1.10, SE = 0.19, t(59) = -5.80, p < .01$ . Happiness followed a similar pattern, and spontaneous happiness mediated the effect of theory  $\times$  frequency on wellbeing.

As a set, these studies show that smiling increases happiness and in turn wellbeing, but only among reactive smilers. Smile-like action serves as positive affective feedback when interpreted as implying one is happy, but negative affective feedback when interpreted as unhappy. Thus, naïve theories moderate interpreting facial feedback.

## Elaborative Thinkers Are More Susceptible to Metaphor-Driven Effects of Heaviness on Judgments of Importance

### EXTENDED ABSTRACT

Subtle incidental sensory experiences with metaphoric relevance can affect judgments, including product evaluations (Landau, Meier, & Keefer, 2010). For instance, as suggested by expressions such as “weighty issues,” the sensory experience of heaviness affects judgments related to importance. Heaviness, felt from a weighted clipboard, can prompt higher valuations of foreign currencies and judgments of increased importance of procedural justice (Jostmann, Lakens, & Schubert, 2009); it can also lead participants to judge job candidates as more qualified and social issues as more important (Ackerman, Nocera, & Bargh, 2010). That is, incidental sensory experience can activate metaphorically-linked abstract concepts and influence reasoning and evaluations in metaphor-consistent ways (for reviews, see Landau, Meier, & Keefer, 2010; Lee & Schwarz, 2014).

However, the underlying psychological processes are not yet well understood. Some researchers suggested that incidental sensory states affect judgment through heuristic, low thought processes. For example, the experience of physical heaviness may bring associated concepts of importance to mind, which affect all evaluations to which they are applicable (cf. Williams, Huang, & Bargh, 2009). The reported main effects of main effects of weight on judgments of importance are compatible with this perspective (Jostmann et al., 2009; Ackerman et al., 2010; Ijzerman, Padiotis, & Koole, 2013); but potential moderators and boundary conditions have received limited attention. Conversely, other researchers suggested that the influence of heaviness on judgment requires more elaborative reasoning processes. While heaviness may trigger thoughts of importance, those thoughts may need to be consolidated with available information through elaborative reasoning in order to exact an effect on judgment.

For instance, Chandler and colleagues showed a moderated weight effect, such that weighted books were judged to be more important and valuable when participants had substantive information that could support a judgment of high importance (Chandler, Reinhard, & Schwarz, 2012), but not otherwise. In their studies, only participants who had actually read the book were influenced by its weight.

These divergent perspectives lead to opposite predictions. If the influence of physical weight on judgments of importance reflects a heuristic process, it should decrease with elaborative thought; conversely, if it reflects an elaborative process, it should increase with elaborative thought. One well established variable that bears on elaborative reasoning is Need for Cognition (NFC), an individual difference variable that captures a person’s tendency to engage in, and their enjoyment of, effortful elaborative thought (Cacioppo & Petty, 1982). In persuasion experiments, recipients low in NFC form judgments based on peripheral cues, whereas recipients high in NFC form judgments based on message elaboration (for a review, see Cacioppo, Petty, Feinstein, & Jarvis, 1996). Across numerous studies, low NFC individuals are associated with a tendency to use heuristic processing, while high NFC individuals are associated with a tendency to use more elaborative cognitive processes. As little is known about the mechanisms driving the effects of weight on judgments of importance and value, assessing who is more likely to display such effects could shed light on these mechanisms.

*Methods* Two-hundred and seventy-seven participants completed the NFC scale and evaluated the importance of an unknown book [as well as how much they were willing to pay (WTP) for two different versions of the book]. The book either did (vs did not) contain a concealed weight to make it considerably heavier. In addition, the book was either handed to participants with the front cover up (offering no substantive information) or with the back cover up, offering snippets from reviews that provided substantive information about the book.

*Results* Multiple regression analyses revealed a significant 3-way interaction of book weight, supporting information, and NFC on judgments of the importance and value of the book,  $\beta = .009, t(269) = 2.249, p = .025$ . This interaction was driven by one group of participants: only high NFC participants who saw supporting information about the book were affected by the book’s weight and judged heavier books to be more important and more valuable than light books,  $\beta = .198, t(269) = 2.36, p = .019$ . However, weight did not influence the judgments of high NFC participants in the absence of supporting information,  $p > .42$ ; nor did it influence the judgments of low NFC participants, independent of the presence or absence of supporting information,  $ps > .22$ .

These results are consistent with theories that assume that sensory experiences of metaphorical relevance are integrated into representations of the target through elaborative thought (Chandler et al., 2012). Replicating our earlier findings (Chandler et al., 2012), weight only exerted an influence when participants could draw on substantive information that could warrant a judgment of high importance. Going beyond our earlier work, only individuals who habitually engage in elaborative reasoning considered their sensory experience in forming an importance judgment, provided that they also had supportive information available. Ironically, judging a book by its weight seems to require knowledge about the book and systematic effort in arriving at a judgment. The more intuitively appealing assumption that reliance on a book’s weight reflects a heuristic strategy would predict the opposite result: a high impact of weight for low NFC participants who lack substantive information. No weight effect was observed under this condition.

## The Interaction Effect of Bitter Taste and Mood on Consumers' Saving Decision

### EXTENDED ABSTRACT

*Conceptualization* A metaphor's meaning is often grounded in physical experience (Barsalou 2008). As a consequence, physical experiences can influence the application of these metaphors in making judgments to which they are relevant. Thus, the experience of physical warmth can lead people to judge a stranger to be personally warm (Williams and Bargh 2008); carrying a heavy shopping bag can influence judgment of importance (Zhang and Li 2012), and experiencing a fishy smell can influence perceptions of an experimenter's deceptiveness (Lee and Schwarz 2012).

We examined the implications of this effect for savings decisions. Harsh physical and social encounters are often characterized as "bitter;" that is, subzero temperatures are "bitter" cold, and impoverished circumstances can give rise to a "bitter" life. We conjectured that experiencing a bitter taste would activate semantic concepts of bitterness that are metaphorically associated with concepts of a "bitter" life and that if these concepts are accessible in memory at the time a saving decision was made, they would influence their saving decision.

We further speculated that mood might moderate the effect of bitter taste on saving behavior. Mood serves as information about not only individuals' reactions to the stimuli they are asked to judge (Schwarz and Clore 1996) but also other aspects of a stimulus situation (Martin, et al. 1993). For example, Wegener, Petty and Smith (1995) found that when participants receive a persuasive message, they often use the affect they are experiencing to infer the validity of their cognitive responses to the message, and this inference determines their acceptance of the message content. Thus, if the message contains strong arguments and stimulates positive thoughts about the position advocated, participants infer that these thoughts are more valid if they are happy than if they are sad and, therefore, are more persuaded by the message in the former case.

We speculated that a similar situation would obtain in the conditions we investigated. That is, suppose participants have tasted bitter drink and so thoughts of a bitter life have been activated at the time they make a decision to save or spend. They might think that these thoughts are more valid, and be more inclined to save, if they are happy than if they are sad. If participants have not tasted bitter drink, however, arguments in favor of spending may be more salient at the time they make their decision, and these arguments may be perceived as more plausible when they are happy than when they are not. Therefore, they may be less inclined to save than they would if they were sad. In short, we expected that tasting bitter drink would increase participants' saving intention if they are happy but would decrease it if they are sad.

*Empirical Evidence* In study 1, participants first reported their affective state, and then drank either bitter melon water or plain water. Then, after completing an unrelated task, they were told to assume that they had an additional \$300 per month in income and to indicate the proportion of this amount that they would like to save. The interaction of mood and taste was significant ( $F(1, 42) = 8.39, p < .01$ ). When participants felt happy, they chose to save a greater proportion of the money after tasting bitter melon water ( $M = 65.5\%$ ) than after tasting pure water ( $M = 43.5\%$ ;  $F(1, 42) = 4.50, p < .05$ ). When participants felt sad, however, this difference was reversed (49.6% vs. 64.6%, respectively;  $F(1, 42) = 4.03, p = .05$ ).

Study 2 was similar except that (a) participants' mood was experimentally induced (by recalling a happy, sad, or neutral experience), and (b) concepts associated with bitterness were activated by

using a word construction task. The interaction of mood and primed concepts was significant ( $F(2, 148) = 4.53, p < .05$ ). Happy participants estimated they would save more when the primed concepts were related to a bitter life than when they were not (70.38% vs. 53.13%, respectively;  $F(2, 148) = 4.17, p < .05$ ). Sad participants, however, estimated that they would save less in the former condition than in the latter (44.11% vs. 58.65%, respectively;  $F(2, 148) = 3.08, p < .05$ ). Finally, control participants' estimates were similar to those of happy participants (60.37% vs. 47.29%, respectively;  $F(2, 148) = 2.67, p = .07$ ). This could be attributed to the fact that participants in this condition actually felt happy; their reported mood in this condition ( $M = 6.08$ ) was significantly above the scale midpoint of 5 ( $t = 34.96, p < .001$ ).

A third study, using Chinese middle-school children as participants confirmed the effect of a bitter taste on actually savings behavior. Specifically, participants who were given ten 1-RMB coins as compensation and told they could save a portion of the money decided to save more money if they had tasted a bitter drink earlier in the study than if they had not (6.10 vs. 3.56, respectively;  $F(1, 45) = .62, p < .01$ ).

A fourth study confirmed the implications of our findings for actual shopping behavior. Consumers before entering a supermarket were asked to sample either bitter-tasting coffee or pure water. Upon exiting, they were asked to give us a copy of their shopping receipt for pay of RMB 20, and to indicate on the receipt the products that they had not initially intended to buy. Shoppers spent less money if they had tasted black coffee than if they had tasted water (1.54 vs. 9.01, respectively;  $F(1, 58) = 5.20, p < .05$ ). Moreover, they indicated making fewer impulsive (unplanned) purchases in the former condition than the latter (8% vs. 20%, respectively;  $F(1, 58) = 3.84, p < .06$ ).

In summary, taking bitter taste or priming bitter life concepts can increase the motivation to save money rather than spending it. This effect is greater when participants are happy. However, the evidence that similar effects were evident under control conditions and in situations in which affect was not manipulated suggests that our findings generalize to situations outside the laboratory.

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# Just Like Being There: The Good and the Bad of Sharing Experiences

Chair: Alixandra Barasch, Wharton, UPenn, USA

## Paper #1: Questioning the “I” in Experience: Experiential Purchases Foster Social Connection

Amit Kumar, Cornell University, USA  
Thomas C. Mann, Cornell University, USA  
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## Paper #2: Experiential Gifts Foster Stronger Relationships than Material Gifts

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## Paper #3: When Happiness Shared is Happiness Halved: How Taking Photos to Share with Others Affects Experiences and Memories

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## Paper #4: Material Words: How Sharing Material and Experiential Purchases with Others Influences Self-Esteem

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### SESSION OVERVIEW

People’s collected experiences form their life narratives and are intricately intertwined with their social relationships. Many of our social interactions involve sharing personal experiences or learning of others’ experiences. For example, people may engage in similar experiences at different points in time, receive an experience from another person as a gift, or document and communicate their experiences to others in the form of photos and word-of-mouth. How do these various forms of sharing affect people, both during the experience and afterwards?

Most relevant research has examined how the co-presence of others affects experiences (Raghunathan and Corfman 2006; Ramanathan and McGill 2007; Capriello and Reis 2013). There has been much less attention, however, to the broader effects of sharing experiences with others who were not present in the actual consumption experience. The four papers in this session illustrate how various forms of sharing experiences can influence social connections, self-esteem, and enjoyment and memory of experiences themselves.

The first two papers focus on the interpersonal consequences of sharing experiences. Building on work about the greater *personal* satisfaction people derive from experiences versus material goods, they show that experiences can also promote stronger *social* connections. **Kumar, Mann, and Gilovich** investigate how experiential purchases foster kinship with both others who have made similar purchases and people in general. Simply thinking about experiential purchases leads people to desire more social activities and to act more prosocially. **Chan and Mogilner** examine how receiving experiential gifts (compared to material gifts) can make recipients feel closer to the gift giver. These effects operate through the emotions evoked when an experiential gift is consumed, regardless of whether the gift is consumed together with the gift giver.

The final two papers concentrate on the intrapersonal consequences of sharing experiences. **Barasch, Diehl, and Zauberman** demonstrate that simply having the *goal* of sharing one’s experience with others while taking pictures (compared to documenting the experience for oneself) can reduce enjoyment during the experience. A sharing goal also results in photos that are perceived as less authentic and enjoyable when people relive the experience. Finally, **Moore**

shows that sharing stories about experiential versus material purchases can differentially affect social dimensions of self-esteem. In particular, sharing about negative experiential and positive material purchases decreases self-esteem, but the use of explanatory language (e.g., because) can reduce the stigma associated with sharing these stories and attenuate these effects.

Individual experience and social interaction are two central elements to human existence. Together, these papers highlight the diverse ways in which these constructs can intersect. All four projects are working papers with at least three studies completed. Given the widespread applicability of the issues discussed, we expect this session to attract researchers interested in experiential versus material consumption, social connection, well-being, word-of-mouth, gift giving, picture-taking, and prosocial behavior. In the spirit of the conference theme “Back to Fun,” we hope that the focus on the social aspects of experiences and the diverse approaches to studying this topic will generate a lively and fruitful discussion.

## Questioning the “I” in Experience: Experiential Purchases Foster Social Connection

### EXTENDED ABSTRACT

Research on experiential and material purchases (that is, money spent on *doing* versus *having*; Van Boven & Gilovich, 2003) has focused on the benefits of experiential consumption in terms of consumer satisfaction and the underlying mechanisms that produce this difference. Here, we present another downstream consequence of spending money on experiences as compared to possessions: fostering social connection. Such effects are important because of the human tendency for the need to belong (Baumeister & Leary, 1995).

In Study 1 ( $N = 98$ ), we investigated whether consumers feel more connected to someone who has made the same experiential purchase as they have than to someone who has made the same material purchase. While people may feel some kinship with those who make the same purchases they do, we set out to determine whether this was especially true for experiential purchases. Participants listed a significant experiential or material purchase and then thought about another person who had made the same purchase as they had. We then asked how similar they would feel to this person and how much kinship they would feel toward the person initially. As expected, participants reported that they would feel more similar to someone who had made the same experiential purchase as they had, unequal variances  $t(82.22) = 3.90, p < 0.001$ . They also reported that they would feel more initial kinship toward the person who had purchased the same experience, unequal variances  $t(86.90) = 3.61, p < 0.001$ . Knowing that another person has made the same experiential purchase thus appears to have notable social benefits: it creates a level of closeness and kinship that shared material purchases can’t match.

In Study 2 ( $N = 97$ ), we extended these findings in two ways. Instead of having participants think about another person who had made the *same* purchase, they thought of someone who had made a similar, but “upgraded” purchase. We also added another dependent measure, one of longer-term kinship. Again, participants indicated that they would feel more similar to the other person in the experiential condition,  $t(95) = 2.47, p < 0.02$ , and that they would feel more initial kinship toward the other person,  $t(95) = 2.03, p < 0.05$ . Learning about someone who had made a similar, but better experiential purchase resulted in greater feelings of long-term kinship as

well, unequal variances  $t(87.90) = 2.44, p < 0.02$ . It seems, then, that even when a notable difference between oneself and another person making a similar purchase is made salient, experiential purchases foster more of a sense of social connection than possessions. Knowing that another person has a better version of what you have can be off-putting and can create a sense of social distance. The results of this study, however, indicate that this is less likely to be true when it comes to experiential purchases. When it comes to being “outdone” on a similar experiential purchase, the similarities appear to be more prominent or more important than the differences.

Study 3 ( $N = 197$ ) examined peoples’ more general feelings of connection that are aroused by the types of purchases they make (i.e., not just toward someone who has made a similar purchase). Because we asked about their sense of connection to other people in general, we thought that the predicted effect might be less strong than those documented in the aforementioned studies, and so we doubled our sample size. After participants thought about either experiential or material purchases, they filled out the Social Connectedness Scale (Lee & Robbins, 1995). In line with our hypothesis, participants reported higher levels of social connection when they reflected on their experiential purchases,  $t(195) = 2.05, p < 0.05$ .

When people feel connected to others, they may want to partake in other social activities and further their sense of connection. After thinking about one type of purchase or the other, participants in Study 4 ( $N = 80$ ) indicated their relative preference for a variety of activities, some social and some not, adapted from Vohs, Mead, and Goode (2006). Participants were given a series of nine pairs of activities and asked which they would prefer if offered a choice between them. In each pair, one activity was inherently social (e.g. “hanging out at a café with a friend”) and the other was not (e.g. “reading a favorite book alone”). Giving consumers an opportunity to think about their experiential purchases made the social activities more appealing,  $t(78) = 2.07, p < 0.05$ . Because we found a significant difference in purchase price between experiential and material purchases in this study, it is important to note that this difference in preference for social activities remains significant in an ANCOVA controlling for (log-transformed) average purchase price,  $F(1, 77) = 6.87, p = 0.01$ . While the previous studies showed that consumers feel more connected to others after thinking about their experiential purchases, this experiment demonstrated that there may be behavioral consequences that stem from this feeling. Experiences not only connect us to other people; they also provide a rich store of memories of such connection to draw on and revisit, and these memories may feed the inclination to engage even more in such activities.

By inspiring people to seek out the company of others, experiential purchases are likely to have benefits beyond the purchase itself. But do the secondary benefits of such purchases apply only to the experientier, or do they flow outward to reach others as well, perhaps causing us to treat others better? In Study 5 ( $N = 48$ ), participants were asked to recall an experiential or material purchase and then assigned the role of allocator in a dictator game. Previous research (Charness & Gneezy, 2008) has found that as social distance decreases, allocators in the dictator game become more altruistic to receivers and give them a bigger portion of the endowment. As predicted, thinking about an experiential purchase led participants to be more generous thinking about a material purchase, unequal variances  $t(40.46) = 2.27, p < 0.03$ .

## Experiential Gifts Foster Stronger Relationships than Material Gifts

### EXTENDED ABSTRACT

Occasions to give gifts tie up each year. From birthdays to religious holidays, Valentine’s Day to Father’s Day, each occasion is fraught with the question: What to give?! To help inform gift givers of what to give and to gain insight into the interpersonal effects of gifts, this research investigates which type of gift causes recipients to feel closer to their gift giver—material gifts (objects for the recipients to keep) or experiential gifts (events for the recipients to live through)—and why.

People seem more inclined to give material gifts. In a survey we conducted among 219 gift givers, 78% reported having most recently given a gift that was material. Four subsequent experiments testing the effect of gift type on how close gift recipients feel to their gift giver, however, reveal this tendency may be misguided.

In Experiment 1A, gift givers were recruited through a university laboratory and were provided with \$10 to spend on a gift for a friend within three days. After identifying their gift recipient, gift givers were randomly assigned to purchase and give an experiential gift they jointly consumed with their recipient (shared experiential gift), an experiential gift not consumed with their recipient (non-shared experiential gift), or a material gift not consumed with their recipient (non-shared material gift). Three days later, recipients described the gift they had received and reported how receiving the gift affected their relationship with their gift giver. Recipients also rated the thoughtfulness of their gift and how much they liked the gift.

Results revealed that people who received either shared or non-shared experiential gifts consequently felt closer to their gift giver than people who received material gifts ( $ps < .05$ ). Furthermore, experiential and material gifts did not differ in thoughtfulness or liking ( $ps > .59$ ), suggesting that these factors do not explain the effect of gift type on closeness.

Experiment 1B extended 1A using a two-part design. We recruited pairs of friends and randomly assigned one friend to be the gift giver and the other to be the recipient. Gift givers were provided with \$15 and randomly assigned to purchase either an experiential or material gift over the next three days for their friend to consume on his/her own. Recipients completed an initial survey to measure the strength of their relationship with the gift giver. The following week, recipients completed a follow-up survey in which they described the gift they had received and rated the strength of their relationship with their gift giver, the thoughtfulness of the gift, and how much they liked the gift. Relationship change was measured as the difference between the pre- and post-gift relationship ratings.

Results showed that receiving an experiential gift made recipients feel closer to their gift giver, compared to receiving a material gift ( $t = 2.06, p < .05$ ). Gift type was again unrelated to thoughtfulness and liking ( $ps > .11$ ).

Experiment 2 explored the underlying role of emotion in the effect. Participants were randomly assigned to recall a gift they had received in a 2(material vs. experiential)  $\times$  2(shared vs. non-shared) between-subjects design. Participants rated the closeness of their relationship both before and after receiving the gift, and the differences between the measures served as our measure of relationship change. Participants also rated how intensely emotional they felt at the moment they felt the most emotional from both receiving and consuming the gift, and identified which emotions they were feeling. Finally, participants rated thoughtfulness and liking.

Results showed that receiving an experiential gift resulted in a greater change in connection than receiving a material gift ( $F = 6.83$ ,

$p=.009$ ). Moreover, a non-significant main effect of whether the gift was shared ( $p=.72$ ) and a non-significant interaction effect ( $p=.32$ ) suggest that the connecting effect of receiving an experiential gift occurred regardless of whether the recipient consumed the gift with the gift giver. Additional analyses showed that thoughtfulness and liking did not explain the effect of gift type on consumption, nor did the emotion felt during the gift exchange. However, an analysis of the emotions that were felt while consuming the gift revealed that experiential gifts evoked more emotion when consumed than did material gifts ( $F=15.55$ ,  $p<.001$ ; the effect of sharing and the interaction effect were non-significant,  $ps>.89$ ). Furthermore, mediation analyses showed that the emotions felt during gift consumption mediated the effect of gift type on relationship change (95%CI=[.03, .12]).

Experiment 3 tested whether framing a gift of a book as more experiential would make it more connecting. We further tested the underlying role of consumption emotion by manipulating whether recipients thought about the emotion they would feel while consuming the gift. Experiment 3 thus followed a 2(material vs. experiential)  $\times$  2(control vs. emotion) between-subjects design. Participants identified a friend and rated their relationship with him/her. They next imagined receiving a book from that friend and wrote about the material or experiential aspects of the book; some participants were further instructed to write about the emotions the book would make them feel. They again rated their relationship with their friend and the difference between the pre- and post-gift measures served as our measure of relationship change.

Results in the control conditions showed that the gift of a book was more connecting when recipients were reminded of the experience of reading the book, rather than its material attributes. Furthermore, in support of the underlying role of emotion, when recipients were led to think about the emotion they would feel while consuming the book, they felt greater connection regardless of gift type framing ( $F=7.60$ ,  $p=.006$ ).

In summary, this paper explores the effect of purchases on connections between people, finding that not all expenditures of money are equally beneficial. Indeed, people's tendency to give material gifts seems to do little to foster the relationship between a gift giver and recipient. Experiential gifts, in contrast, make recipients feel closer to the person who gave them the gift because of the emotion evoked when consuming the gift, regardless of whether the experience is consumed together. Thus, when deciding on a gift for a loved one, an experiential gift promises greater hope of connection.

### When Happiness Shared is Happiness Halved: How Taking Photos to Share with Others Hurts Experiences and Memories

#### EXTENDED ABSTRACT

Picture-taking has become ubiquitous with technological innovation and the availability of camera phones. From eating a meal to watching a concert to skiing a mountain, hardly a situation exists these days that individuals do not feel compelled to document with the snap of a camera. While precise numbers are difficult to obtain, researchers estimate that Americans alone took 53 billion pictures in 2006 and that this number has doubled in the past seven years (National Geographic, 2012).

Consumers have different motivations for taking these pictures. One goal is to document and preserve experiences for themselves, as people gain utility from their memories (e.g., Zauberan, Ratner, & Kim, 2009). Another goal is to document and share experiences with others, as people also gain utility from connecting with others (e.g., Ramanathan & McGill, 2007). Indeed, of the billions of photos that

people take every year, millions of them are shared on social media websites each day (Facebook, 2013). Yet, prior literature has devoted little attention to understanding how one's goal for taking photos might influence their online experience and future memories. We address this question with two lab experiments and one field study.

On the one hand, it is possible that taking photos to share with others will increase enjoyment of the experience and retrospective evaluations. Sharing positive events with others provides both personal and interpersonal benefits (Reis et al., 2010; Lambert et al., 2012), and the ability to share experiences with others partially accounts for why people value experiential goods more than material goods (Capriarello & Reis, 2013). However, while people clearly gain utility from sharing experiences with others, we propose that pursuing this goal comes with a cost. People motivated to share their experience through photos become concerned with impression management and self-presentation (Leary & Kowalski, 1990; Tetlock & Manstead, 1985), which have often been associated with increased anxiety and pressure to make a good impression (Schlenker & Leary, 1982). We propose and find that taking photos to share with others can reduce online enjoyment and immersion in the experience, while also reducing enjoyment of photos themselves by hampering people's ability to fully relive their experiences.

To initially examine how one's goal in taking pictures may affect online experience, we developed a unique computer interface that allows respondents to experience a simulated event in the lab by watching a first-person-perspective video of the event. In the first two studies, participants experienced a simulation of a 4-minute city bus tour. During the simulation, participants were able to take pictures like they would during an actual experience by clicking their mouse.

In **Study 1**, 131 participants from Mechanical Turk were randomly assigned either to take photos of the bus tour so that they could preserve the memories for themselves (self condition) or to take photos so they could share the memories with their friends (share condition). A manipulation check confirmed that participants were more focused on others (versus themselves) in the share condition than the self condition ( $F(1,129)=6.03$ ,  $p=.02$ ). Importantly, we found that relative to the self condition, taking photos to share decreased participants' enjoyment ( $F(1,129)=6.21$ ,  $p=.01$ ) and immersion in the experience ( $F(1,129)=7.86$ ,  $p<.01$ ). Participants in the self condition also reported that their albums were better at capturing their overall tour experience ( $F(1,131)=5.51$ ,  $p=.02$ ).

Because Study 1 involved hypothetical sharing, **Study 2** sought to replicate these findings when individuals had to actually share their photos with others. 169 participants were assigned to the same conditions as above, except that in the sharing condition they were instructed to share their photos with a partner in the lab. Confirming the results in Study 1, participants enjoyed the experience less ( $F(1,167)=3.11$ ,  $p=.08$ ) and were less immersed ( $F(1,167)=6.10$ ,  $p=.01$ ) in the share condition than the self condition. In addition, we found initial evidence for the mechanism underlying these effects: individuals were more anxious when they were taking photos to share ( $F(1,167)=5.93$ ,  $p=.02$ ), which mediated the effects on immersion and enjoyment (95% CI=[-.321, -.080]).

In **Study 3**, we extended our findings from the lab into the field and also examined the effects of picture-taking goals on people's subsequent memories and evaluations of their photos. We recruited 107 students to participate in the study before they left for Christmas vacation. Half the participants were instructed to take pictures on Christmas so that they could make an album to post on Facebook, while half the participants were instructed to take pictures so that they could make an album to keep for themselves. Two days after

Christmas, participants were asked to fill out a short questionnaire and create an album based on their assigned goal (Time 1). To allow us to investigate longer-lasting consequences, they also completed an online follow-up survey one month later (Time 2; filled out by 102 out of 107 participants).

Consistent with the anxiety effects found in Study 2, participants in the share condition were more likely to report that they tried to take photos that made them look good at Time 1 ( $F(1,105)=5.25, p=.02$ ). Interestingly, when asked to recall their Christmas experience and visualize the situation, participants in the share condition were more likely than those in the self condition to rate that image as being from the perspective of an observer (versus their own perspective) at both Time 1 ( $F(1,105)=4.41, p=.03$ ) and Time 2 ( $F(1,102)=4.10, p=.04$ ). Moreover, these effects were reflected in the photos people took: participants in the share condition were less able to relive their experience through their photos at Time 1 ( $F(1,105)=6.80, p=.01$ ) and enjoyed looking at their photos less at both time points (T1:  $F(1,105)=6.79, p=.01$ ; T2:  $F(1,102)=4.24, p=.04$ ), compared to those in the self condition.

By demonstrating the impact of picture-taking goals on online experience and subsequent memory, the present research offers novel insights for psychology and consumer research. Given its contributions to literatures in picture-taking, sharing, and memory, we believe this research would be of interest to a wide audience at ACR.

### Material Words: How Sharing Material and Experiential Purchases with Others Influences Self-Esteem

#### EXTENDED ABSTRACT

Consumers share word of mouth (WOM) about purchases, such as buying clothes or watching movies, daily (Carl, 2006). While sharing allows individuals to savor events (Lyubomirsky, Sousa, & Dickerhoof, 2006) and build relationships (Sprecher & Hendrich, 2004), it can also subject them to stigma (Van Boven, Campbell, & Gilovich, 2010). Thus, we examine when sharing has positive or negative consequences for consumers.

Because sharing is inherently social and self-esteem indicates relational value (Leary & Baumeister, 2000), we explore how sharing impacts social state self-esteem—the extent to which individuals feel self-conscious about their public image (Heatherton & Polivy, 1991). In general, self-esteem should be affected when individuals share purchases for which they may be stigmatized (Link & Phelan, 2001). Prior work on *material* (tangible objects) and *experiential* (intangible events) purchases shows that material purchases are stigmatized (Van Boven et al., 2010). Individuals who make material purchases are stereotyped as selfish and are evaluated unfavorably relative to those who make experiential purchases; material purchases are viewed as extrinsically motivated by factors such as status, while experiential purchases are viewed as related to the self and intrinsically motivated by factors such as personal growth and enjoyment; and conversations about material purchases are less enjoyable than conversations about experiential purchases (Caprariello & Reis, 2013; Van Boven et al., 2010).

Due to this stigma, self-esteem may decrease when sharing about material purchases, as individuals may fear being judged. Further, extending prior work, we hypothesize that purchase valence will interact with purchase type (experiential vs. material) to predict changes in self-esteem. Specifically, individuals may not fear judgment for sharing about unenjoyable, disliked material purchases, or enjoyable, liked, and fulfilling experiential purchases (Caprariello & Reis, 2013; Van Boven et al., 2010). Thus, sharing about negative material or positive experiential purchases should not influence self-

esteem. In contrast, individuals may fear judgment for sharing about enjoyable, liked material purchases or unenjoyable, disliked, and unfulfilling experiential purchases (Caprariello & Reis, 2013). Thus, sharing about positive material or negative experiential purchases may decrease self-esteem.

Importantly, we expect the language used while sharing to moderate this effect. Language influences behavior (Patrick & Hagtvedt, 2012), attitudes (Moore, 2012), and emotions (Hart, 2013). One particularly impactful type of language is explaining language (Pennebaker, 1997). Explaining may protect self-esteem because justifying stigmatized purchases should reduce individuals' fear of being judged (Lerner & Tetlock, 1999). Thus, if positive material and negative experiential purchases are not explained when sharing, self-esteem should decrease; however, if these purchases *are* explained when sharing, self-esteem should not decrease. We test these predictions in three studies.

Study 1 examined material purchases. Undergraduates ( $N = 169$ ) participated in a 2 (audience: salient/not) by 2 (valence: positive/negative) by 3 (writing: control/explain/non-explain) design. They recalled an appropriate purchase (using instructions from Van Boven et al., 2010), and then wrote a review of their purchase. In the audience salient condition, participants were told their review would be shared with another participant. In the not-salient condition, participants were told their review would be stored anonymously. Control participants wrote only one or two words about their purchase, while explain and non-explain participants completed a fill-in-the-blank review (Moore, 2012). In the explain condition, half of the ten sentences contained explaining clauses (e.g., “I would \_\_\_ recommend this product to others, because \_\_\_.”); the non-explain condition had similar sentences without explanation. After writing, participants completed the Social State Self-Esteem Scale (e.g., “I am worried about whether I am regarded as a success or failure,” Heatherton & Polivy, 1991) and the short Material Values Scale (Richins, 2004); this was used as a covariate.

A three-way audience x valence x writing interaction predicted self-esteem ( $F(2, 156) = 4.03, p = .02$ ). Self-esteem decreased only in the audience salient conditions, and only when individuals wrote about positive material purchases without explaining. Those who did not explain had lower self-esteem ( $M = 2.22$ ) than those in the explain ( $M = 2.83, F(1, 77) = 6.77, p = .01$ ) and control conditions ( $M = 2.79, F(1, 77) = 3.77, p = .05$ ), which did not differ ( $p = .58$ ).

Study 2 investigated how self-esteem was influenced by explaining (or not) material and experiential purchases, holding audience salience constant—all participants were informed that their review would be shared. We also measured global self-esteem (Rosenberg, 1965) several weeks prior to the study to use as a covariate. For the study, undergraduates ( $N = 157$ ) participated in a 2 (type: material/experiential) by 2 (valence: positive/negative) by 3 (writing: control/explain/no explain) between-subjects design. The study proceeded similarly to study 1, except for the type of purchases recalled; state self-esteem and materialism were measured after writing.

Results revealed a type x valence x writing interaction on self-esteem ( $F(2, 143) = 3.27, p = 0.04$ ). For positive experiential and negative material purchases, self-esteem was not influenced by writing ( $ps > .60$ ). However, for negative experiential and positive material purchases, compared to control ( $M_{NE} = 3.61; M_{PM} = 3.87$ ), writing without explaining decreased self-esteem ( $M_{NE} = 2.85, F(1, 142) = 5.37, p = .02; M_{PM} = 3.36, F(1, 142) = 4.28, p = .04$ ), while writing with explaining did not ( $M_{NE} = 3.51, p = 0.76; M_{PM} = 3.82, p = 0.85$ ).

In study 3, undergraduates ( $N = 91$ ) wrote freehand about positive or negative material or experiential purchases; all were told their writing would be shared. We measured explaining word use (e.g.,

because) using the Linguistic Inquiry and Word Count (LIWC) program (Pennebaker et al., 2007). Negative material purchases were explained ( $M = 3.57\%$ ) more than any other type of purchase ( $M = 1.19\%$ ,  $F(1, 89) = 16.02$ ,  $p < .001$ ).

While consistent with prior work (Wong & Weiner, 1981), study 3 suggests that consumers do not naturally share WOM in a way that protects their self-esteem. However, studies 1 and 2 demonstrate that if consumers explain their positive material or negative experiential purchases when sharing WOM, they can overcome the negative impact of sharing on their self-esteem.

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# Aging Consumers: Beyond Chronological Age

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Rik Pieters, Tilburg University, The Netherlands  
Carolyn Yoon, University of Michigan, USA

## **Paper #1: Golden or Graying? Cognitive Ability and Experience Predict Financial Outcomes Across the Lifespan**

Ye Li, University of California, Riverside, USA  
Eric J. Johnson, Columbia University, USA  
Zeynep Enkavi, Columbia University, USA  
Jie Gao, Columbia University, USA  
Lisa Zaval, Columbia University, USA  
Elke U. Weber, Columbia University, USA

## **Paper #2: Brand Memory and Aging: Accounting for Specific Age Reveals Superior Memory for Older Compared to Young Consumers**

Raphaëlle Lambert-Pandraud, ESCP Europe, France  
Gilles Laurent, INSEEC, France  
Etienne Mullet, Ecole Pratique des Hautes Etudes, France  
Carolyn Yoon, University of Michigan, USA

## **Paper #3: Aging and Product Choice: The Effects of Feel-Age and Social Context**

Cesare Amatulli, LUISS University, Italy  
Alessandro M. Peluso, University of Salento and LUISS University, Italy  
Gianluigi Guido, University of Salento, Italy  
Carolyn Yoon, University of Michigan, USA

## **Paper #4: The Age of Materialism: Age, Period, & Cohort Effects Across the Life Cycle**

Esther Jaspers, Tilburg University, The Netherlands  
Rik Pieters, Tilburg University, The Netherlands

### **SESSION OVERVIEW**

Worldwide population is undergoing a significant shift with the increasingly growing proportion of older adults. Thus older consumers are of key interest to academics and practitioners. More work on older consumers is needed, especially at the conceptual level, given the relative paucity of prior research. This session aims to address this deficiency by tackling two overarching questions. While chronological age is obviously a critical variable in investigations of older consumers, what other age-related variables play a mediating role between chronological age and behavior. What are some explanatory variables and moderators to consider in combination with chronological age?

The four papers offer innovative approaches to these questions. The first two papers show the importance of taking into account, in addition to a consumer's current age and abilities, the experience, capabilities and knowledge accumulated over the consumer's lifetime as well as the age at which they were acquired. The third paper demonstrates the need to consider how feel-age in addition to chronological age affect product choice, and further reveals that a consumer's feel-age varies as a function of social context. The fourth paper tackles the ever thorny problem of disentangling the effects of age, cohort, and period. It demonstrates, using the example of materialism, an approach that combines a new statistical method with a sound theoretical approach.

The first paper, "**Golden or Graying? Cognitive Ability And Experience Predict Financial Outcomes Across the Lifespan,**" focuses on the complementary capabilities of fluid intelligence and crystallized intelligence. It shows how older adults may com-

pen-  
sate decline in the former with the latter: domain-specific expertise acquired over the lifetime, such as financial literacy. The authors utilize measures of consumer current cognitive ability and accumulated knowledge with real-world financial behaviors in the form of credit report data.

The second paper, "**Brand Memory And Aging: Accounting For Specific Age Reveals Superior Memory For Older Compared to Young Consumers,**" shows how both a consumer's chronological age today and specific age (defined as the consumer's age when a brand was initially launched) affect memory of brands learned over one's lifetime, and how this relationship is mediated by cognitive ability. Compared with young consumers, older consumers have worse memory for recent brands, but equivalent or better memory for brands encountered before age 30. Hence older consumers hold a biased perception of the market.

The third paper, "**Aging And Product Choice: The Effects of Feel-Age And Social Context,**" focuses on older consumers' tendency to feel younger than they actually are. It reveals that this feeling varies as a function of social context, namely of the presence of young versus older people. It then investigates how older consumers choose more youthful products in the presence of young people as a way to feel more at ease.

The fourth paper, "**The Age of Materialism: Age, Period, & Cohort Effects Across the Life Cycle,**" applies a new statistical approach (Multilevel Latent Growth model) to disentangle age, period, and cohort effects. Application to variations in materialism across the life cycle using a panel of 4700 consumers across eight waves reveals that younger and older people are more materialistic, which is partly due to younger birth cohorts being more materialistic. The statistical approach has potentially very broad applications beyond this specific case.

## **Golden or Graying? Cognitive Ability And Experience Predict Financial Outcomes Across the Lifespan**

### **EXTENDED ABSTRACT**

One in five Americans will be over 65-years-old by 2030. This demographic shift will be accompanied by two trends: The first is that people accumulate wealth up to retirement and subsequently face decisions about how to spend that wealth while guarding against the possibility of running out of money. Moreover, as companies shift from defined benefit retirement plans (pensions) to defined contribution plans (e.g., 401(k)s), individuals face an increasing number of important and often complex financial choices later in life.

The second age-related trend is one of the most replicable and sizeable in psychology: the brain slows with age. Studies have shown that *fluid intelligence* ( $G_f$ )—the set of abilities related to generating, transforming, and manipulating novel information—falls by nearly two standard deviations from age 20 to 70 (Salthouse 2010; Schaie 1993). Given mounting evidence that cognitive ability is a key determinant of decision-making (Agarwal et al. 2010; Agarwal and Mazumder 2013; Burks et al. 2009; Mani et al. 2013; McArdle, Smith, and Willis 2011), age-related deterioration of  $G_f$  raises the specter that people with major responsibility for financial decisions may be increasingly unable to make them. Fortunately, declining  $G_f$  is accompanied by increasing *crystallized intelligence* ( $G_c$ ) (Carroll 1993;

Cattell 1987), i.e., the accumulation of knowledge and experience that increases with age into the 60s and plateaus thereafter (Horn and Cattell 1967; Li et al. 2004; Salthouse 2004, 2010).  $G_c$  may therefore represent a kind of intellectual capital that may circumvent declining  $G_p$  producing sharp-minded octogenarians.

Importantly, the effect of age on decision quality also depends on the *relative impact* of the two types of intelligence required for the decision. Deficits in  $G_f$  might be compensated for only in situations in which the decisions can rely on the accumulated  $G_c$ . If  $G_c$  is a more important determinant of decision performance than  $G_p$ , we might even expect older adults to perform better. The opposite would be true for tasks requiring more  $G_f$ . For decisions made equally well using either or both pathways, we may see no net age effect on decision quality.

We examine whether this interaction between  $G_f$  and  $G_c$ —which we term *Complementary Capabilities* (Li et al. 2013)—affects the ability to make good financial decisions. We use a unique data set that combines extensive measurements of cognitive ability and economic phenotypes (i.e., risk, loss, and time preferences) with field observations of those same individuals' economic performance.

Our cognitive data comes from a four-part study in which 478 U.S. residents between 18 and 86 completed a battery of cognitive, decision-making, and demographic measures. We obtained credit report data for these participants from a major credit bureau. Maintaining high credit scores reflects sustained ability to make good financial decisions and brings substantial benefits increased likelihood of obtaining loans at lower interest rates. To the best of our knowledge, this study is the first to combine credit report data with multiple standard measures of  $G_p$ ,  $G_c$ , and economic phenotype assessments.

We conducted all analyses using structural equation modeling but present, for simplicity, the results of linear regressions using the factor scores from the SEM. We conducted multiple regressions of credit score on age and other demographic variables (Model 1), cognitive ability (Model 2), and a number of other control variables.

Model 1 shows that credit scores increase by an average of 13 points per decade of age, comparable to the effect of an additional year of education or a doubling of income. Model 2 verifies the positive relationship between credit scores and  $G_f$  but suggests that domain-general  $G_c$  is unrelated to financial decision-making ability.

We replaced the general  $G_c$  measures with a domain-specific measure of financial  $G_c$  in Model 3 and all subsequent analyses, specifically, *financial literacy* ( $G_{c-FL}$ ), or the ability to understand financial information and decisions (Lusardi and Mitchell 2007). Model 3 shows that even after controlling for demographics, credit scores positively relate to  $G_f$  and  $G_{c-FL}$ . One standard deviation increase in  $G_f$  (roughly equivalent to 15 points of IQ) corresponds to a credit score increase of 18 points, whereas one standard deviation of  $G_{c-FL}$  corresponds to an increase of 66 points. In addition, the reduced age coefficient in Model 3 suggests that  $G_f$  and  $G_{c-FL}$  partly explain the effect of chronological age on credit scores.

Model 4 controls for financial experience as self-reported on 20 different financial instruments (e.g., credit cards, mortgages, mutual funds, etc.). The fact that the effect of  $G_{c-FL}$  remains significant suggests that good financial decisions require understanding financial products, not just experience using them.

We also measured individual differences in risk, loss, and time preferences using state-of-the-art adaptive measurement tasks (Toubia et al. 2013). Model 5 adds model estimates for these preferences as covariates in Model 3. Consistent with recent findings (Meier and Sprenger 2012), credit scores were higher for people with more patient time preferences. Importantly, the effect of  $G_f$  is no longer significant after controlling for time preference, consistent with a posi-

tive relationship between  $G_f$  and patient time preferences (Dohmen et al. 2010; Li et al. 2013). That is, part of the reason that people with higher  $G_f$  have higher credit scores is that they exhibit more patience in financial decisions.

Finally, we control for other important psychological factors known to influence a wide range of behaviors. Model 6 controls for the DOSPERT risk-taking scale (Weber, Blais, and Betz 2002), which has been shown to correlate with many real-world risk-taking behaviors (Brown and Braver 2007; Harrison et al. 2005; Markiewicz and Weber 2013). Model 7 controls for Big Five personality measures (Digman 1990). Both Models 6 and 7 find similar results for the effects  $G_f$  and  $G_{c-FL}$  even after controlling for these other important psychological variables.

In summary, decreasing fluid intelligence does not spell doom for older adults' financial decision-making. Instead, their improved crystallized intelligence, particularly in the financial domain, seems to provide an alternative pathway to making good financial decisions. These complementary pathways cannot be explained by other demographic differences, financial experience, economic phenotypes, or personality variables.

## Brand Memory and Aging: Accounting For Specific Age Reveals Superior Memory For Older Compared to Young Consumers

### EXTENDED ABSTRACT

Chronological age has a major and complex effect on the brands that a consumer knows (i.e., recognizes) and those that a consumer spontaneously recalls. These two forms of brand memory are important determinants of the composition of consideration sets, whether consumers engage in memory-based choice or stimulus-based choice. Building on previous experimental research, the present paper investigates memory for real-world brands (radio stations) that older consumers have learned about over the course of their lives.

We examine the impact of chronological age at two different times: the consumer's *age today* and the consumer's "*specific age*" relative to a brand (defined as one's age when the brand was first launched in the marketplace). Our hypotheses rely on previous research regarding age-related impairments in both encoding and retrieval processes, such as in spontaneous recall (Park et al. 2002); poorer lexical knowledge by older people of "contemporary" words compared with their knowledge of "dated" words (Worden and Sherman-Brown 1983); and declining memory of autobiographical events that occurred after the age of 30 years (Janssen, Chessa, and Murre 2005). Although our present work focuses on cognitive explanations, we acknowledge the potential effect of affective factors demonstrated in previous research that older people like older brands more (Holbrook and Schindler 1994). We do so by controlling for the differential liking of older brands and report its significant impact in many of our analyses.

*Age today* is important because it affects the probability that consumers spontaneously recall brands they know (i.e., recognition in an aided brand recall task). On the basis of the age-related decline in cognitive ability, we hypothesize that ( $H_1$ ), compared to young consumers, older consumers are less likely to spontaneously recall the brands they know, and that ( $H_2$ ), among the brands they know, older consumers are more likely to recall spontaneously those that were introduced when they were younger. Consistent with  $H_1$ , older consumers recall a smaller percentage of the stations they know. But the support for  $H_2$  is so strong that it leads to a result that stands in contrast to  $H_1$ , depending on the age of the brand. Compared with young consumers, older consumers are *less* likely to spontaneously

recall the recent radio stations they know, but *more* likely to spontaneously recall old radio stations they know. Thus, empirical support for  $H_1$  when analyzing overall brand recall does not seem to apply to recall of old brands for which older consumers do better than young consumers. This result challenges the common view that older people always exhibit poorer performance on memory tasks.

Regarding the underlying process, we hypothesize ( $H_3$ ) that cognitive ability today (speed of treatment) mediates the impact of age on spontaneous recall. This hypothesis holds for recent stations but not for old stations. We find no impact of cognitive decline in this latter case which constitutes another counterintuitive result.

*Specific age* for a given brand is important because it determines the probability of knowing that brand today (assessed via recognition). We hypothesize ( $H_{4a}$ ) that recognition should be highest among consumers who were in their 20s when the brand was launched, whereas ( $H_{4b}$ ) among consumers in their 30s or older at launch time, the probability of knowing the brand today should decrease monotonically with their specific age. The results are mixed. First, for 6 of the 20 leading stations, there is no impact of specific age on current knowledge. These stations (5 old, 1 recent) include 4 of the 5 leading stations, known by almost everyone (< 97.6%). Here, older listeners perform as well as younger ones. Second, for the other 14 stations, we always obtain a strong decline of current knowledge for high values of specific age, with typically low knowledge for a specific age of 60 years. Recent stations targeting older listeners are no exceptions in this regard.

We further hypothesize that the total numbers of known brands ( $H_{5a}$ ) and spontaneously recalled brands ( $H_{5b}$ ) should decrease with a consumer's age today, and that the average age of known brands ( $H_{6a}$ ) and spontaneously recalled brands ( $H_{6b}$ ) should increase with consumer's age today. Because we found such notable differences between old and recent stations in our previous analyses, we assessed their knowledge and recall separately, and again, find mixed results. Both  $H_{5a}$  and  $H_{5b}$  received support with respect to recent stations: Knowledge and spontaneous recall were worse among older respondents. However, these hypotheses are found not to hold for old stations, for which, compared with young consumers, older consumers know *more* and exhibit *better* spontaneously recall. Finally, we confirm that the average age of known stations ( $H_{6a}$ ) and spontaneously recalled stations ( $H_{6b}$ ) increase with consumer age today.

In summary, a consumer's age significantly affects the set of brands the consumer knows, as well as the set of brands he or she recalls spontaneously, in four ways. Older consumers know more old stations and fewer recent stations. Among the stations they know, they are more likely to spontaneously recall old stations and less likely to recall recent stations. These four effects converge to show that older consumers know and recall spontaneously fewer brands and older brands. They, in turn, develop a restricted and dated view of the market, in terms of both knowledge and spontaneous recall. This produces more limited consideration sets and choices for older consumers compared to their younger counterparts. At the same time, our results serve to challenge the intuitive notion of a general decline of brand memory with age. Although older consumers, compared to young consumers, do have poorer memory for brands that are recently introduced as would be expected, they exhibit equivalent or sometimes better memory for brands that were encountered at low specific ages (i.e., when they were younger than 30).

## Aging And Product Choice: The Effects of Feel-Age And Social Context

### EXTENDED ABSTRACT

The increasing aging of worldwide population is an important trend for marketers. Older consumers represent a market segment that is of interest to both practitioners and academic scholars (Guido 2014; Yoon and Cole 2008; Yoon, Cole, and Lee 2009). Prior research has shown that older people systematically state they feel younger than they actually are (Barak 1987; Sherman, Schiffman, and Mathur 2001), and that this tendency may vary across contexts (Guido, Amatulli, and Peluso 2014). In the present paper, we seek to understand how the social context influences the tendency by older consumers to report a feel-age (i.e., the age one feels) that is lower than their chronological age. In three studies, we show that this tendency is magnified by the presence of young people in social contexts, and investigate how older consumers choose more contemporary versus traditional products as a way to feel greater ease in such social contexts.

Study 1 tested whether the tendency by older consumers to report a feel-age lower than their chronological one increases when they are exposed to a young social cue rather than an old one. Eighty-six consumers aged 65 and over were intercepted close to shopping sites and randomly assigned to one of two conditions: young or old social cues. The interviewers who were blind to the study hypotheses served as social cues. Respondents in the young social cue condition were interviewed by a young interviewer, whereas those in the old social cue condition were interviewed by an older interviewer. After answering some filler questions, participants reported the age they felt at that moment and their actual date of birth.

The tendency by older consumers to state a feel-age different from their chronological age was computed as a Youth Age (YA) index which is the difference between the chronological age of respondents and their stated feel-age (Barak 1987). As expected, participants in the young social cue condition reported a higher YA ( $M = 15.90$ ) than those in the old social cue condition ( $M = 7.87$ ),  $p = .008$ .

Study 2 investigated the mechanism that might drive this tendency. Building on prior research (Kawakami et al. 2012; Mead et al. 2011), we theorized that being exposed to a social context perceived as chronologically distant from the self may cause older consumers not to feel at ease in that context. Thus, older consumers should feel less in harmony with a context in which other people are young. Such a lower sense of harmony, in turn, might cause older consumers to adapt by reducing the perceived distance from the young people in their context. We predicted that stating a feel-age that is lower than the chronological age is a means by which older consumers adapt the self to fit with others who are young. Thus, older consumers' sense of harmony should mediate the effect of social cue on their tendency to state they feel younger (i.e., YA). Two hundred twenty-seven older consumers participated in a field study. Respondents received a questionnaire by an interviewer, who did not interact with them, close to real shopping sites typically attended by either young or older people (e.g., disco-pubs vs. senior recreation centers). Respondents first reported their feel-age and indicated how they perceived their context (1 = most of the people around me are old, 7 = most of the people around me are young). Then, respondents reported their sense of harmony captured via three items (e.g., "I feel at ease with people around me"; 1 = strongly disagree, 7 = strongly agree;  $\alpha = .61$ ), and their date of birth. After computing YA as in Study 1, we tested our prediction in a simple mediation model. We found a negative effect of social context on sense of harmony ( $p < .001$ ), a negative effect of sense of harmony on youth age ( $p = .001$ ), and an effect



of social context on the youth age index that became non-significant when sense of harmony was included in the model. The indirect effect of social context on youth age was positive and significant ( $b = .35, p < .05$ ), thus confirming our prediction.

Study 3 tested whether being exposed to young people may lead older consumers to adapt their selves by choosing contemporary rather than traditional products. The study was designed as a 2 (respondent's age: young vs. old)  $\times$  2 (social cue: young vs. old) between-subjects experiment. Four hundred participants, both young and older consumers, were first exposed to a picture displayed either a pair of young or a pair of old people, which served as the social cue. Participants were then asked to choose an option across four different choice sets. Each choice set contained a contemporary and a traditional version of a same product. The individual tendency to prefer contemporary options was captured by the percentage of times these options were chosen across the four choice sets, which ranged from 0% (the contemporary option was never chosen) to 100% (the contemporary option was always chosen), and served as dependent variable in the analysis. We found a significant interaction between respondent's age and social cue ( $p = .005$ ). Contrasts revealed that the tendency by old respondents to prefer contemporary options was higher when they were exposed to a young ( $M = 41.55\%$ ) rather than an old social cue ( $M = 27.91\%$ ),  $p = .001$ . The tendency by young respondents to prefer contemporary options did not vary as a function of social cue.

This present research advances our understanding of how the social context affects older consumers' tendency to state they feel younger, and elucidates the underlying processes that affect their choice behavior. Results suggest that exposing older consumers to young social cues might prompt them to choose more youth-oriented options.

### The Age of Materialism: Age, Period, & Cohort Effects Across the Life Cycle

#### EXTENDED ABSTRACT

Do consumers become less materialistic when they grow older or do they actually become more materialistic? Likewise, are older birth cohorts of consumers, such as the Baby Boomers (born between 1946 and 1964), less materialistic than younger birth cohorts, such as Generation X (born between 1965 and 1981), or are they more materialistic? And finally, does the current period of global economic downturn prompt consumers to become more or less materialistic? These questions deal with three fundamental influences on consumers during their life cycle, namely, their age, birth cohort, and the period they live in.

The answers to these questions are of vital importance to consumer behavior theory and to public policy, because modern societies are rapidly aging, birth cohorts such as the Baby Boomers are retiring, and consumers face the challenges of a major economic downturn and restructuring period (Cole et al. 2008; Inglehart 2008; Yoon, Cole, and Lee 2009). The questions are even more pressing because materialism has been associated with a host of negative well-being and health implications, including excessive substance abuse, overeating, loneliness, depression, and even premature death (Burroughs and Rindfleisch 2002; Pieters 2013). Thus, the question is whether or not we are witnessing "The Age of Materialism," and how we know. There is surprisingly little research on the influence of age, period, and cohort (APC) in general, and in particular in consumer behavior (Cole et al. 2008). This is partly due to the initial theorizing, the challenges of collecting appropriate data, and the methodological tasks of identifying age, period and cohort effects from the data. To

unequivocally establish APC effects, the same consumers --from different birth cohorts and across different periods-- would need to be followed from birth to death. This would mean tracking thousands of consumers across a few hundred years, which is longer than the average academic tenure clock. Prior materialism research mostly had to rely on cross-sectional surveys and included age as a control variable for other factors of interest (e.g. Burroughs and Rindfleisch 2002; Chaplin and Roedder John 2007; Richins and Dawson 1992). The rare longitudinal studies covered only brief periods of just 14 months (Moschis and Moore 1982) or did not examine age, period and cohort effects (Pieters 2013). Age, period, and cohort effects cannot be disentangled without the appropriate theory, data, and model. This holds, for instance, the danger of inferring that aging consumers become less materialistic as a whole, while this is—in fact—due to certain birth cohorts getting to the older life stage, as detailed below.

The present research aims to contribute to closing the knowledge gap about age, period, and cohort effects on consumer materialism. First, it extends the Motivational Theory of Life-Span Development (Heckhausen, Wrosch, and Schulz 2010) to account for and predict the influence that age, period and cohort have on materialistic values across the life cycle. Second, it estimates a Multilevel Latent Growth model that deals with the well-known limitations of APC analysis (Yang and Land 2013; Yoon et al. 2009), by identifying the separate main and interactive effects of age, period, and cohort. Recall, that in cross-sectional designs where people of different ages are observed at one point in time, age and cohort effects are confounded (Miyazaki and Raudenbush 2000). In data from multiple time periods for the same age group, period and cohort effects are confounded. In additive statistical models, each of the factors is completely defined by the other two factors (Cohort = Period – Age), which is referred to as the APC identification problem (Mason and Fienberg 1985). As a result, traditional data and regression models cannot provide a unique solution to APC models. The methodology implemented here solves this.

Using longitudinal data (2005-2013) from a representative Dutch sample (over 4700 participants) covering a broad age span (16-90 years at the start of the study), this study employs a Multilevel Latent Growth model to disentangle the effects of age, period and cohort on materialism across the life cycle. Table 1 provides summary descriptives. Individual change in materialism over time is a function of age and period. Since the economic downturn might not influence people from all ages in the same way, the model also includes an Age  $\times$  Period interaction effect. Cohort effects are captured by cohort-specific intercepts. Models are estimated for overall materialism, but also for the three subtypes of materialism: acquisition centrality, possession-defined success, and acquisition as the pursuit of happiness (Richins and Dawson 1992).

The findings reveal a U-shaped relationship between age and overall materialism, with the lowest levels of materialism around the age of 62, and higher levels before and after that age. In addition, the most recent birth cohorts (born after 1980) have higher levels of materialism. The influence of the current economic downturn on materialistic values depends on age. Whereas older people's materialism declines, younger people's materialism increases.

The U-shaped relationship between materialism and age was found for all three materialism subtypes. However, age differences in acquisition centrality and acquisition as the pursuit of happiness become insignificant after controlling for cohort effects. The observed age differences are due to the youngest birth cohorts (born after 1970 and 1975) being most materialistic. Such cohort effects are not observed for possession-defined success. The interaction effect between age and period also differs across the subtypes. For

instance, the economic downturn increases acquisition as the pursuit of happiness among both younger and older people.

Using a Multilevel Latent Growth model, this study sheds light on the effects of age, period and cohort on materialism. It finds that age differences in materialism exist but are overestimated if cohort effects are not controlled for. The relationship between materialism and age is U-shaped and driven by the subtype possession-defined success. Age differences in acquisition centrality and acquisition as the pursuit of happiness are driven by cohort effects. The influence of the economic downturn on materialism depends on one's age. These findings point to the importance of disentangling age, period and cohort effects in studying materialism and consumer behavior.

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# Good Health is in the Eye of the Beholder: Helping Consumers Navigate Health-Related Decisions

Chair: Chiara Longoni, New York University, USA

## **Paper #1: Motivated Hypochondriacs: Disease Labels Shape Health Perceptions**

Chiara Longoni, New York University, USA  
Geeta Menon, New York University, USA

## **Paper #2: Sleeping with One is Sleeping with Many: How Shifts in the Saliency of Others' Behavior can Improve Contagious Disease Prevention**

Adriana Samper, Arizona State University, USA  
Mary Frances Luce, Duke University, USA  
Debu Purohit, Duke University, USA

## **Paper #3: Having More but Not Feeling Better: The Effects of Merely Owning Preventive Goods on Risk Perceptions**

Dengfeng Yan, University of Texas at San Antonio, USA  
Huachao Gao, University of Texas at San Antonio, USA

## **Paper #4: Perceptions of Hospital Safety Records: Mean or Variance?**

Janice Yeonjin Jung, University of Pennsylvania, USA  
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### **SESSION OVERVIEW**

In an era of direct-to-consumer advertising, widespread Internet-based health information, and heavy reliance on self-care, consumers must take multiple steps in navigating their way toward optimal health decisions. A typical consumer investigates disease and symptom information, processes different types of health appeals, and purchases various preventive health goods. Further, if a disease becomes more serious, consumers must even make decisions regarding different types of health providers. As such, this high-stakes domain involves multiple factors that may influence each decision making stage.

Together, the papers in this special session examine four critical factors (categorization, fit with a health message, ownership, and hospital record framing) that play a role in hindering or fostering important health-related decisions such as health and risk assessment, prevention of diseases, and choice of health provider. Understanding these factors is at the root of helping consumers make normatively appropriate decisions regarding their health.

The first paper by Longoni and Menon examines the interplay of categorization-based biases and self-protection motives on health perceptions. Four studies illustrate that the mere presence (vs. absence) of a one-word label biases symptom reporting, perceived symptom intensity, and overall health risk assessment. However, decreased defensiveness when processing health information eliminates such bias.

Building on this theme of considering the role of small changes to health information in shaping health decision making, the second paper by Samper, Luce, and Purohit presents a strategy to assist consumers in overcoming feelings of low control over one's health outcomes, a typical barrier in disease prevention. Fostering a match between the focus of a health message (self vs. other-focus) and consumers' worldviews of control (high vs. low) is associated with greater preventive behaviors.

Moving along the decision making chain to examining purchase of preventive goods, Yan and Gao examine how owning a preventive good can influence risk estimates. These studies show that merely

owning a preventive product (e.g., an anti-cavity toothpaste) leads consumers to estimate the associated risk as more likely and more harmful.

Finally, the fourth paper by Jung and Kahn explores the factors that affect consumer choice of health providers. Hospital choice is influenced by data on hospital safety records, both in terms of framing (whether the hospital is categorized by mortality or survival rates), and illustration format (whether the data are animated pictographs or boxplots).

Overall, this special session illuminates key aspects of how consumers make decisions about their health, providing theoretical insights and practical applications to improve consumer decision-making in this domain. Together, these papers raise and answer interesting questions such as: What factors contribute to forming health perceptions and how can we aid accurate risk assessment? What kind of health information is best suited to engage different consumer segments? How can policy makers ensure that the right information is presented in the right way? We expect this special session to attract a wide ACR audience, in particular consumer researchers in risk assessment, health, context effects, attitudes and intentions.

## **Motivated Hypochondriacs: Disease Labels Shape Health Perception**

### **EXTENDED ABSTRACT**

This research looks at how disease labels might fundamentally alter health perceptions. We propose that disease labels, much like categories, lack precise and discrete membership boundaries: for a stimulus (i.e., a constellation of somatic and affective sensations at a certain point in time) to be assigned to a category (i.e., a certain illness), not all features (i.e., symptoms) need be present. In other words, symptom matching, much like feature matching, should be a flexible process of interpretation rather than exact matching. This results in a certain degree of latitude when attending to, remembering, and attributing somatic and affective states, giving rise to biases in symptom reporting and thereby affecting health perceptions. Furthermore, such disease labeling effect is susceptible to self-serving biases, whereby inaccuracies in risk estimates reflect the interaction of categorization-based errors with defensive mechanisms.

In a series of four studies, we show the following: (a) Disease labels alter symptom reporting and bias health risk estimates; (b) The direction of this bias reflects a self-protection motive: a label signaling (or interpreted as signaling) a mild ailment leads to greater symptom reporting and higher risk estimates compared to a label signaling (or interpreted as signaling) a severe ailment; (c) Reducing defensiveness eliminates this bias; (d) Perceived disease threat partially mediates the effect; (e) Disease labels do not affect risk estimates made for the general population (i.e., base-rates) or for individuals matched for age and gender (further corroborating the motivational nature of the bias); and (f) This bias holds when controlling for incidental affect, well-being, life satisfaction, and general health perception.

In Study 1, participants were handed a survey ostensibly assessing the wellness of the university community. Although all versions of the survey described the same medical condition,

the disease was labeled as Seasonality, Mild Seasonality, Severe Seasonality, or was not labeled. Participants were asked to report (a) if in the previous month they had experienced any symptoms of the disease, and if so which ones, (b) how intensely they had experienced these symptoms, and (c) risk estimates (i.e., likelihood of self-diagnosis and likelihood of contraction) for self and for another person matched for age and gender. As expected, the presence (vs. absence) of a label was associated with higher symptom recognition, higher perceived symptom intensity, and greater risk estimates. Perceived disease severity moderated the effect: symptom reporting, symptom intensity, and risk estimates were higher if the label signaled (or was interpreted as signaling) a mild (vs. severe) ailment (as measured by perceived severity ratings). Finally, labels affected risk estimates for the self but not for others. These effects held when controlling for incidental affect, well-being, life satisfaction, and general health perceptions.

In Study 2 and 3 we sought to better understand the phenomenon and identify boundary conditions. We hypothesized that the biasing effect of disease labels on health perception is due to defensive motives. If so, the effect should disappear when defensiveness is reduced, either because the person affirms alternative self-resources (Study 2), or because one's sense of perceived control is temporarily shaken (Study 3).

Building on self-affirmation theory (Steele, 1988) and on the role of self-affirmation in reducing perceived invulnerability to health risks (e.g., Sherman, Nelson and Steele 2000), in Study 2 participants were first either allowed to affirm themselves in an important domain or they were not allowed to do so. Participants were then handed a survey on the wellness of the university community containing a description of a medical condition that was either labeled or not labeled. To measure risk estimates, participants rated the likelihood they, as well as an average person of their same age and gender, would contract the disease. As predicted, defensiveness moderated the effect of labels on risk estimates, with the direction of the bias determined by participants' perception of disease severity. When participants did not engage in self-affirmation, risk estimates were biased by the presence of a label. However, when participants' defensiveness was reduced (because they engaged in self-affirmation), risk estimates were no longer biased by the presence of a label. Neither self-affirmation nor label affected risk estimates for another person, further corroborating the notion that the phenomenon reflects a self-protection bias.

Study 3 builds on research showing how high perceived control is associated with greater defensiveness and perceptions of invulnerability to negative events (e.g., DeJoy 1989; Harris 1996; Hoorens and Buunk 1993). We reasoned that we could reduce defensiveness and eliminate the biasing effect of labels by inducing perceptions of *low* control. Participants were first asked to recall and vividly describe an instance in which they felt they had high (vs. low) control, and then handed the same health survey used in Study 2, which contained the label (vs. no label) manipulation and the critical measures of risk. As expected, risk estimates of low-control participants were not biased by the presence of a label, presumably because the induction of low control tempered defensiveness; risk estimates were instead biased by the presence of a label when participants recalled an instance of high perceived control. The direction of the bias was once again determined by participants' perception of disease severity, and the effect did not apply to risk estimates for others.

Study 4 brings together the previous three studies to gain a better understanding of the process behind the phenomenon. We first manipulated the factor self-affirmation as in Study 2, and then

manipulated the factor label. The wellness survey contained measures of risk estimates and an expanded web of measures of perceived disease threat. Bootstrapping analyses revealed that perceived disease threat partially mediated the relationship between label and risk estimates, and defensiveness moderated the relationship between perceived disease threat and risk estimates.

This research is important from both a theoretical and applied perspective. Theoretically, this research elaborates on how health perceptions are formed, and presents a novel effect based on the interplay of categorization and defensive processes. From an applied perspective, this research has substantive implications for social welfare, as both preventive and care-seeking behaviors heavily rely on self-assessment.

### **Sleeping with One is Sleeping with Many: How Shifts in the Salience of Others' Behavior can Improve Contagious Disease Prevention**

#### **EXTENDED ABSTRACT**

Low perceived control over one's health outcomes, or external Health Locus of Control (HLOC) (Wallston et al. 1976a), is associated with poorer health behaviors and outcomes, such as reduced interest in health information (Quadrel and Lau 1989) or prevention behaviors (Morrill et al. 1996). While people with more internal HLOC feel they have high control over their health, more external individuals believe that their health outcomes are a result of outside factors such as chance, God, or external authorities, and as such, feel less compelled to perform adaptive health behaviors.

Though the belief that others determine one's health is often detrimental, it may be positively leveraged when external others do, in fact, impact health outcomes. In this research, we argue that contagious disease offers such a context, and show that manipulating the focus of a health appeal to match individual worldviews of control over health can improve persuasion. Specifically, we find that individuals who feel high control over their health (health internals) increase their prevention intentions with self-focused messages, while individuals who feel less control over their health (health externals) increase these intentions with other-focused messages. We suggest that this is driven by a beneficial effect of compatibility: a self-focused message emphasizes personal control, which is easier to process for health internals, while an other-focused message emphasizes a lack of control, which is easier to process for health externals. Importantly, this is only true with contagious diseases; with noncontagious disease, this compatibility effect disappears as others have a much weaker role in the likelihood that one will be affected by disease.

In Study 1, we manipulated the message recipient's processing focus with mortality salience and control (dental pain) primes. The reminder of one's mortality has been shown to lead to an avoidance of self-focus (Arndt et al. 1998), and is often elicited in medical contexts (e.g., physician's offices, clinics, etc.). Participants in this 2 (prime: mortality salience vs. control) x HLOC (measured) experiment completed the HLOC scale (Wallston et al. 1976a) and were primed with mortality salience or dental pain. They then read a passage about HIV and rated their intentions to engage in future HIV prevention. Results revealed a significant prime x HLOC interaction: under the self-focused control prime, more internal HLOC increased intentions to engage in HIV prevention, while under the other-focused mortality prime, more external HLOC marginally increased intentions to engage in HIV prevention. Thus, we see compatibility between internal beliefs and self-focus and external beliefs and other-focus.

## Having More But Not Feeling Better: The Effects of Merely Owning Preventive Goods on Risk Perceptions

### EXTENDED ABSTRACT

Earlier literature has demonstrated the mere ownership effect where individuals evaluate an object more favorably after owning it (Beggan and Allison 1997). In some instances people acquire the products intentionally, whereas the effect is more intriguing in other circumstances where the ownership is arbitrary such as being induced by random assignment in an experiment. This mere ownership effect is often interpreted as a consequence of motivated reasoning (Festinger 1957; Kunda 1990; McGuire and McGuire 1991; Thaler 1980).

Research on mere ownership effect has been exclusively focused on the effects of mere ownership on product-related consequences such as evaluation (Beggan 1992; Strahilevitz and Loewenstein 1998), choice (Sen and Johnson 1997), pricing (Kahneman et al. 1990; Thaler 1980), and so forth. These findings could be summarized as “sweet lemon” effects. The current research, however, shifts the attention away from the lemon itself to explore whether merely owning preventive goods can influence people’s risk perceptions. Preventive goods here refer to products that prevent negative outcomes from happening or reduce financial, psychological, and other loss when these events happen. Examples include sun screen, anticavity toothpaste, and insurance.

The core hypothesis of this research is that owning a preventive product leads individuals to judge the associated risk as more likely and more harmful. We propose that this effect is driven by two motivations. First, individuals want to maximize the value of their possessions. For preventive goods, their value won’t be realized until negative events happen. The more frequently the associated negative event occurs, the greater value the product will have. For example, an umbrella will be more valuable if it rains frequently than infrequently. The second motive underlying our prediction is that people often have a desire to be better than others (Dunning, Perie, and Story 1991; Krueger and Mueller 2002; Kunda 1987). In the present context, such self-enhancing tendency will lead the owner of preventive goods to perceive the negative events as more likely because it will create more opportunity for owners to be better than non-owners. In addition, the superiority will become more salient if the negative event is very negative.

Four studies were conducted to examine our prediction using a variety of product categories including anticavity gum (Study 1), Apple Care (Study 2A), sun screen (Study 2B), and an advanced anti-theft lock (Study 2C). In Study 1, 137 undergraduates were randomly assigned to four conditions. Participants in the *ownership (control)* condition were told that they own a pack of anticavity gum (nothing). In addition to these two conditions, two more groups were included to rule out alternative explanations. First, it’s possible that being merely exposed to information about preventive goods is sufficient to increase risk perceptions by making the risk concept more accessible (Raghubir and Menon 1998; Schwarz et al. 1991). Thus, we included an *information condition* in which participants were only provided with information about the preventive product. Second, it’s arguable that receiving *any* gift may have the same effect. To control for this possibility, we added a *gift condition* in which participants owned a pack of whitening gum. All participants then were asked to estimate the percentage of American adults having cavity problems from “0” to “100” and to rate the harmfulness of cavity (1 = *not harmful at all*; 7 = *extremely harmful*).

The one-way ANOVA on perceived cavity pervasiveness revealed a marginally significant difference among conditions

In Study 2, we directly examined the role of self vs. other focus in a 2 (referent: self vs. other) x HLOC (measured) experiment. Participants completed the HLOC measure and read information on HIV. Prior to reading this information, participants were asked to think about how HIV affected them (self-focused condition) or how it affected the average individual (other-focused condition). We chose this “average individual” perspective to ensure that participants focused on an anonymous individual that was neither close nor individuated (Raghubir and Menon 1998). We again took measures of disease prevention as well as message processability measures of ease of understanding. Results revealed a significant referent x HLOC interaction, such that health internals were more likely to engage in vigilance behaviors under self-focus, while health externals were more likely to engage in vigilance behaviors under other-focus, replicating Study 1. Examination of message processability also revealed a significant interaction. A bootstrapping mediation analysis revealed that message processability mediated the effects of HLOC on HIV prevention.

In Study 3, to further generalize these effects, we manipulated instead of measured HLOC, extended to a new disease context and used a public service ad to manipulate the referent. We used the threat of MERS (Middle East Respiratory Syndrome), an airborne disease that had broken out in Saudi Arabia and spread to European countries by plane. In this 2 (HLOC: internal vs. external) x 2 (referent: self vs. other) experiment, we manipulated HLOC by having participants read a passage about the controllable (internal) vs. uncontrollable (external) risks of air travel and then showed a MERS public service ad that emphasized the risk of MERS for either the self or the average person. After viewing the ad, participants rated their likelihood of engaging in air travel disease prevention behaviors (e.g., judiciously using hand sanitizer, wearing a face mask). Results revealed a significant HLOC x referent interaction on prevention whereby as before, under self focus, the internal control prime lead to increased prevention while under other focus, the external control prime did so.

Study 4 examined whether the positive effect observed with other-referencing for health externals was limited to contagious disease contexts. We only examined other (average individual) focus and manipulated contagion by presenting female participants with information about obesity described as contagious or noncontagious. This resulted in a 2 (contagion: contagious vs. noncontagious, manipulated) x 2 (Health Locus of Control: internal vs. external) design. HLOC was manipulated through a passage emphasizing the role of healthy living (internal, high control) vs. genetic factors (external, low control) in determining one’s health outcomes. Analyses revealed a significant contagion x HLOC interaction on prevention. As in Study 2, when obesity was described as contagious with an other-focus, external HLOC increased disease vigilance. However, when obesity was described as noncontagious with this other-focus, external HLOC was no longer beneficial. These results replicate prior external control /other-focus compatibility effects with contagious disease, yet show that these effects do not hold when a disease is noncontagious.

In sum, we show that message compatibility effects exist between perceived control over health and the message referent to improve disease prevention. In demonstrating this, we identify a way to overcome the obstacle of external/low control individuals disengaging from their health. We also show that the benefits of message compatibility can be achieved with the subtle manipulation of other-focus in a contagious disease context and suggest that this is driven by ease of processing.

( $F(3, 133) = 2.56, p = .06$ ). Follow-up contrast analyses indicated that, consistent with our theorizing, participants in the *ownership condition* ( $M = 69.93, SD = 10.61$ ) rated cavities as more common than those in the *gift condition* ( $M = 61.16, SD = 14.75; t(133) = 2.10, p < .05$ ), *information condition* ( $M = 59.70, SD = 21.57; t(133) = 2.53, p < .05$ ), and *control condition* ( $M = 61.13, SD = 15.74; t(133) = 2.19, p < .05$ ). No difference was found among the latter three conditions ( $ps > .70$ ). The analysis on the harmfulness of cavity revealed a parallel pattern. Follow-up analyses for the significant main effect ( $F(3, 133) = 3.94, p < .01$ ) indicated that participants who received a pack of anticavity gum ( $M = 5.90, SD = 1.09$ ) rated cavity as more harmful than their counterparts in the *gift condition* ( $M = 4.97, SD = 1.18; t(133) = 2.81, p < .01$ ), *information condition* ( $M = 5.05, SD = 1.60; t(133) = 2.64, p < .01$ ), and *control condition* ( $M = 4.92, SD = 1.24; t(133) = 3.07, p < .01$ ). No difference was found among the latter three conditions ( $ps > .65$ ). In Studies 2A, 2B, and 2C, we replicated the above results using different product categories. The convergent support obtained from all these studies indicated that our findings are robust and generalizable.

Our findings contribute to research on mere ownership by expanding the scope from product-related evaluative judgments to more general, product unrelated perceptions. Our data can partially explain many marketing strategies such as free samples. Interestingly, our findings also suggest that offering free samples may benefit other companies. For example, as shown in Study 1, offering a free pack of anticavity gum led to higher perceptions of cavity risk, which, in turn, may increase consumers' purchase intention for anticavity products in general such as mouth wash and toothpaste. Future research is needed to directly examine such predictions.

### Perceptions of Hospital Safety Records: Mean or Variance?

#### EXTENDED ABSTRACT

Consumers' view of hospitals should be guided by informative, accurate, and understandable hospital safety records. We attempt to understand the ways in which safety records of hospitals are processed in consumers' minds and tackle various barriers to rational choices of hospitals.

Hospitals' safety records are based on average estimates of the risks associated with surgeries (e.g., cardiovascular operation), and variance produced by the uncertainty in those estimates. Existing literature has shown that the public finds it difficult to process mean and variance simultaneously. Consumers are especially likely to overlook variance due to their lack of understanding and attention. Further, the literature on self-positivity bias and overconfidence predicts that people may have optimistic conceptions of the safety of the hospital (e.g., Taylor and Brown 1988; Harris 1996; Keller et al. 2002; Lin et al. 2003). These tendencies are possible barriers to understanding variance, because even if consumers do register the variance they may over-estimate the upside possibilities and therefore regard large variances as a chance to achieve a better outcome rather than a chance of both better and worse outcomes.

Understanding variance is especially critical for hospital selection because it directly affects the survival of patients. Generally, larger hospitals have smaller variances in estimated mean risks and may also be better equipped. Given the importance of variance, we explore how various framing and depictions of the variance affect the choice of hospitals, so that we can develop a more transparent and rational presentation format.

We conducted two surveys (Study 1:  $N = 239$ , Study 2:  $N = 195$ ) using actual hospital records obtained from the 2010 US

Census, American Hospital Association (AHA), and other official sources used by Medicare. The data enables us to predict the mean and variance associated with each hospital's safety for each person's health condition. We test how participants' views of safety records (as measured by their choices of hospitals) are influenced by framing effects (whether the safety records are characterized by mortality rates or by survival rates), by their health conditions (currently healthy or ill), and by how the mean and the uncertainty in the estimated mean are illustrated (by animated pictographs or boxplots). Participants make a choice between a pair of hospitals. There are four pairs of hospitals in each study – we varied whether a higher variance hospital has a lower or higher mean risk than the other hospital, and whether the mean or variance was kept the same between the two hospitals.

We hypothesize that variance is more salient when risks are illustrated by animated pictographs rather than boxplots used by Medicare websites. We also hypothesize that framing risks as survival rates trigger wishful thinking: People will seek high variance hospitals when it is an emergency rather than a non-emergency (Study 1), or when survival rates are low rather than high (Study 2), because they process variance as a chance of positive outcomes when the outlook is bad. Morality rates, however, do not trigger wishful thinking because people's mindsets are focused on negative outcomes regardless of the level of risks.

In Study 1, we found that high variance hospitals were less likely to be chosen when their safety records were illustrated by animated pictographs than boxplots in the mortality framing condition. The illustration method did not affect hospital choice in the survival framing. Emphasizing variance by animated pictographs seems to focus people's attention on variance, and presenting risks as mortality rates seems to highlight the downside possibilities of high variance hospitals. The interaction between graphic illustration (animated pictographs vs boxplots) and framing (mortality vs survival) was significant.

Consistent with our wishful thinking hypothesis, participants were more (less) likely to choose a higher variance hospital in an emergency situation as opposed to a non-emergency situation in the survival (mortality) condition. Furthermore, participants reported more confidence in their decisions and trust in the hospitals overall when the risks were framed as survival rates than mortality rates. This suggests that when risk is depicted by mortality rates, participants are less susceptible to various motivational biases, such as self-positivity bias, unrealistic optimism, and "It cannot happen to me" syndrome.

In Study 2, participants reported that they want to know the variance in the estimate of mean risk. However, the ways in which people incorporated the information about variance in their choices depended on framing effects, illustration methods, and the level of risk. We replicated the result of Study 1 that high variance hospitals were less likely to be chosen under animated pictographs than boxplots in the mortality framing condition. We also found evidence that the animation affects choices by emphasizing variance rather than de-emphasizing mean. Study 2 used two types of pictographs, one used in Study 1 and the other that depicted the mean until participants clicked a button to see the animation (i.e., variance). The two graphs did not differ in their influences on choices.

Our wishful thinking hypothesis was again supported in Study 2 that only manipulated the level of risk unlike Study 1 that manipulated the choice context (emergency or non-emergency). High variance hospitals were more likely to be chosen when the risks framed as survival rates were low (e.g., survival rate of 25%) rather than high (e.g., survival rate of 75%). Variance in survival rates is positively



perceived when risks were high. The level of risks, however, did not affect choices of high variance hospitals when the same risks were framed as mortality rates, because the variance in mortality rates is always perceived negatively when the consumer mindset is focused on deaths. Such wishful thinking was more pronounced when animated pictographs illustrate the risk because animation emphasizes variance. As found in Study 1, participants were more confident about their choices under survival than mortality framing.

Taken together, these results suggest that consumers can be nudged to a healthier and better choice of hospitals if we understand how consumers process hospital risk records.

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# Consumer Perceptions of Unfairness and Greed

Chairs: Margaret C. Campbell, University of Colorado at Boulder, USA  
Erin Percival Carter, University of Colorado at Boulder

## **Paper #1: Firm Power, Power Distance Belief, and Consumer Price Fairness Perceptions**

Zhi Lu, The Pennsylvania State University, USA  
Lisa E. Bolton, The Pennsylvania State University, USA  
Sharon Ng, Nanyang Technological University, Singapore  
Haipeng (Allan) Chen, Texas A&M University, USA

## **Paper #2: No Harm, No Foul: The Role of Inferred Harm in Perceptions of Price Fairness Under Price Maintenance**

Margaret C. Campbell, University of Colorado at Boulder, USA  
Erin Percival Carter, University of Colorado at Boulder, USA

## **Paper #3: The Role of Interpersonal Attachment Anxiety and Security on Consumer Responses to Customized Pricing**

Meredith E. David, Baylor University, USA  
William O. Bearden, University of South Carolina, USA  
Kelly L. Haws, Vanderbilt University, USA

## **Paper #4: Perception of Environmentally-Friendly Efforts as Green or Greed**

Aradhna Krishna, University of Michigan, USA  
Brent McFerran, University of Michigan, USA  
Wenbo Wang, Hong Kong University of Science and Technology, Hong Kong

### **SESSION OVERVIEW**

Price and image: two critical marketing issues. This session presents four papers that each address important questions about how aspects of prices influence consumers' perceptions of the price setter. Prices serve as an important signal in the market, allowing consumers to make inferences about the appropriateness of firms' actions and motives. The objective of this session is to provide conceptual and empirical evidence of several interesting factors that influence inferences consumers make. In this session, we investigate consumer inferences related to price information, specifically examining negative inferences of firm unfairness and greed.

The first two papers both suggest more nuanced conceptualizations of the principal of dual entitlement for price unfairness (Kahneman, Knetsch & Thaler 1986a,b). Lu and colleagues provide evidence that a consumer's response to a price increase is influenced by firm power and by the consumer's power distance belief. These factors influence the extent to which a price increase leads the consumer to infer that the firm is attempting to take advantage of consumers.

In the second paper, Campbell and Carter start by examining price maintenance following a cost decrease. They show that consumers' perception of the fairness of price maintenance is influenced by perceived impact on consumer welfare. When a consumer perceives that product affordability is important to consumer welfare, price maintenance can be perceived as unfair. They further show, however, that the concern for consumer welfare is tempered by concern for firm reference profit. A price that is inferred to harm consumers is perceived as unfair unless it is necessary to maintain the firm's profit. They extend these findings to disadvantageous differential pricing.

In the third paper, David, Bearden, and Haws ask how consumers are likely to respond to customized prices and when such prices may lead to perceptions of unfairness. Three studies provide evidence that a consumer's attachment style moderates the impact of customized prices on perceptions of fairness and thus, satisfaction.

Anxiously-attached consumers perceive customized prices (as compared to non-customized or group-level prices) as unfair, even when they themselves are advantaged by the customized offer.

The fourth paper extends beyond perceptions of unfairness to perceptions of greed. Krishna, McFerran and Wan examine whether a firm's price image influences the interpretation of a firm action. Both lab and field experiments demonstrate that a firm that typically charges low (versus high) prices is more likely to be perceived to have negative motives for the same activity; specifically low price firms are more likely to be seen as motivated by "greed" than a desire to be "green." Interestingly, a firm with an image for charging high prices appears to be buffered against inferences of negative motives, and thus, perceptions of greed.

Greater understanding of factors leading to negative firm perceptions is of great practical and theoretical importance. We know from past research that such perceptions can negatively impact firm success. Each paper in this session asks how and when price actions lead to negative consumer inferences and thus, perceptions of unfairness and greed.

## **Firm Power, Power Distance Belief, and Consumer Price Fairness Perceptions**

### **EXTENDED ABSTRACT**

How do consumers assess fairness of a price increase? Pioneering work on the principle of dual entitlement (Kahneman, Knetsch, and Thaler 1986a,b) proposes that fairness perceptions are governed by i) a firm's entitlement to a reference profit and ii) consumers' entitlement to a reference price. Accordingly, consumers judge it fair for a firm to raise its price when justified by a reason such as cost increase (because firms are entitled to a reference profit) but unfair to take advantage of demand (because consumers are entitled to a reference price).

A natural question arises regarding the impact of firm power on consumer price fairness perceptions. Previous research has examined various factors that influence price fairness (Bolton, Warlop, and Alba 2003; Haws and Bearden 2006). Likewise, research has examined various ways in which *consumer power* influences behavior (Rucker, Galinsky, and Dubois 2012). Notably, price fairness varies by power when consumers respond to self versus other price comparisons (Jin, He, and Zhang 2014). To our knowledge, however, research has not investigated the impact of *firm power* on price fairness.

Kahneman et al. (1986a) demonstrated that consumers judge it unfair for firms to exploit monopoly power. If so, then consumers may respond negatively to higher-power firms, regardless of pricing behavior. However, we propose a more nuanced response whereby consumers are especially sensitive to firm power when firms provide justifications for price increases. Because power confers more resources and alternatives (Galinsky et al. 2008), consumers will be less accepting of a higher power firm's justification for a price increase. The high-power firm will be seen as exploiting consumers whereas the low-power firm will be seen as more entitled to the price increase. In contrast, unjustified price increases will make exploitation and lack of entitlement salient regardless of firm power.

*Hypothesis<sub>1</sub>*      *With a justification, price increases will be judged less fair for high-power versus low-power*

*er firms. When unjustified, price increases will be judged unfair regardless of firm power.*

*Hypothesis<sub>2</sub> Perceived exploitation and entitlement will play a mediating role.*

Our research also explores cultural differences in price fairness perceptions. Prior research has examined the role of independence/interdependence in across-customer price comparisons (Bolton, Keh, and Alba 2010). Our research focuses on power distance belief (PDB): people with high PDB tend to accept and expect power disparity more so than people with low PDB (Hofstede 2001). We propose that PDB will moderate the impact of power; that is, consumers with higher PDB will be more sensitive to power differences and therefore more likely to respond differentially to pricing behaviors as a function of firm power.

*Hypothesis<sub>3</sub> The impact of firm power on price fairness perceptions (i.e., H<sub>1</sub>) will be more likely to emerge for high- (vs. low-) PDB consumers.*

A series of studies investigate how consumers respond to price increases as a function of firm power and PDB. Studies 1-2 investigate firm power and include both un/justified price increases; studies 3-4 focus on cost justifications and assess PDB. To briefly summarize:

- Study 1 was a 3 (firm power: high, low, unspecified) x 2 (justification: cost, demand) design. The scenario was adapted from Kahneman et al. (1986a, p.729) and described a store raising the price of shovels due to a snowstorm (demand) versus wholesale costs (cost). Power was manipulated (“large major national hardware chain” vs. “small independent hardware store” vs. “hardware store”). Participants rated fairness (seven-point scales anchored by “unfair/fair,” “not at all just/just”, and “unreasonable/reasonable”). ANOVA of fairness revealed a main effect of justification ( $F(1, 256)=10.21, p < .01$ ), qualified by its interaction with firm power ( $F(2, 256)=2.93, p=.06$ ); firm power was n.s. ( $p>.10$ ). Raising prices due to costs was judged more fair when firm power was low/unspecified than when firm power was high ( $F_{\text{high vs. low}}(1,256)=4.04, p<.05$ ;  $F_{\text{high vs. unspecified}}(1,256)=4.68, p<.05$ ). In contrast, raising prices due to demand was judged equally unfair regardless of firm power ( $F<1$ ). These results support H<sub>1</sub>.
- Study 2 was a 2 (firm power: low, high) x 2 (justification: donate, keep profit) between-subjects design. For generalizability, we examine a different scenario from Kahneman et al. (1986a, p735) that describes a firm holding a toy auction, justified (or not) by donating the profits to charity. Power was manipulated similar to study 1; fairness was measured as in study 1. Participants also rated perceptions of exploitation and entitlement (respective sample items: “The store is... taking advantage of customers”, “... free to price as it wishes”). ANOVA of fairness revealed a main effect of justification ( $F(1,199)=79.65, p<.01$ ), qualified by its interaction with firm power ( $F(1,199)=3.47, p=.06$ ); firm power was n.s. ( $p>.10$ ). Pricing was judged more fair with a donation justification for low vs. high power firms ( $F(1,199)=3.52, p=.06$ ); fairness did not differ in the absence of this justification ( $F<1$ ). Bootstrapping analyses (omitted for brevity’s sake) support mediation by perceived exploitation and entitlement. These results support H<sub>1</sub>-H<sub>2</sub>.
- Study 3 was a 2 (firm power: high, low) x 2 (PDB Prime: high, low) between-subjects design. After PDB priming (Zhang et al.

2010), participants read a scenario describing a cost-justified price increase by a high- vs. low-power firm (adapted from study 1). Fairness and exploitation/entitlement perceptions were measured as in study 2. ANOVA of fairness revealed an interaction of PDB and firm power ( $F(1,79)=7.50, p<.01$ ); main effects were n.s. ( $F$ 's  $<1$ ). When primed with high PDB, participants rated the price increase more fair for a low- vs. high-power firm ( $t=2.30, p<.05$ ); fairness did not differ for low PDB ( $t=1.54, p>.10$ ). These results (including mediation) support H<sub>2</sub> and H<sub>3</sub>.

- Study 4 replicated study 3 with measured rather than manipulated PDB.

Four studies provide converging evidence that consumers respond differentially to price increases as a function of firm power and power distance belief, driven by perceptions of exploitation and entitlement. These findings provide novel insight into the role of firm power in the marketplace and have important implications for firms’ pricing strategy. High-power firms must exercise caution when justifying price increases, especially in high PDB settings.

### No Harm, No Foul: The Role of Inferred Harm in Perceptions of Price Fairness Under Price Maintenance

#### EXTENDED ABSTRACT

Much research on price fairness draws on the principle of dual entitlement and its implication that a violation of a reference price is needed for perceptions of price unfairness (Kahneman, Knetsch, and Thaler 1986a,b; KKT), and thus typically examines prices that are higher than an available reference price (e.g., Campbell 1999). However, consumers can perceive prices as unfair that are not higher than a specific reference price. For example, sometimes consumers perceive the price of pharmaceuticals to be “unfair” even though the price has not increased nor has a competitive product been offered at a lower price.

We propose that consumers’ perceptions of price fairness are additionally influenced by concern for consumer welfare. Drawing on moral psychology, we propose that consumers are concerned about whether a lack of product affordability causes consumer harm. We examine whether inferences of consumer harm moderate the earlier finding that price maintenance following a cost decrease will be perceived as fair (e.g., KKT 1986b). We expect that the type of product, namely, the extent to which it is perceived as a necessity, will moderate perceptions of fairness of price maintenance after a cost decrease (H1; Study 1). We further propose that the level of consumer vulnerability moderates perceptions of the fairness of price maintenance (H2; Study 2).

While we propose that inferences of a negative impact on consumer welfare influence consumer perceptions of price fairness, the principle that a firm is allowed to protect itself from harm likewise holds. Thus, we expect that while the perceived fairness of a firm’s decision to maintain a price after a cost decrease will be moderated by consumer price vulnerability, a firm’s decision to increase a price after a cost increase will not be (H3; Study 3). Fairness does not require that a firm decrease its profits in order to improve the welfare of vulnerable consumers.

Lastly, we extend beyond examination of a firm’s decision to maintain a price after a cost decrease. We propose that concern with consumer welfare is sufficiently important as to apply in situations in which a consumer evaluates being charged a higher price than another consumer. We propose that the extent to which a consumer infers that another consumer will be harmed by not receiving the lower price moderates the perceived fairness of a price discount for another consumer (H4; Study 4).

Studies 1 & 2 were scenario lab studies with U.S. undergraduates. Study 1 ( $N = 60$ ) manipulated the importance of the product for consumer welfare, using a scenario from KKT (1986b) in which a small firm has a decrease in costs. We manipulated whether the firm produced furniture (low importance) or medicine (high importance). Product importance moderated the perceived fairness of price maintenance; the price was perceived as less fair for a product that was more ( $M = 4.45$ ) versus less ( $M = 5.25$ ;  $p < .01$ ) important for consumer welfare. A bootstrapped mediation analysis indicated that the impact of product importance on perceived price fairness was mediated by inferences of harm to the consumer.

Study 2 ( $N = 96$ ) manipulated consumer vulnerability by the inclusion of a description of the consumers of the product as “barely getting by.” As hypothesized, maintaining the same price when costs decrease was perceived as less fair when the consumer was more vulnerable ( $M = 4.76$ ) as compared to less vulnerable ( $M = 5.46$ ,  $t=2.34$ ,  $p < .02$ ). Inferred harm to the consumer revealed the same pattern; inferred harm was higher when consumers were described as barely getting by ( $M = 4.42$ ) than not ( $M = 3.75$ ),  $t=3.03$ ,  $p < .01$ . A bootstrapped mediation analysis indicated that the impact of the type of consumer on perceptions of price unfairness was mediated by perceived harm to the consumer.

Study 3 ( $N = 202$  U.S. mTurk workers) examined the tradeoff between inferred harm to the consumer and harm to the firm with a 2 (Type of consumer: more vulnerable/less vulnerable) X 2 (price action: maintain with cost decrease/increase with cost increase). Using the two fair pricing conditions suggested by the principle of dual entitlement – maintaining price with a cost decrease and increasing price with a cost increase – enabled us to compare concern for consumer and firm welfare by exploring the underlying processes for each. We found a significant main effect of price action; maintaining price with a cost decrease was perceived as less fair ( $M = 3.6$ ) than raising price with a cost increase ( $M = 4.7$ ;  $t=4.96$ ,  $p < .001$ ). In line with our hypothesis, we also found a main effect of consumer type; both price actions were perceived as less fair when consumers were vulnerable ( $M = 3.7$ ) than when they were less vulnerable ( $M = 4.6$ ,  $t=4.00$ ,  $p < .001$ ). A bootstrapped mediation analysis indicated that the impact of the type of consumer on perceptions of price unfairness was mediated by perceived harm to the consumer, with an estimate for the indirect path of 0.677 and a 95% CI of .376 to 1.018. A second bootstrapped mediation analysis indicated that the impact of price action on perceptions of price unfairness was mediated by perceived potential harm to the company, with an estimate for the indirect path of 0.403 and a 95% CI of .167 to .693.

Study 4 ( $N = 85$ ) extended to differential pricing, examining whether the perception of the fairness of another consumer getting a lower price than one's own price is influenced by inferred harm to the consumer. Participants read that they were in line for a movie behind an elderly consumer. We manipulated the presence of a senior discount (present/absent) and whether participants were primed to consider seniors as financially vulnerable (financially vulnerable/financially invulnerable). A significant interaction ( $F(1, 81) = 11.39$ ,  $p < .001$ ) revealed that when senior vulnerability was primed, a senior discount was perceived as significantly fairer ( $M = 5.87$ ) than no discount ( $M = 3.12$ ), but that there was no effect of discount on perceived fairness with the financial invulnerability prime ( $M_{\text{discount}} = 4.88$ ;  $M_{\text{no discount}} = 4.71$ ).

## The Role of Interpersonal Attachment Anxiety and Security on Consumer Responses to Customized Pricing

### EXTENDED ABSTRACT

Advances in technology have enabled marketers to offer individual-level customized prices based upon the unique purchase patterns of consumers (Wang and Krishna 2012; Zhang and Wedel 2009). However, little is known about factors that influence consumers' evaluations of customized prices in terms of consumers' satisfaction and perceptions of fairness (Barone and Roy 2010). The present research focuses on how interpersonal attachment styles (Bowlby 1969) impact consumers' responses to customized pricing tactics, including perceptions of fairness.

In customized pricing, a consumer's purchase history is used to offer him/her an individualized discount, thus putting the consumer in an advantaged position and leaving other consumers in a less desirable position (Xia and Monroe 2010). In this regard, customized prices are similar to interpersonal relationships, in which individuals can be favored or not favored (Argo and Main 2008; Barone and Roy 2010). Thus, from an attachment theory (Bowlby 1969) perspective, consumers' evaluations of customized prices may depend on their attachment style.

Attachment theory explains that people, innately motivated to form social bonds, develop interpersonal attachment styles based on early experiences with caregivers, and these attachment styles, or psychological orientations, impact individuals' behavior throughout their lives (Ainsworth et al. 1978). Anxious attachment styles are held by individuals who have a strong need for closeness and are preoccupied with attachment, while also worrying about relationships and fearing rejection (Mikulincer and Nachshon 1991). Since anxiously attached individuals are highly sensitive to interpersonal factors and have negative expectations regarding interpersonal situations (Cassidy and Kobak 1998; Ein-Dor et al. 2011), they likely perceive customized discounts as unfair. Similarly, they are likely to be less satisfied with an advantaged price that is based on customization rather than on programs that apply to broad groups of consumers (e.g., cardholder membership programs).

Secure attachment styles are held by individuals who, based on being cared for in a responsive manner, expect that others will be available when needed (Ainsworth et al. 1978). Therefore, securely attached individuals are less likely to be concerned about interpersonal fairness (Bowlby 1973). Further, securely attached individuals often seek variety, are comfortable engaging in financial risk-taking, and have positive expectations regarding interpersonal situations (Li et al. 2012). As such, the securely-attached are likely to be open to customized pricing and interpret variations of prices offered in individualized pricing programs as having positive implications. Thus, it is likely that securely attached individuals are satisfied when they receive customized prices. We test these predictions in three studies.

Study 1 manipulated customized pricing (present/absent) and used established scales to measure participants' attachment style (Johnson et al. 2012) and satisfaction with the deal (Darke and Dahl 2003). A significant interaction between customized pricing and attachment style revealed that securely (anxiously) attached individuals reported lower (higher) satisfaction when there was no customized pricing program than when a customized pricing program was present. In addition, when a customized pricing program was present, anxiously attached individuals were less satisfied with the offered price than their more securely attached counterparts.

Study 2 examined consumer responses to customized prices that were the same versus lower (advantaged) than those charged to other customers to assess differential fairness and satisfaction (Haws

and Bearden 2006). The results indicated that secure consumers are more satisfied receiving a customized price that is lower than the price paid by other customers, but anxiously attached consumers are just as satisfied receiving a customized price that is the same as versus lower than the customized price offered to others. Similarly, securely attached individuals were more satisfied receiving an advantaged customized price than were anxiously attached individuals.

Study 3 manipulated attachment style and used a 2 (Attachment style: anxious, secure)  $\times$  2 (Program: customized, loyalty card)  $\times$  2 (Price: equal, advantaged) between-subjects design to test (1) whether the interactive effect of attachment style in the customized pricing-customer satisfaction relationship is mediated by perceptions of price fairness, and (2) the prediction that securely attached individuals report similar price evaluations after receiving a group vs. customized discount; whereas, anxiously attached individuals report more positive evaluations after receiving a group (vs. customized) deal. The results suggest that anxiously attached consumers may be highly concerned about the interpersonal factors surrounding a price discount. Specifically, in the presence of a customized pricing program, anxiously attached consumers perceived an advantaged price as being unfair; whereas, an advantaged price based on having a store loyalty card was perceived as being fair. As such, the negative effect of customized pricing on anxiously-attached consumers is reversed when the deal is based on having a loyalty card rather than on personalized customization. Further study 3 demonstrates that customers' perceptions of fairness mediate the customized pricing-customer satisfaction relationship.

Overall, our results suggest that customized pricing programs are likely effective among securely-attached consumers but not among anxiously-attached consumers. We propose that understanding the role of attachment theory in determining fairness and satisfaction responses to various marketing strategies is important both theoretically and practically. Given that attachment anxiety is negatively related to demographic variables such as age and income, managers can segment customers based on correlates of attachment style and tailor their marketing and pricing strategies accordingly. Relatedly, attachment styles can be primed through information presented in marketing communications (Gabriel et al. 2010); and, thus, marketing materials pertaining to customized prices can be designed to prime consumers with attachment security as they view information related to the customized pricing.

## Perception of Environmentally-Friendly Efforts as Green or Greed

### EXTENDED ABSTRACT

Consumer environmental concern is at a historical high, and many firms now offer products that are (or positioned as) friendly to the environment. Importantly, while many environmental efforts firms undertake cost additional money (e.g., using organic ingredients, making parts recyclable), others result in a cost savings for the firm (e.g., asking hotel patrons to re-use their towels, reminding consumers of saving electricity). The question we explore in this research focuses on the latter case, and examines when consumers construe a firm's efforts to be environment-saving (green) versus money-saving (greed)?

Beliefs in "green" versus "greed" are attributions made about a firm's intentions. Attribution research (e.g., Calder and Burnkrant 1977; Heider 1958) consistently shows that individuals infer the (unobservable) intentions of others based on their (observable) actions. In our context, consumers can attribute conservation efforts by firms as being of a noble (green) or more sinister (greed) motive?

We propose that the price image of the place where these efforts are practiced and the extent to which firms draw attention to the environmental effort will affect whether consumers ascribe a firm's motives as being based primarily in green (versus greed). Specifically, as there is a natural positive correlation between high price and perceived environmental friendliness (Yuan, Rajan, Krishna 2012), we expect consumers to infer more "green" motives to a firm with higher prices (versus a firm charging lower prices) (H1). Furthermore, when the higher priced firm makes consumer efforts in its green acts salient (versus not), we expect there is a greater attribution of greed (versus green) for such efforts compared to when a lower priced firm does so (H2). We also expect the effect of consumer-effort salience on green-greed attribution to be mediated by perceptions of the firm's profit orientation (H3). The green-greed attribution is important because we expect it to drive consumers' actual green behavior (H4), and the extent to which they blame (or credit) themselves (versus the firm) for green behavior (H5).

Study 1 and 2 were lab-based scenario studies in U.S. and Hong Kong. Undergraduate participants ( $n=197$  for S1 and  $n=175$  for S2) imagined that they had just checked into a hotel. We varied the price and whether or not a card was placed in the bathroom ("please reuse the towel to save resources"), making these 2(price: high vs. low)  $\times$  2(green effort: present vs. absent) between-subjects designs. We create a single item Green-Greed scale to measure the green versus greed attribution: "In my opinion, this hotel (1) is totally committed to going green; (4) will do green acts that will save them money; (7) is just cheap and is using "going green" as an excuse to save money." In both studies, the low-priced hotel was perceived as being greedier than high priced hotel (H1). We also found that consumers perceived the high priced hotel as being more greedy (versus green) if they had an environment card versus when they said nothing at all; for lower priced hotels, the card had no effect on attributions (H2). In study 2, we also assessed the extent to which consumers perceived the hotel to be motivated by profit. Perceived profit motivation mediated the effect of price and green effort on green-greed attribution (H3).

Studies 3 and 4 were field experiments, which took place in at a hotel chain in China. Participants ( $n=314$  for S3 and  $n=281$  for S4) were staff members of a large corporation participating in a training workshop. Participants were assigned to one of two hotels according to workshop themes (not performance). The two hotels, while under the same parent brand name, differ substantially in price (about US \$125 vs. \$37). We manipulated salience of green effort by whether or not a card was placed in the bathroom ("please reuse the towel to save resources"), making this a 2(price: high vs. low)  $\times$  2(salience of green effort: yes, no) between-subjects design. We replicated the findings in S1 and S2, again supporting H1-H3. Further, consumers tended to reuse their towels more when they perceived the hotel as being green (vs. greedy) (regression coefficient  $B = .20$ ,  $p < 0.01$ ) (H4). Controlling for towel reuse, consumers felt that they themselves were more green when they perceived the hotel as being greedy ( $B = -.25$ ,  $p < 0.05$ ), suggesting a zero sum game between the firm and customer (H5).

Given the mediating role of perceived profit orientation, Study 4 examined the effect of mitigating this motive by manipulating it directly in a 2 (price: high vs. low)  $\times$  2 (salience of green effort: yes, no)  $\times$  2 (profit orientation: control vs. mitigated) between-subjects design. In the high salience green effort condition, consumers were encouraged to save electricity by turning off electrical devices and managing room temperature via a note on a small card in the room. We manipulated profit orientation by placing different types of toothbrushes in the bathroom: either a regular plastic tooth brush (control condition) in a plastic bag package (standard practice in local hotels)

or one made of bamboo, in a recycled paper-box package (mitigated condition). In the control condition, we found the same price X effort interaction pattern on greed-green attribution as in the previous studies. However, when profit orientation was mitigated, the price X effort interaction was no longer significant, leaving only the finding that the high-priced hotel was perceived as being more green than the low priced one. Additionally, the greed-green attribution predicted actual electricity usage over the guest's stay ( $B = -.66, p < 0.01$ ) (H4) and self credit/blame for conservation efforts ( $B = -.19, p < 0.01$ ) (H5). Together, our results have important implications for which firms have more to gain from green efforts, how these efforts should be made public, and how to encourage green behaviors.

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# Contesting Institutional Arrangements

Chair: Alex Mitchell, Queen's University, Canada

## **Paper #1: The Role of Ideology in Contesting Market-Based Institutional Arrangements**

Alex Mitchell, Queen's University, Canada

Jay M. Handelman, Queen's University, Canada

## **Paper #2: Professional Contests and the Emergence of Social Media as an Institutional Field**

Andrew Smith, York University, Canada

Ashlee Humphreys, Northwestern University, USA

## **Paper #3: Market Evolution Through Shifts in Institutional Logics**

Burçak Ertimur, Fairleigh Dickinson University, USA

Gokcen Coskuner-Balli, Chapman University, USA

## **Paper #4: Consumption Rituals and the Complexities of Institutional Resistance**

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### **SESSION OVERVIEW**

The purpose of this session is to explore emerging scholarship investigating how individuals and organizations contest institutional arrangements. In the context of marketing, institutional arrangements are the formal and informal rules and norms created by actors and organizations to facilitate exchange behaviors (Carson et al. 1999, p. 115). Investigating the economic and social arrangements that exist within and between marketers, consumers, and other stakeholders has long been a central feature of marketing scholarship, historically aligned with the institutional school (Shaw and Jones 2005). Viewed ostensibly from the perspective of firms, this work, and the theorizing it supported, has tended to focus on how to effectively structure relationships between stakeholders to deal with threats such as opportunism and speculation (Bucklin 1965). This focus produced influential research into governance mechanisms, such as contracting (c.f. Bergen, Dutta, and Walker 1992; Rindfleisch and Heide 1997), designed to help marketers reduce risks and stabilize relationships and channels (Grewal and Dharwadkar 2002).

More recent work has shown that economic and social institutional arrangements can come into existence through less formalized, social processes. For example, Humphreys (2010) uses a social-constructionist perspective informed by institutional theory to show how members of the gambling industry worked to legitimate gambling in the United States. Central to the macro-level shift in views on gambling was the legitimation of both gambling as a social practice, and the organizations associated with the practice (e.g. casinos). Thomas et al. (2013) show how individuals and institutions in heterogeneous consumption communities rely on frame alignment processes to ensure continued existence of the community and its practices. Martin and Schouten (2014) chronicle how consumers provided the impetus for the emergence of a minimoto motorcycle market, through a series of pre-market and market translations among individuals and institutions. These examinations of how institutional arrangements are created through social processes raise questions concerning how market-based stakeholders might contest arrangements.

While individual and collective resistance is one form of contest (c.f. Thompson and Coskuner-Balli 2007), Scaraboto and Fischer's (2013) investigation of what they term 'frustrated fashionistas' demonstrates how consumers can alter the scope of existing institutional arrangements. The papers in this session seek to further

this line of inquiry by asking how institutional arrangements are subject to change through both formal and informal social processes, undertaken by individuals and forms of collective action. Mitchell and Handelman explore the centrality of ideology to contesting institutional arrangements, and advocate field theory to examine the interplay of individuals and institutions at various levels of analysis involved in contesting arrangements. Smith and Humphreys investigate how different professional fields seek to influence and control the structuring of an emergent field – social media – through forms of institutional work. Ertimur and Coskuner-Balli explore how markets evolve through the institutional work of actors as they appeal to, or distance themselves from, various institutional logics at play in the US yoga market. Weinberger explores how individual consumers negotiate collective consumption rituals aligned with dominant social and cultural institutions.

### **The Role of Ideology in Contesting Market-Based Institutional Arrangements**

#### **EXTENDED ABSTRACT**

Recent scholarship in marketing and consumer research has focused on how market-based stakeholders work to bring about changes in the organization of firms and value offerings in commercial industries. For example, Humphreys (2010) demonstrates how gambling industry stakeholders worked to achieve institutional legitimacy for gambling practices and venues. Martin and Schouten (2014) investigate how consumers of minimoto motorcycles were instrumental in the creation of a new market previously overlooked by incumbent firms, such as Harley-Davidson. Similarly, Scaraboto and Fischer (2013) demonstrate how a group of marginalized female consumers, frustrated by their lack of inclusion in fashion offerings, mobilized alternative institutional logics to expand the range of available product offerings. These empirical studies demonstrate the fluid nature of rules, norms, and processes that structure social action and relationships, within and between market-based stakeholders (Carson et al. 1999). Further, these studies have directed attention to the importance of understanding processes of strategic legitimation (Suchman 1995) for understanding how such fluidity is negotiated and resolved by consumers and marketers. However, while legitimation implies a congruence between values and acceptable behavior (Dowling and Pfeffer 1975), what is not clear from this growing body of literature is the role of ideology in establishing such congruence within institutional arrangements.

While numerous definitions of ideology exist (see for example Eagleton 1991), at the core it represents a particular "configuration of ideas and attitudes in which the elements are bound together by some form of constraint or functional interdependence" (Converse 1964, p. 207). In other words, ideology represents a value system in which certain activities, beliefs, and relationships are considered to be more appropriate or desirable than alternatives.

Ideology is typically reserved for discussions of political affiliation, however it also forms an important aspect of consumption practices (Hirschman 1988; 1990), in particular as it influences meaning-making activities at the level of everyday consumption (Belk 1988; 2010; Belk et al. 1989). For example, Hirschman (1990) describes the ideology of affluence, and the ways in which wealthy consumers attempt to achieve "secular immortality" through practices consistent with values rooted in social class ideologies. Crockett et al.

(2004) show how normative political ideology influences relatively routine consumption habits of African Americans. Khan et al. (2013) show that conservative ideology may inform everyday purchasing habits implicitly or unconsciously. Luedicke et al. (2010, p. 1028) demonstrate how consumers construct moralistic identities using mythological and ideological tropes as resources. They do so by linking these moralistic identities to market-based resources, which allowed them “to venerate and validate their own ideological beliefs and values while casting different ideological views ... as antagonistic threats to a sacrosanct moral order.” Likewise, Kozinets and Handelman (2004) show the use of ideology to construct the identity of oppositional groups with the goal of contesting the moral order around consumption generally, in order to broker broader ideological change. Taken together, these socio-cultural investigations anchor on substantive human values (Slater 2011 p. 35), and illustrate how those values reflect ideological positions that inform one aspect of consumers’ social action, namely consumption. These studies also demonstrate that the rules, processes, conventions, and accepted relations within market-based institutional environments are at least in part ideologically constituted, highlighted through consumers’ attempts to legitimate reconfigurations of such arrangements.

While the studies above have investigated ideology in the context of consumption-driven meaning making at the level of consumers and consumption, what about marketers? Prior work from Holt (2002; 2004; 2010) highlights that marketers are adept at generating ideologically-informed cultural materials. Handelman et al. (2010 p. 35) demonstrate how marketers engage in ideological framing in order to overcome the limits of the fluid contexts within which strategic decisions must be made. This is consistent with the notion of marketing as a cultural technology (Slater 2011), suggesting de-centered ideological commitments on the part of marketers. Thompson and Tian (2008) and Peñaloza (2000; 2001) have built theory with respect to this position, highlighting the processes by which marketers produce cultural meanings through commercial myth-making (Peñaloza 2000 p. 82). In all of these studies, marketers commodify certain heterogeneous ideological, or mythological, identities in accordance with deliberate framing attempts (Thompson and Tian 2008; see also Thompson 2004). In this way, marketers seek to strategically legitimate particular market-based institutional designs (Carson et al. 1999) through positioning of products and services.

The variability present in market-based institutional arrangements, as chronicled in the studies discussed above, suggests that social structures represent a form of reified ideology, embodied in institutions and institutional arrangements (Friedland and Alford 1991; Meyer and Rowan 1977). Institutions are socially constructed through the beliefs and practices of individuals (Berger and Luckmann 1966/2008; Castoriadis 1987), suggesting that ideology informs the social relationships of particular institutions. Further, ideological commitments represented by institutions are malleable, particularly as they are forced to adapt and react to social disruptions (Holt and Cameron 2010). This fundamental malleability manifests in contests, undertaken by consumers and marketers, which leverage ideology as a way to establish new configurations of institutional arrangements.

Building upon earlier work in sociology and psychology, and in particular that of Pierre Bourdieu, field theory has emerged as an approach to understanding the interplay of individuals, forms of collective action, and meso/macro social structures (Fligstein and McAdam 2012; Martin 2003; 2009; 2011). While predominantly used to understand configurations of social actors with respect to particular issues (Hoffman 1999), field theory has also been used

to understand how ideology creates anchor points (Kozinets 2008; Zizek 1989/2008), around which individuals and institutions can root their identities.

This presentation will set the conceptual stage for the rest of the session by explaining and illustrating a field theoretic approach to market arrangements by examining the emergence of the 3-D printing market. This conceptual understanding and application of a field theoretic approach will help frame the empirical papers that follow in this session.

## **Professional Contests and the Emergence of Social Media as an Institutional Field**

### **EXTENDED ABSTRACT**

Social media is emerging as a domain of discourse and practice that potentially intersects with many industries and fields. Previous research has studied the emergence of industries and consumption practices, detailing the process through which industries (Humphreys 2010), consumption practices (Giesler 2012), and market segments (Scaraboto and Fischer 2013) become integrated with dominant norms and values. Yet most of these studies have centered around company-consumer dynamics. We aim to examine inter-field dynamics in the legitimation process. Using Abbott’s (1988) theory of the system of professions, we examine the process through which different professional fields contend for control over the processes, practices, and tools broadly labeled “social media,” which may be conceptualized as an emerging field (Maguire, Hardy, Lawrence 2004). How do contests between rival fields play out and what are the results of these contests for the meanings of the new domain?

Abbott argues that professions vie for control over particular fields of knowledge and defend boundaries of knowledge against outsiders. He says, “Study of organizational forms can indeed show how certain occupations control their knowledge and its application. But it cannot tell why those forms emerge when they do or why they sometimes succeed and sometimes fail. Only the study of competition can accomplish that.” (1988, p. 2). The empirical question, then, is how professions vie for control over particular domains of knowledge and defend those claims against rivals. Although Abbott’s framework has been used widely to understand knowledge contests in established fields as diverse as healthcare (Scott 2000), higher education (Slaughter 2004), and accounting (Greenwood and Suddaby 2006), we use it to examine dominance for knowledge over new technological processes and innovations.

The professional formations that result from these contests over new technologies have critical importance for understanding the structuring of consumer life. For example, if the field of journalism were to dominate social media, it would infuse the domain with principles based on the civil sphere, a watch-dog ethos, but perhaps also a short term, headline-driven cycle of attention. On the other hand, if marketing were to come to dominate the new field, a different set of norms and values—namely measurement, prediction of behavior, and other logics would come to the fore. That is, certain orders of worth (Boltanski and Thévenot 2006) might emerge that would have been unrealized if the contest had ended differently. For instance, Marwick (2013) shows how the norms and values of a particular tech culture shaped meanings of status and even particular functions of social media such as self-branding, functions that, in turn, can shape consumer subjectivities.

To understand the process through which professions contend over the domain of social media, we conducted a study of public discourse during the period of its emergence from 2008 to 2013. We collected all articles that mentioned “social media” in the three highest



circulation newspapers in the United States, the New York Times, Wall Street Journal, and USA Today ( $n=6,877$ ). Using qualitative and quantitative content analysis, we examined the emerging logics for understanding the new phenomenon and analyzed the strategies by which different fields claimed dominion over particular aspects of the new field.

We find that various professions – including marketing, entertainment media, journalism, and information technology – as well as loosely affiliated institutional entrepreneurs, vie for some control over the emerging field of “social media.” These groups engage in institutional work to stake a claim over the jurisdiction and its associated knowledge, practices, and tools. Four prominent ways in which the professions contest the field are through: professionalization attempts, issue translation, knowledge generation and assertion, and field-specific practice development.

First, the professions try to assert their place in the field through professionalization attempts such as establishing domain-relevant associations or sub-associations and forming relationships with degree granting institutions that can train people to specialize in social media. This work helps the professions to formalize and organize their approach towards the field, as well as to gain legitimacy by partnering with credible organizations such as universities. Professionalization has previously been associated with the institutionalization of fields (Lounsbury 2002).

Second, the professions stake claim to the emerging field by engaging in issue translation. That is, they demonstrate that the issues over which they hold cognitive legitimacy to professionally address are also significant in the domain of social media. For example, marketers might claim that understanding consumers is an important component of social media, or journalists might argue that public discussion is a central aspect of the field. In making such claims and translating these issues into the emerging field, professions attempt to transfer their legitimacy into the domain as well, constructing the shape of the field in the process.

Third, the professions contest the domain by generating and asserting abstract knowledge about the field. Abbott (1988) asserts that developing such knowledge is central to making legitimate claims of professional jurisdiction. The professions engage in such behavior by publishing white papers, funding academic research (e.g. MSI), providing outlets for dissemination and debate (e.g. conferences), etc.

Fourth, the professions contest their positions by engaging in field-specific practices that solve societal needs. Marketers deliver products and services to consumers via social media, journalists deliver news, the entertainment industry delivers content, etc. Abbott (1988) suggests that professions which fail to offer solutions to societal needs associated with their work risk losing relevance and control over their jurisdiction. The professions seek to avert this fate by developing practices that solve needs which are at the intersection of their traditional jurisdiction and the emerging field of social media.

Understanding professional contests can help us better understand the forces that structure consumer relationships with technology, from norms and values associated with using social media to material infrastructure of particular social media tools (e.g. presence of advertising, mobile features, etc.). Our findings have the potential contribute to consumer research on the integration of technology into consumer life (Giesler 2008; Kozinets 2008) and better understand the process of institutionalization that produces so many structuring conditions for consumer choice and practices (Martin and Schouten 2013; Scaraboto and Fischer 2013).

## Market Evolution Through Shifts in Institutional Logics

### EXTENDED ABSTRACT

Institutional theories in organizational theory and sociology posit that individuals and organizations exist within larger institutional environments that contain taken-for-granted social, cultural, and symbolic meaning systems that define their social reality. These environments are subject to “logics,” both symbolic and material organizing principles that direct and circumscribe thoughts, decisions, and behaviors of individuals and organizations via “socially constructed, historical pattern of material practices, assumptions, values, beliefs and rules” (Friedland and Alford 1991; Thornton and Ocasio 1999, p. 804). Recent work in marketing illustrates the centrality of institutional environments and logics to understanding dynamics of markets. Scholars have shown how institutional environments impact creation and evolution of markets and how market actors may challenge as well as draw on institutional logics to change markets (Giesler 2008, 2012; Humphreys 2010; Martin and Schouten 2014; Scaraboto and Fischer 2013; Thompson and Coskuner-Balli 2007). In this article, we extend on these theoretical accounts of market dynamics by exploring how markets may become subject to multiple logics and the complex institutional work of institutional actors in augmenting/repressing these logics.

We selected the United States yoga market for our research context as it provides a vivid case of historical plurality and variation in its institutional logics. We conceptualize the yoga market as an organizational field consisting of multiple brands (yoga studios, gyms, schools, yoga gurus), consumers, and regulatory agencies (government, professional associations). Through a historical analysis of the last three decades, we seek to identify the institutional logics that guide actions and understandings in this market, understand the mechanisms by which they diffuse and shift, and the conditions that support their sustenance.

We collected data from a variety of archival sources to construct an analytical narrative of the logics guiding the yoga market. First, to study the evolution of logics constituting the market over time, we examined newspaper articles about yoga. We collected articles with the word “yoga” in the headline and the lead paragraph from the New York Times ( $n = 868$ ) and the Washington Post ( $n = 604$ ) published from 1980 to 2012. Following a procedure similar to one in Humphrey’s (2010) study on the legitimization process of casino gambling, we began by qualitatively analyzing the newspaper articles, coding for themes and characteristics of logics. The three field level logics of spirituality, medicine, fitness and a societal logic of commodification that pervade the yoga market emerged as a result of this analysis. Then we conducted an automated quantitative content analysis of the population of articles from 1980 to 2009 using the computer program called LIWC (Pennebaker, Francis, and Booth 2007) to assess the changes in attention to logics over time.

Our analysis illustrates how the plural logics of spirituality, medicine, and fitness characterized the yoga market with the medicine and fitness logics gaining increased attention over time and how distinct market actors sought to amplify and repress these logics in line with their interests and agendas. Our qualitative analysis shows that over time institutional entrepreneurs (journals, brands, institutions) attempt to strengthen/weaken normative associations with yoga. Our findings reveal a set of institutional work that actors in this market adopt to influence organizational arrangements. These strategies range from creating normative associations (Yoga Alliance, Yoga Fit) and advocacy (Hindu American Foundation, Open Source Yoga Unity) to changing rule structures (Hindu Government) to name a few examples. (Lawrence and Suddaby 2006). The institutional

work of these distinct actors not only helps sustain the plural logics in the market but also impact the relationship amongst the logics.

Exploring the dynamics in a market with multiple logics, the contributions of our study to extant research on market evolution and change in institutional arrangements are threefold. First, our analysis documents how plural logics are created and sustained in markets. Our analysis reveals that markets do not necessarily shift from one dominant logic to another (c.f. Humphreys 2010) or are organized around two countervailing ideologies that exist in tensions with each other (c.f. Giesler 2012), but rather can be characterized by plural logics with brands with distinct interests influencing the relationality among logics that permeate the marketplace. Second, while previous marketing studies focus on managers' and media's framing strategies to account for the conflicts in markets, our analysis brings to attention how multi brand contestations undergird the balances and tensions crafted among logics in markets. Third, extending on the framing and brand revitalizing strategies, we uncover a series of institutional work that actors in pluralistic fields can adopt to legitimize particular institutional arrangements.

### **Consumption Rituals and the Complexities of Institutional Resistance**

#### **EXTENDED ABSTRACT**

This presentation focuses on the complexities of contesting social institutions by examining a context where people do not celebrate a dominant consumption ritual in their community where the ritual elements are the primary vehicle by which community members connect. Collective rituals create "conventions that set up visible public definitions" of who one is, in what stage of life, and to what groups one belongs (Douglas and Isherwood 1979, 65). Through successful participation in collective rituals, individuals reaffirm their relationship to others in the group performing the ritual, to associated institutions, and to shared beliefs (Etzioni 2004, p. 11). They reaffirm emotional ties and group solidarity (Bell 1997; Cheal 1988; Collins 2004; Durkheim 1973; Etzioni 2000). Ritual is also a "tool for social and cultural jockeying; it is a performative medium for the negotiation of power and relationships" (Bell 1997, p. 79; Bourdieu 1977, pp. 36-37). As a result, when one makes a choice to not engage in a consumption ritual that is dominant in their community, that individual risks not reaffirming their relationship with celebrators. As such, not participating is potentially disintegrative (Etzioni 2004, p. 22) and marginalizing, because connections are not reaffirmed (Weinberger and Wallendorf 2012). Because of this, institutions like collective rituals are extremely powerful. Despite a healthy focus on collective ritual participation, particularly on gift giving, in consumer research, fewer studies have focused analytically on consumption rituals as powerful social institutions nor resistance to these types of institutions. This presentation focuses on understanding the complex choices non-celebrants must make and the ways non-celebrants interact with ritual elements to both resist and at times engage with this dominant institution.

Recent research has examined the ways that consumers use marketplace resources to contest existing institutional arrangements based on their ideological beliefs or identity (Coskuner-Balli and Thompson 2013, Izberk-Bilgin 2012, Scaraboto and Fischer 2013, Thompson 2014). This paper builds on that work as well as research on consumption rituals (Otnes and Lowrey 2004; Rook 1985; Wallendorf and Arnould 1991) by focusing on the complexities of not celebrating dominant collective rituals, where the rituals literally dominate the social, cultural and political landscape. I use an institutional and cultural frame to build on Swidler (2001) whose

research focuses on how culture is used and how institutionally informed cultural resources enable and constrain meaning making and action. As well as Lamont and Molnar's (2002) research on symbolic boundaries. While the meaning making and boundary work that occurs by celebrants of rituals has been the focus of research, here I focus on the problems created by collective consumption rituals and the implicit and explicit strategies and practices deployed to navigate around and through rituals as dominant social and cultural institutions.

The context for this study is Christmas in America, the most dominant collective consumption ritual in the US. Unlike some rituals, it is overly inclusive, incorporating even those who prefer to not participate, what Brahm Levey (2006) describes as "smothering", meaning that at times the ritual serves to marginalize non-celebrants through failing to recognize their identities as non-celebrants. The data draws from a project where I conducted 27 interviews with and collected 20 diaries from Americans who choose for ideological reasons to *not* celebrate Christmas. Theoretical and purposive sampling techniques were used to understand a range of decisions and meanings related to Christmas practices. The participants in this study range in age and SES and are engaged in a variety of social groups in their communities (i.e. work/school, leisure, children's activities). The processes of data collection and analysis were iterative. The data were organized using the NVIVO software program, which was also used for preliminary grounded theory analysis (Spiggle 1994; Strauss and Corbin 1998). After initial grounded theory analysis of interviews with Jewish informants, additional data was collected purposively based on emergent themes and analyzed.

I find that for much of the year, boundaries that mark differences between individuals in the same community remain in the background, yet during the Christmas season, the ritual creates a meaningful divide between celebrants and non-celebrants. Most informants are not "anti-Christmas." Instead, the dominance of the institution creates a set of problems in their lives as retailers, government offices, media, workplaces and schools operate as if most participate in the non-religious consumption elements (sending cards, giving gifts, going to parties, decorating, etc), and deploy these as tools for relationship work amongst community members. While these ritual elements are not themselves religious, they are nested within ideological practices that run counter to identities and beliefs of non-celebrants.

This dominant institution creates a tension for non-celebrants between their goals of maintaining relationships with celebrators and protecting their and their children's identities as non-celebrators. To alleviate this tension between these two countervailing goals, they must actively manage the symbolic boundary between themselves and the dominant celebrating group. Thus, beyond just resisting these institutional forces, informants use dominant ritual elements as cultural resources for boundary work. I find that they contingently deploy four strategies based on these relational and identity goals: participating, disengaging, appropriating, and traversing. Participating involves not resisting and instead engaging in the ritual elements in service of relational work, backgrounding the symbolic boundary between celebrators and non-celebrators. Meanwhile disengaging means actively rejecting smothering ritual elements through everyday practices such as not attending parties. Appropriating is complex and involves using ritual elements from the dominant institution for their latent relationship purposes but stripping them of their original meaning to facilitate connections between non-celebrants, and traversing is the attempt at using ritual elements to both do relationship and identity work, maintaining and minimizing the symbolic boundary. By bringing together research on

consumption rituals, institutional resistance, and boundary work, and by focusing on the broader social context of non-celebrants lives, the presentation builds on all three areas by showing the complexities of resisting dominant social institutions.

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# Women, Emotion Work and Producing 'Family': The Role of Food and Fun

Chairs: Teresa Davis, University of Sydney, Australia

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## Paper #1: Love should be fun: Mothering as a practice

Susanna Molander, Stockholm Business School, Stockholm University, Sweden

## Paper #2: Making meal times fun: representation of mothers and family meals over time in Magazine Advertising

Margaret Hogg, Lancaster University, UK  
David Marshall, University of Edinburgh, UK  
Teresa Davis, University of Sydney, Australia  
Tanja Schneider, Oxford University, UK  
Alan Petersen, Monash University, Australia

## Paper #3: Feeding the children at school: unpacking fun food in packed lunches

Vicki Harman, Royal Holloway, University of London, UK  
Benedetta Cappellini, Royal Holloway, University of London, UK

## Paper #4: A Prize in Every Box! From Cracker Jack to Fun da Middles

Charlene Elliott, University of Calgary, Canada

### SESSION OVERVIEW

Bourdieu refers to family as a 'social artefact' (1996: p.25). *'To understand how the family turns from nominal fiction into a real group whose members are united by intense affective bonds, one has to take account of all the practical and symbolic work that transforms the obligation to love.... This work falls more particularly to the women.. perpetuated through a continuous creation of family feeling...'* (1996: p.22)

This special session focuses on the 'emotion work' of women in 'producing fun' through their food care practices. DeVault (1999) dissects their complex organisation, negotiation and planning and reveals women's efforts as creative and persistent. Much of this effort centres on creative use of food to materialize the idyllic 'happy' nuclear family. Cook (2011) suggests that mothers consume **for the family**; we focus on the 'producer mother' who consumes **to produce** the family. She is the emotion manager, who uses tools of cleaning, cooking, and creating to keep the family smiling. This production of family fun and joy is not always a easy process, but often presented as effortless in popular media (Ticknell 2005). This session examines women's constant effort, attention and 'emotion maintenance work' through food, materializing emotions that reinforce the idea of family.

We situate our session in the context of the family as a site of discourse and practice. Within this field, we study how the gendered practices of feeding as affective work integral to producing the family. We build on the work of scholars such as Murcott (1983), DeVault (1991), Sheridan (2002), Martens and Scott (2005), Chambers (2001), and Jackson (2010, 2011); examining how the emotion work of fun and joy in everyday food are used to materialize the emotional links of a 'ideal family'.

This session examines emotion work by which 'Family' is constructed. It brings together four papers (four countries) that examine how women materialize family emotions of fun and 'caring' through novelty around food and mealtimes.

The first paper uses ethnographic work in the Scandinavian context. It examines how mothering can be conceptualized as a practice requiring consumption. It highlights how emotions such as love and

fun and its consumption must be understood as a relationship between mother and needing child.

The second paper is a visual analysis of representation of family care in women's magazines (UK and Australia) and highlights the role of women in using food and mealtimes to 'produce' happy families. The paper contextualizes media discourses and implicates advertising as a cultural intermediary that reproduces a mythic 'happy family'.

In the third paper mothers (in the UK) reconcile conflicting discourses and pressures around 'fun' foods to produce carefully negotiated 'lunch boxes' which keep both child and school happy. It details the effort and labour that goes into balancing of 'healthy' with 'fun'.

The fourth paper (from Canada) focuses on how the market helps create and sanction ideas of 'food as fun'. From traditional ideas of food as something to be taken seriously, this paper examines the evolution of the relationship between food and fun.

### QUESTIONS FOR DISCUSSION

Is Food work really fun? for whom? Is it a necessary affective state for families? Is it overrated?

How has the relation fun-food- family been constructed in the marketplace? What are the implications of this relation for family collective and individual identities (i.e mothers)?

### Love should be fun: Mothering as a practice

#### EXTENDED ABSTRACT

Consumption can be seen as a way to construct and express identity (Arnould and Thompson 2005), including that as a mother. Encoded in advertisements, brands, retail settings, and material goods, the marketplace provides the consumer with a broad range of symbolic meanings which she may tap into when constructing this identity (e.g. Hogg et al. 2011; Scott 2006). One way to conceptualize the relation between consumption and the identity as a mother supports the idea of *role embracing* (Davies et al. 2010; Hogg et al. 2004; Jennings and O'Malley 2003). Another body of literature stresses the *discourses* that women use to present themselves and act as mothers (Bugge and Almås 2006; Lupton 1996; Moisio et al. 2004). Identity can also be seen as an intersection of *practices* (Reckwitz, 2002:256) serving as the bedrock of consumption (Warde 2005:144). Even if approaching mothering as a practice is far from new in the social sciences in general (cf. Chandler 1998; O'Reilly 2009; Rich 1986; Ruddick 1995[1989]), it is still fairly unexplored in consumer research. By conceptualizing mothering as one of the practices that may constitute identity and that requires consumption to be performed (Warde 2005), this paper explores different ways in which mothering expresses love towards a needing child with the help of consumption – practice performances many times facilitated by bringing in the fun.

The paper conceptualizes mothering as a learned practice along the lines of feminist philosopher Ruddick's maternal thinking (1995[1989]) whose philosophy also goes hand-in-hand with Schatzki's notion of practices (1996: 2002). Mothering as a practice spotlights emotions and underlines that mothering must be understood as an emotional relationship that develops between a caregiving practitioner and a needing child (Ruddick 1995[1989]). The relationship does not necessarily involve the child's biological mother or father

but can be anyone prepared to step into it, while striving for overall purposes like *preserving*, *fostering*, and making the child *socially acceptable* (ibid.). The practitioners find these purposes worth striving for through their *attentive love* which keeps the practice going – a capacity that allows them to see the world from the child’s perspective and care intensely about it (ibid.).

The study of love and other types of emotions has long been dealt with in sociocultural consumption research (cf. Arnould and Price 1993; Belk and Coon 2013; Belk et al. 2003; Campbell 1987; Holbrook and Hirschman 1982; Miller 1998). What has been lacking according to some scholars, however, are *analytical frameworks* that make emotions more visible in consumption (Illouz 2009; Beruchashvili and Moisio 2013) - and this is where a practice theoretical approach can help. According to practice theory, we engage in practices and strive towards certain ends because they *matter* to us, and the emotions related to these strivings are expressed through the activities composing a practice and understood only within the practice (Schatzki 1997:302). Inspired by Nussbaum (2001) attentive love can be seen as a background emotion guiding and making the practice matter, while situational emotions like joy or frustration express how the practice is going (Schatzki 1996). By approaching the relation between consumption and theories of practice along the lines of Warde’s seminal work (2005), the purpose of this paper is to illustrate how mothering can be understood as an emotional practice and how the consumption and the fun that occurs in relation to it can be understood as something that this practice entails and requires. In order to pin down both the doings and sayings composing a practice, I have used an ethnographic study, including participant observations, informal conversations and attention to material artifacts, focusing on dinner consumption, an activity of utmost importance in other studies of motherhood (Charles and Kerr 1988; DeVault 1991; Lupton 1996), among nine Swedish single mothers. These women represent an extreme case of demands on combining both breadwinning and caretaking, and were, due to scarcity both time and money-wise, expected to at least express threshold activities of love.

Even though mothering may include many different activities, the analysis confirmed the everyday dinner’s central role by its contribution to the practitioners’ strivings to materialize mothering’s rather vague purposes. It showed that the purposes can be split into a number of different dinner activities that, guided by attentive love, materializes through the goods bought, processed and thrown away, and through the child’s developing body. Furthermore, the activities expressing love were not always interpreted as such by the needing child as they not necessarily meant giving the child what it wanted. Rather, the activities meant fostering it to become what was seen as being in its best interest in the long run, namely a competent member of society (cf. Ruddick 1995 [1989]). To develop a relationship with the child and to make it receptive to the various love acts performed, the practitioners “brought in the fun” in ways that not necessarily made their lives easier in the short run, but that expressed hopes for making it easier in the long. This included *fun with food* when, for example, Camilla invited her five year old to “cook” or rather “play” with food together with her, spending far more time in the kitchen than she usually would, as a way to foster the child’s future cook skills. It also included *fun while food*, like when Eva promised her teenagers a greasy dinner in front of the TV – the fun – on Fridays provided they ate vegetables and helped out in the household during the rest of the week, hereby fostering responsibility and balanced eating habits. Another, more rare way was *first fun then food*, letting the play and the fun come to the foreground and be what actually guided the mothering practice. Linda, for example, spent most of her time playing with Leon. The dinner was squeezed in once the play

was finished. In short, the fun included in mothering in many ways seemed to facilitate its long term goals, mostly as a tool involved in the dinner, but the fun could also take over and be the main activity that guided the mothering practice.

## Making meal times fun: Visual representation of mothers and family meals over time in Magazine Advertising

### EXTENDED ABSTRACT

Drawing on a selection of food advertising and articles from Good Housekeeping (UK) this paper examines the (re)presentation of family and food through the lens of this popular women’s magazine and considers the discursive meanings around food and the family over the sixty year period. Some comparison is drawn with Australian Women’s weekly over the same time period.

Family life is frequently played out through domestic commonsality and happy eating rituals that accompany everything from joyful festive meals such as Thanksgiving and Christmas to more mundane gatherings around the dining table (Epp and Price 2008, Jackson et al. 2009, James et al. 2009, Marshall 2005, Bisogni et al 2007, Mosio et al 2004, Wallendorf and Arnould 1991, de Vault 1991). Within this discourse family dinnertime is seen as an important vehicle for the ‘exchange of family narratives’. Providing ‘proper’ meals and catering to the demands of other family members, is seen as part of women’s work as mothers’ juggle their time and bring together these ‘separate family lives’ (Douglas 1972, Murcott 1982, 1995, Charles and Kerr 1987, de Vault 1991, Thompson 1996, Marshall 2005).

This idea of mother as carer and food provisioner is reinforced in popular media and food journalism which promotes the idea of ‘the family meal, one prepared by housewife and mother’ (Warde 1997: 137; Marshall, Hogg, Davis Schneider and Petersen 2014:125). Women are not only responsible for food provisioning but for the emotional responses of their family through this provisioning process and this is seen in the advertising images in women’s magazines and early cookbooks (Burridge and Barker 2009, Burridge 2009, Hogg et al). Food advertisers, women’s magazines and cookbooks reflect this idea that providing ‘proper meals’ is the key to building the ideal family. (Warde 1997, Mosio et al 2004). There is a question over the extent to which these popular media representations might contribute to family identity management and provide scripts for these imagined happy families (Borgerson et al 2006, Heaphy 2010, Kehily and Thomson 2010).

This paper looks at a selection of family food related advertising and articles in popular women’s magazines, spanning the period 1950 to 2010. Using a data sample that included one year in each decade of the two magazines (a historical slicing sample, Martens and Scott 2005) and including all advertisements around food and the family, we identify key shifts in the depiction of the mother in producing food, family and fun. Drawing on visual discourse analysis it uses a selection of food advertising and articles from Good Housekeeping (UK) to examine the (re)presentation of family and food in this popular women’s magazine and consider the type of families depicted and discursive meanings around mothers, food and the family over the sixty year period. Some comparison is drawn with Australian Women’s weekly over the same time period. The nature of family meals appears to be changing but not the role or responsibilities of mothers in bringing joy and fun to the family meals and in producing the idyllic ‘happy family’ (Chambers 2001). The changes across the six decades examined, reveals a key shift in mothers being ‘givers of joy/ and creators of fun’ for the family to becoming ‘part of the fun of eating’. While we still see the mother as the primary

emotional worker in creating the 'fun in food for the family' we see her participating in the fun of consumption more. Thus, in the latter decades we see the mother as consuming not just on the behalf of the family but for herself as an individual.

We therefore see two distinct phases in the depiction of the mother and the family in relation to food and fun. The early phase, roughly covering the 1950s, 1960s and 1970s where the mother is the chief producer of food and fun for the family, and deriving her pleasure and 'fun' vicariously rather than directly. In the latter decades, the mother is at once the producer of food and fun as well as participant /consumer of the food and fun. Thus, in the first phase the mother produces a fun meal and serves the happy family at the table. In the second phase, she produces the meal but also consumes the food and the family fun at the table herself, directly.

This coincides with the overall construction of the mother as a producer and vicarious consumer (for the family) in the early period as described by Cook (2011) and as producer and direct consumer/participant in the latter decades. Overall however, our data shows that the mother is consistently and enduringly constructed as the person who engages in continual, ongoing labour of materializing family feeling and thus producing the family, using food as a means of channelling emotions of fun, pleasure and nurturing. Ultimately, these media representations reinforce the normative ideal of 'happy families'.

### Feeding the children at school: unpacking fun food in packed lunches

#### EXTENDED ABSTRACT

This paper unpacks the connection between children's lunchboxes, fun food and leisure from the perspective of thirty British mothers who prepare school lunchboxes. Although fun is recognised as a key component of children's food consumption (Cook 2005), the experiences of mothers providing a leisure experience through lunchboxes has been unexplored to date.

Interpretive research looking at mothering shows how discourses of care and convenience dominate mothers' narratives of their food experiences (Moisio et al. 2004; Bugge and Almås, 2006). These discourses are usually described as a dichotomy (care-healthy food versus convenient-unhealthy food) symbolising resistance or surrender to the market penetration of domestic life (Moisio et al. 2004). Healthy food is described not simply in nutritional terms, but rather as food "from scratch" with a reduced intervention from the market (Bugge and Almås, 2006). It symbolises "good mothering", such as mothers' self-sacrifice of preparing "good" food for their children (Cappellini and Parsons 2012). On the contrary convenient food is mainly associated with mass produced food, ready to be consumed without any (or with a minimal) intervention by mothers (Bugge and Almås, 2006; Elliott 2007).

Convenient food targeting children has been described as fun food (Cook 2005, Elliott 2007). Fun food is not classified in nutritional terms, but rather in its "appeal of fun and play" (Elliott 2008: 269). As Elliott highlights fun food "is edible entertainment, to be consumed for reasons that have little to do with sustenance or nutrition (2008: 266). *Proprietary* and *transgressive* are two dimensions of fun food (Cook 2005). Indeed this food belongs to the children's world since it refers to cartoon characters or famous games and it is re-categorised as a toy used for entertainment more than its nutritious purposes (Cook 2005; Elliott 2007). The transgressive nature of fun food makes it particularly appealing for children and renders problematic parents' attempts to reduce or forbid its consumption (Cook 2005). Feeding children with convenient and fun food is often morally condemned as a sign of "lazy", overindulgent and "un-

knowledgeable" parenting, and denounced as a cause of childhood obesity (Guber and Berry 1993; Whitman 1994).

Although these studies show the market penetration of food as promising a leisure experience, we think that they do not take into consideration mothers' own involvement in making food a leisure experience. Also seeing fun food only as a market's offer of convenient food does not take into consideration how, how often, when, where and with whom children consume food considered fun. In order to understand mothers' practices of providing food that their children will enjoy, this research adopts an interpretivist approach combining photo-elicitation interviews and a focus group discussion with thirty British mothers, recruited through a purposive sampling, from various primary schools in England. Parents with children aged between nine and eleven years old were targeted since children at this stage have well established food preferences and can negotiate their choices with adults (Roberts and Pettigrew, 2013). The aims of the interviews and focus group discussions were to investigate mothers' understandings, feelings and ideas surrounding the mundane practice of making lunchboxes for their children.

Our findings reveal that mothers prefer making a packed lunch rather than opting for a school dinner, as a lunchbox is considered a gift from home. However lunchboxes are not simply a maternal gift echoing the exiting literature on feeding the children (De Vault 1991). Seen as a way of displaying good motherhood outside the home, lunchboxes are a space of daily complex negotiations between the school's regulations, children's request for specific brands and mothers' own understanding of "good" food. Mothers' understanding of a "good" packed lunch is framed as a combination of "proper" (healthy) but also "fun food" that children can enjoy.

Mothers' understanding of fun food goes beyond the market classification of food as a convenient product. In fact three different meanings were associated with food classified as "fun". Firstly, escapism emerges as a main justification of providing food considered enjoyable, such as "adult" food commodified by mothers to accommodate children's requests. For example handmade sandwiches and pieces of fruit were shaped into stars and various animals. Secondly, enjoyable food was considered a transgression to the school's regulations. For example "sneaking in", as one mother says, food forbidden by the school (like a piece of "adult" chocolate bar), makes the experience of eating food a fun activity since it becomes a mother-child transgression of school regulations. Lastly, branded and convenient fun food is considered an "unhealthy" but crucial reward reinforcing the child's "good behaviour" in the school setting.

In unpacking mothers' experiences of making lunchboxes this research shows how Lunch boxes are "balanced culturally rather than nutritionally" (Metcalf et al. 2008: 405). Indeed it shows that lunchboxes are a complex process of negotiating different and contrasting requests of good mother, including the school, the child and the self. Also it shows that the relation between health-care and fun-convenience is not a dichotomy as suggested by some literature (Moisio et al. 2004; Bugge and Almås, 2006). While mothers include convenient food in order to reward their children for having eaten the more healthy part of the lunch, they also have a wider understanding of the transgressive nature of fun through food, which goes beyond the market offering and understanding of fun. The market with its offer of convenient and ready to consume fun food seems to be excluded from the *reappropriation process* wherein mother and child transform adult food into child food and transgress school's regulations. In this process fun and healthy food are not a dichotomy but they are rather part of the same process of mother and child transformation of adult food into child's food. This research sheds new light on the relation between consumption and care, showing how they are



not a dichotomy, but they are part of the same process of ‘care for the children’ providing them with both enjoyable and healthy eating.

### A Prize in Every Box! From Cracker Jack to Fun da Middles

#### EXTENDED ABSTRACT

Fun is a powerful symbolic theme that characterizes contemporary food marketing. From PepsiCo’s Fun-for-You product portfolio and Fun da Middles cupcakes to the advertising of olives as ‘fun at your fingertips’ and Disney Flavorz (that claim to make ‘apple eating fun’), fun in terms of food marketing is becoming increasingly commonplace. Yet the everyday connection of fun with food—just like current usage of the word fun itself—is of rather recent origin. At the turn of the 19<sup>th</sup> century, the notion of ‘food fun’ was verboten. As American paediatrician Luther Emmett Holt sternly dictated to mothers in his manual *The Proper Care and Feeding of Children*, “young children [age 4-10] should not be allowed to play with their food, nor should the habit be formed of amusing or diverting them while eating” (1916[1894]: 147). Holt was America’s most prominent child rearing expert for nearly half a century, until the emergence of the highly popular Dr. Spock (Sealander 2005: 172) who similarly suggested that child feeding was not to be an extension of the playroom (Spock 1946: 356). How, then, did fun become a commonplace and the fulcrum of foods targeted at children? (See Cook 2005, Elliott 2008, 2009, 2009a, 2010, 2012, Schor and Ford 2007) What conditions made this possible and what does this mean? In broad terms, I am interested in tracing how we move from a place where the injunction “*Don’t play with your food*” transforms, with the help of commercially packaged edibles, into eating as a license to play. How did food play become acceptable and how did it become convention? And what are the implications of this kind of marketing?

Tracing back to 1912, this paper examines the rise of “fun” in connection with children’s food. The analysis incorporates extensive primary research from a variety of archival sources, with particular focus on newspaper, magazine, radio and television advertisements for food products, as well research on (historical and contemporary) cultural and marketing perspectives on childhood (see Cook 2004; Cross 1997; McNeal 1969, 1992, 1999, 2007, Mechling 2000). Advertisements in popular women’s magazines such as *Chatelaine*, for example, reveal how marketers first introduced the idea of packaged foods to mothers seeking to “solve the breakfast problem”. “Children think they’re confections,” asserted a 1928 advertisement for Quaker’s puffed cereal. By 1939, the idea that food could be ‘fun’ emerged in advertisements for Rice Krispies (i.e., an advertisement picturing a little girl asserting “Mommy, these Krispies are fun!”). This set the stage for the 1950s and 1960s dominance of child-targeted breakfast cereals—and the subsequent emergence of marketing such as Kraft Foods’ 1999 campaign to promote sweetened Post Cereals to children under the slogan, “*The fun starts here.*”

I argue that the rise of food as ‘fun’ can be understood in three unique waves. The first wave, *food with toy*, can be exemplified by a range of products in which companies sought to distinguish themselves from the competition and increase sales by adding in a “prize”. Cracker Jack—first mass-produced and sold at the Chicago World’s Fair in 1893—was the very first company to put toy “surprises” in their packages. Starting in 1912, children could find a miniature car, animal, gun, airplane, pair of scissors, or similar item in each box. The second wave is *food and toy*, which is largely about modelling future gender roles and domestic labor practices for girls. It is exemplified by the Kenner Easy Bake oven. Launched in 1963, it is the first example of a toy centered around food. Ken-

ner’s Easy Bake oven stood 14-inches tall and baked treats using the heat of two light bulbs. The toy was explicitly targeted at girls, with early advertisements cajoling “delight the little homemaker today”, and “FUN! Safe and **educational**, just like mommy makes” In 1967 General Mills acquired Kenner and rebranded it the *Betty Crocker* Easy Bake oven, advertising miniature packaged Betty Crocker cake mixes to make the experience tastier—and “even more fun”. Finally, *food as toy* emerges when Jell-O advertising campaigns start explicitly telling children to *play with their food*—forcing parents to relax rules around eating, at least for dessert. This “food play” marketing strategy becomes dominant in the 1990s and beyond, leading to such products as *FunSqueeze* margarine, *Fun-da-Middles* cupcakes, *FunBites* fruit snacks, *FunCheez* processed cheese, not to mention crushable yogurt tubes and fruit snacks that tattoo your tongue, or oatmeal with mini sugar dinosaur eggs that ‘hatch’ with the addition of boiling water. *Food as toy*, I suggest, represents a fundamental shift in strategy because the food is not accompanied by a toy but has become the toy itself.

Each ‘wave’ of food fun reflects particular cultural and historical preoccupations: the ‘fun’ of the Easy Bake oven—exemplifying *food and toy*—was rooted in accepted domestic labour practices of the 1960s, as well as a shift in which homemakers accepted packaged foods (such as cake mixes) as part of ‘modern’ homemaking. *Food as toy*, in contrast, reflects a far different ‘everything for the child’ sensibility which is often coupled with dual working parents or single parent homes.

Overall, my analysis reveals how packaged foods promised creativity and entertainment for children, and how the once transgressive notion of “playing with your food” has become increasingly acceptable, largely as a result of commercially packaged foods “specially designed” for children.

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# Fun with Words: How Language Affects Consumer Response to Brands and Marketing Communications

Chairs: Anne-Sophie I. Lenoir, Erasmus University, Netherlands  
Stefano Puntoni, Erasmus University, Netherlands

## Paper #1: “Buy Now! How Brand Relationships Influence Consumer Responses to Imperative Advertising”

*Sarah G. Moore, University of Alberta, Canada*  
*Yael Zemack-Rugar, Virginia Tech, USA*  
*Gavan Fitzsimons, Duke University, USA*

## Paper #2: “What Shall I Call Thee? The Impact of Brand Personality on Consumer Response to Formal and Informal Address”

*Anne-Sophie Lenoir, Erasmus University Rotterdam, The Netherlands*  
*Stefano Puntoni, Erasmus University Rotterdam, The Netherlands*  
*Stijn van Osselaer, Cornell University, USA*

## Paper #3: ““And” Bridges, “With” Bonds: A Lexical Inferencing-based Framework for Influencing Perceptions of Product Combinations”

*Vanessa Patrick, University of Houston*  
*Kelly L. Haws, Vanderbilt University*

## Paper #4: “The Effect of Phonetic Embodiment on Attitudes towards Brand Names”

*Ann Kronrod, Michigan State University*  
*Tina Lowrey, HEC Paris*  
*Josh Ackerman, MIT*

### SESSION OVERVIEW

This session presents work that deals with the most subtle of marketing communication effects: language. Language is an essential feature of marketing communication that colors and changes consumers’ experiences—even subtle differences in the way words are used can significantly impact consumers’ reactions to marketing communications. The four papers in this session are linked by a focus on the importance of language for the success of branding and product positioning endeavors. Taken together, they demonstrate that every word matters. Nouns and verbs are not the only words that have an impact; small, seemingly unimportant words such as pronouns, prepositions, and conjunctions should be carefully chosen as well. The aim of this session is to provide a picture of current theoretical perspectives on language effects in consumer research and to explore the breadth of linguistic elements from which these effects originate.

The papers are organized by a descending order of the size of linguistic unit analysis. The first two papers consider the tone in which consumers are addressed. The first paper deals with imperative messages such as “Buy now!” Moore and colleagues show that consumers in committed brand relationships are more likely to perceive imperatives in advertisements as a threat to their freedom and experience reactance against the message. The second paper looks at the pronouns with which consumers are addressed. Lenoir and colleagues find that in languages that possess a distinction between informal and formal address pronouns (such as *tu* and *vous* in French or *tú* and *usted* in Spanish), brands that are perceived as warm, sincere, exciting or low-end benefit more from addressing consumers informally than brands that are perceived as competent, sophisticated or high-end.

In contrast, the third paper exposes small words which can be easily overlooked: prepositions and conjunctions. Patrick and Haws demonstrate how a subtle word change - using “with” instead of “and” - influences perceptions of product combinations: while “and” acts as a bridge between two different products, “with” binds products that complement each other and suggests that one item is of greater value than the other. Finally, the fourth paper arrives at the smallest unit of linguistic analysis: the sound. Kronrod and colleagues demonstrate the embodied power of the phonetic structure of brand names, showing that the movements of the organs in the mouth backward or forward when articulating brand names impact attitudes towards the brand names.

We expect this session to be of interest to a substantial proportion of the ACR community, particularly appealing to researchers working in the areas of branding and advertising. Language is a tool we all have personal experience with, and we anticipate an interesting discussion around the extent to which subtle differences in language affect consumers’ responses. Because the four papers investigate different units of linguistic analysis utilizing an array of theoretical perspectives, they provide a substantive contribution to an underexplored - and fun! - field of our research discipline.

## Buy Now! Brand Relationships & Consumer Responses to Imperative Advertising

### EXTENDED ABSTRACT

Marketing communications often use restrictive messages that contain imperative language, such as “Call today!” or “Buy now!” Such imperative communications can be perceived as restrictions of consumers’ freedom, and commonly result in negative consumer responses (Dillard, Palmer, and Kinney 1995; Goldsmith 2007; Miller et al. 2007). Yet, imperative ads are frequently used. A content analysis of America’s top ten magazines showed that 72% of print ads contained at least one imperative message (e.g., “Buy Now!” and “Call Today!”), and that each ad contained, on average, two such messages. Thus, we re-examine the effectiveness of advertising that uses imperative language.

We take a novel approach by combining reactance theory with consumer-brand relationship theory. We examine two key consumer-brand relationship types—committed and uncommitted (Fournier 1998; Aaker, Fournier, and Brasel 2004)—and explore how each type impacts reactance to imperative ads. We do so by focusing on a variable that is central to reactance theory and relevant to brand relationship theory: threat perception.

Threat perception is the degree to which consumers feel that a restriction or imperative poses a meaningful threat to their freedom: the higher the perceived threat to freedom, the higher the likelihood of reactance (Brehm 1966). We suggest that consumer-brand relationship type influences threat perception. Specifically, consumer-brand relationships may influence how negatively consumers think their relationship with the brand will be impacted if they do not comply with an imperative. We argue that the negative consequences of non-compliance are greater in committed consumer-brand relationships. In committed relationships, consumers who do not comply with imperatives run the risk of violating relationship norms, experiencing negative emotions such as guilt, or damaging the relationship (Aaker

et al. 2004; Fournier 1998). In contrast, these negative consequences of non-compliance do not apply in uncommitted relationships (Aaker et al. 2004; Fournier 1998). Thus, consumers in committed relationships should view imperatives as more threatening. This higher perceived threat should create greater pressure to comply, resulting in greater reactance (Brehm 1966).

In other words, due to greater threat perception in committed (relative to uncommitted) brand relationships, pressure to comply should increase when an imperative is presented, and greater reactance should result. Due to this increased reactance, consumers should dislike imperative ads more when they come from a committed, as compared to an uncommitted, brand partner. To examine this prediction, we compare consumers' liking of imperative and non-imperative ads from both types of brand partners. In six studies, we examine when imperative ads will elicit negative responses from consumers (i.e., decreased ad liking) and when they will not. We demonstrate that reactance underlies our effects, and that these effects are mediated by threat perception and pressure to comply. We also identify and test moderating variables that attenuate our effects.

Our first studies compared consumers' reactions to imperative versus non-imperative ads.

In study 1a, participants identified a clothing brand with which they had a committed or an uncommitted relationship (using relationships definitions from Aaker, Fournier, and Brasel, 2004 and Rusbult, Martz and Agnew, 1998), and viewed an imperative or a non-imperative ad for the brand. The ads were identical except that the imperative ad included a "Buy now!" message. We found a brand-relationship by ad interaction. Participants liked the imperative ad from a committed brand partner less than the non-imperative ad from the same brand partner, while participants liked the imperative ad from the uncommitted brand partner just as well as the non-imperative ad. We replicated these findings in studies 1b and 1c using a different imperative ("Visit us!") and different dependent variables. Study 1b measured participants' likelihood of visiting the store/brand in question; study 1c asked participants to allocate \$25 between a brand gift card and cash (they were entered to win their chosen allocation in a lottery).

Study 2 added a measure of individual reactance (Hong and Faedda 1996) and embedded imperative and non-imperative ads for pre-tested committed and uncommitted brand partners into a magazine that participants read. As predicted, our results replicated for high, but not low reactance individuals, suggesting that reactance underlies these findings.

In study 3, we examined threat perception as a mediator of consumers' responses to imperative ads. Participants identified a personal hygiene brand with which they had either a committed or an uncommitted relationship, and then saw an imperative ad from that brand. We measured threat perception in a two-step process: first, we assessed consumers' perceptions of the negative consequences (e.g., guilt, negative emotion) of not complying with their brand partners' imperative. We then measured consumers' likelihood of complying with their brand partners' imperative. As expected, participants who identified committed brand partners perceived greater negative consequences of non-compliance, which predicted increased likelihood of compliance. Both mediators negatively predicted ad liking. Finally, negative consequences and compliance mediated the effects of relationship type on ad liking using a two-step serial mediation model, demonstrating the hypothesized role of threat perception.

Our final two studies investigated two variables that should reduce the negative impact of imperative language from committed brand partners. In study 4, we removed the relationship threat by allowing some participants to affirm their committed or uncommi-

ted brand relationship prior to viewing an imperative or a non-imperative ad. When consumers in committed (but not uncommitted) relationships affirmed their relationships, they no longer responded negatively to imperative ads. In study 5, we used an imperative message that is already part of a committed relationship contract, and contrasted ads using "buy now" versus "buy from us" imperatives. Since consumers in committed relationships already comply with loyalty restrictions ("buy from us"), they do not react negatively to such imperative ads.

In sum, consumers respond negatively to imperative advertising from committed but not uncommitted brand partners due to differences in threat perception. The current work introduces relationship variables to reactance theory, and clarifies when and why different restrictions from different relationship partners elicit negative responses to imperative language in advertising.

### What Shall I Call Thee? The Impact of Brand Personality on Consumer Response to Formal and Informal Address

#### EXTENDED ABSTRACT

In recent years, marketing researchers have become aware of the impact of linguistic factors on the effectiveness of marketing communication. Thus far, however, interest in sociolinguistic factors in monolingual contexts has, with some exceptions (Kronrod, Grinstead and Wathieu 2012a and 2012b; Sela, Sarial-Abi and Wheeler, 2012), been relatively limited. In particular, the impact of formal and informal address remains to be understood. In marketing communication, address choices - that is, deciding to address another person formally or informally - are everywhere. Today, English speakers rarely wonder whether it would be more appropriate to say *you* or *thou* to one another. But in many languages, different address pronouns are still used in formal and in informal situations: think for instance of the Spanish *usted* and *tu*, the French *vous* and *tu*, the German *Sie* and *Du*, the Dutch *u* en *jij*, or the Russian *vy* and *ty*. Globally, among the 10 languages counting more than 100 million native speakers - a list which includes Mandarin, Castilian Spanish, Hindi-Urdu, Bengali, Portuguese, Russian, Japanese and Punjabi - Modern English is the only one, together with some dialects of Arabic, to not possess such a distinction.

This contrast is known as the T-V distinction, after the Latin forms *Tu* and *Vos* (Brown and Gilman, 1960/2003). The T pronoun is typically used to express solidarity, directness and informality, whereas the V pronoun is used to express respect, distance, and formality. In many cases, both pronouns are used in marketing communication. This means that for billions of consumers worldwide, both formal and informal address pronouns constitute an omnipresent feature of communication in the marketplace. This is especially the case in advertising - and yet we do not understand the consequences of formal and informal address use for consumers' attitudes. On what basis should advertisers decide which type of address to use? In this paper, we explore the impact of brand positioning on consumers' expectations for, and reactions to, address pronouns.

Marketers have to decide on the most appropriate form of address for a particular communication depending on the context, taking into account language-specific norms as well as other factors such as target characteristics. We argue that address can also be chosen to reflect a brand's positioning and values - and that making address choices that are consistent with these values will have a positive impact on consumer response. We expect that informal "T" address will elicit more positive responses when the brand is perceived as warm, sincere, exciting or low-end than when it is not,

whereas formal “V” address will elicit more positive address when the brand is perceived as competent, sophisticated, or high-end than when it is not.

In study 1, we show that informal address is more consistent with the positioning of warm brands, whereas formal address is more consistent with the positioning of competent brands, as reflected in consumers’ preferences. A first group of Dutch participants rated a series of brands selected among the Interbrand Best Global Brands on warmth and competence. Then, for each brand, other participants expressed their preference for either formal or informal address in the brand’s communication. Both perceived warmth and competence had a significant effect on preference for formal address, with high perceived competence associated with a greater preference for formal address and higher perceived warmth associated with a greater preference for informal address.

In study 2a and 2b, we investigate the impact of brand personality on address expectations and preferences. In study 2a, we looked at the impact of a brand’s association with excitement or competence. Russian participants were shown a magazine ad for a fictional jeans brand called “YourJeans”, which was presented as either exciting or competent. Participants translated the brand name and the slogan into Russian. Responses were coded as using the formal (*vy*) or the informal pronoun (*ty*). A logistic regression analysis revealed a significant association between brand personality and address translation formality: in the competence condition, 29.1% of the translations used formal address. In the excitement condition, only 7.8% of the translations used formal address. In study 2b, we explored the impact of perceived sophistication and sincerity on address preferences. Chanel and Moët & Chandon (sophisticated) and Dove and Nutella (sincere) were selected by pretest. For each brand, Dutch and Dutch-speaking Belgian participants chose a slogan from a set of formal and informal slogans. A repeated-measures logistic regression revealed a significant effect of brand on address preference. Formal address was selected 58.2% of the time for Chanel and 57.5% of the time for Moët & Chandon, but only 42.9% of the time for Dove and 42.9% of the time for Nutella.

In study 3, we focus on the role of low-end and high-end positioning in moderating the effect of address on consumers’ attitudes.) Participants were approached in office and public transportation settings in the Netherlands and evaluated a printed ad for a fictional low-end or high-end sunglasses brand. The address pronoun (*u* vs. *ji*) changed to implement formal or informal address. A floodlight analysis (Spiller, Fitzsimons, Lynch, and McClelland, 2013) revealed a significant interaction effect of address pronoun and positioning on purchase intention in consumers aged 29.46 and above, on attitude towards the ad in consumers aged 33.52 and above, and on attitude towards the slogan in consumers aged 47.06 and above. These results suggest that older age does not simply result in a greater preference for formal address, but rather in a greater sensitivity to address appropriateness.

In conclusion, the distinction between a formal address pronoun “V” and an informal address pronoun “T” is a feature of the marketplace for billions of consumers worldwide, and advertisers have to decide which of the two is more appropriate for a particular ad. We show that the characteristics of the target consumers are not the only factors that need to be taken into account. The brand itself matters as well. Our findings show that brand positioning is not only a predictor of address expectations, but also moderates the effect of address choice on consumers’ attitudes.

## “And” Bridges, “With” Bonds: A Lexical Inferencing-based Framework for Influencing Perceptions of Product Combinations

### EXTENDED ABSTRACT

Will a consumer prefer eggs with ham or eggs and ham? In linguistic analysis, words can be categorized as content words (e.g. “eggs”, “ham”) or function words (e.g. “and”, “with”; Chung and Pennebaker 2007). Function words include prepositions, articles, conjunctions, and pronouns that hold the content words together to form meaningful sentences. Function words are often considered devoid of meaning and are hence overlooked. The current research examines the conjunctions “and” and “with”, and proposes that although these are used interchangeably, they differentially signal integration and therefore value when used to communicate product combinations.

Our central thesis is that the conjunction “and” bridges two products together, without necessarily integrating them (purely conjunctive role) whereas “with” goes beyond bridging and actually bonds the products together in an integrative manner. This level of product integration is of particular relevance when the products themselves are unequal in value, and the prepositional role of “with” serves to indicate both unequal valuations and better integration from having the products bundled together. Further, since individuals differ in their propensity to attend to subtle differences in language (Chung and Pennebaker 2007), we argue that an individual’s processing style might explain the effect of conjunction use on the valuation of product combinations. We expect that a holistic processing style should result in less attention to the function words and the valuation they connote, while an analytic processing style should result in greater attention to the semantic meaning the conjunction conveys.

In sum, we expect that (1) the conjunction “with” connotes greater value than “and” when products are complementary, yet unequal in value (2) this effect emerges when consumers are primed to use a more analytical processing style, and 3) other cues of integration may facilitate or diminish these differences in the effectiveness of “with” and “and” in communicating value or perceived enjoyment to consumers.

In Study 1a, the 126 undergraduate participants were randomly assigned to one of four conditions following a 2 (conjunction: “with” vs. “and”) X 2 (product combination: unequal value (steak/salad) vs. equal value (soup/salad)). After being presented with one of the four product combination options, they indicated their perceived value of the product combination. Results revealed significant main effects for both equal versus unequal bundles and for conjunction cue, such that “with” was higher than “and”. These main effects were qualified by a significant interaction showing that while combination cue did not affect the equal value combination, “with” was perceived more favorably than “and” for the unequal value combination. As predicted, this study demonstrates that for unequal value combinations, “with” results in higher perceived value than “and”. In a follow-up study (study 1b), we used non-food combinations and asked participants to evaluate an audio system and controller. Again, the product bundle connected by “with” was perceived as more attractive than the one joined by “and” again implying the enhanced value through the integrative function of “with”.

In Study 2, we focused on unequal bundles only and measured processing style to test our hypothesis regarding the underlying process of our effect. The 118 participants were presented with one of two prix fixe brunch menus in which they either chose between “A: eggs with ham” and “B: eggs and bacon” OR “A: eggs and ham” and “B: eggs with bacon”. The results revealed the expected main effect,

such that individuals preferred option A (eggs with ham) in the first menu and option B (eggs with bacon) in the second menu. Spotlight analysis revealed a significant interaction between conjunction use and processing style on option preference, suggesting that analytic processors were more likely to discern the differences between conjunction use.

In Study 3, 225 participants were randomly assigned to a 2 (conjunction: and vs. with) X 2 (thinking style: analytic vs. holistic) between-subjects design. Participants first completed a priming task to induce a holistic or analytic thinking style. Next participants were exposed to an advertisement for a frozen entrée product positioned as “Grilled Peppercorn Steak and/with Vegetable Medley” depending on condition. Participants responded to two items regarding their perceived satisfaction with the entrée. Results revealed a significant interaction between combination cue and thinking style prime. Specifically, only those participants in an analytical mindset showed increased preferences for the “with” combination, providing evidence that only when more attention is paid to the subtle language cues in one’s environment does the combination cue matter.

In Study 4, 177 MTurk participants viewed a product combination of chips and salsa in which complementarity was influenced through matched or mismatched brands. Results revealed a significant interaction between conjunction and brand match/mismatch, such that when the brands were coordinated, “with” led to higher evaluations than did “and”, but the opposite was true when the brands were mismatched.

Finally, in Study 5 ( $n = 132$ ), we manipulated a separate cue of integration by presenting two food products (peppercorn steak and vegetable medley) either on one plate or two along with our manipulation of conjunctive cue (“with” vs. “and”). The results revealed that the visual cues were more powerful than the subtle cues of language, as the presentation of two separate plates was evaluated more favorably in conjunction with “and” rather than “with” and the typical pattern of results in which “with” was preferred to “and” was eliminated by the visual plate cues.

Overall, the current research adds to a growing literature on the powerful effects that subtle language differences have on consumer preferences. Our results underscore the importance of investigating the functioning of often-ignored function words like “and” and “with” in language use.

## The Effect of Phonetic Embodiment on Attitudes towards Brand Names

### EXTENDED ABSTRACT

Rising in a global culture, brand names today oftentimes lack meaning to avoid specific connotations. Therefore marketers create innovative nonsense brand names for their products. The purpose of this work is to explore the possible effects of the phonetic structure of nonsense brand names on brand attitudes. In this work we employ an innovative approach introducing research on embodiment into research on phonetic symbolism.

Research on sound symbolism has demonstrated that sounds create meaning and may affect attitudes towards brand names. For example, Sapir (1929) showed that while back vowels (e.g. mal) are associated with large size, front vowels (e.g. mil) are associated with small sizes. Yorkston and Menon (2004) found that the brand name Frosh for an ice cream was preferred over the brand name Frish, as it was perceived as smoother, richer, and creamier than the Frish name. Recently, Lowrey and Shrum (2007) showed that participants prefer a fictitious brand name whose vowels are associated with attributes which are desirable for the category (e.g. sharpness for a knife).

The works on phonetic symbolism demonstrate the importance of the role played by phonetic sounds to construct meanings. However, to the best of our knowledge no previous work has inquired into the effect of the movement of the articulation organs within the space of the oral cavity while pronouncing the phonemes of a brand name. This question is the focus of the current work.

To answer this question we introduce research in embodied cognition, which ties bodily movements to the creation of, and effect on, attitudes and affect. For example, in Chen and Bargh’s (1999) classic work, positive attitudes were more accessible in the participants’ minds when they were pulling a lever towards them, as opposed to pushing it away.

Following the research on sound symbolism and embodied cognition, we suggest that there may be a phenomenon of phonetic embodiment, whereby the movement of the organs in the oral cavity during the articulation of a brand name may affect attitudes regarding that name. Specifically, movement from front sounds like “i” and “b” towards back sounds like “u” and “k” simulates food accepting/swallowing. To the contrary, movement of the organs from back sounds to front sounds simulates food rejection/spitting. We suggest that names with back-to-front (bf) oral movements (like Goomie) will elicit more negative attitudes than brand names where the sounds are ordered in a front-to-back (fb) direction of the articulation organs (like Meegoo), due to the movement of articulation organs inside the oral cavity.

Four studies investigate this process. In study 1 we demonstrate the basic phenomenon. Participants indicated their intent to purchase one of two brand names, based on their names only: Goomy (bf) and Feeco (fb). Then, participants indicated their preference between two companies – Picoo (fb) and Gobi (bf) – on company evaluation items, such as “has better customer support”, “can sell for higher price”, “sounds more credible”. Participants also indicated their preference to purchase one of the brand names. Consistent with our hypothesis, results suggest that for all tasks the front-to-back (fb) words, names, and brand names elicited more positive attitudes than the back-to-front (bf) words, names, and brand names. As predicted, the likelihood to purchase Feeco was significantly higher than the likelihood to purchase Goomy; and Pikoo (fb) company was more highly evaluated than Gobi (bf) company.

In study 2 we tested the possible moderation of product category for this phenomenon. Specifically, we assumed that food products, embodied as an intake motion (fb) may impact the effect we found in study 1. We compared the same tasks for food and non-food products. All food/non-food comparisons were between subjects, whereas articulation direction comparisons were within subject. Participants first evaluated the quality, popularity, and likelihood to try any of 6 items in a menu of cocktails (movies), some of which were bf (e.g. Kobim) and some fb (e.g. Megu). Next, they predicted the success of 2 new products in their category – soup (soap) – having either bf (Goven) or fb (Megu) phonetic structure direction. Finally, participants indicated their trust for two brand names (Maitoug (fb) and Kuanbei (bf)) in one of two categories (snacks or hand cream). Results replicated the findings in study 1, suggesting that brand names with a fb articulation direction elicit higher attitudes than brand names with bf articulation direction. However, this effect was attenuated and non-significant for all food products in all comparisons.

Study 3 extends the findings of study 2 by comparing non-food products (e.g. pen) with two types of food: edible (e.g. sandwich) and spoiled (e.g. molded sandwich). The purpose of this study was to further test the phonetic embodiment hypothesis in the case of food products. Results of this study support our prediction that food

products bias the phonetic embodiment effect towards always-intake: participants consistently preferred fb brand names for non-food products, had no preference for articulation direction for food products, and preference for bf brand names for spoiled food.

Finally, in study 4 we tested the mechanism of approach-avoidance associated with the phonetic embodiment effect of nonsense brand names. Participants were biased to prefer fb(bf) brand names for non-food products after viewing (un)pleasant/ approach (avoidance) pictures. These results were replicated in a physical approach-avoidance task (pushing/pulling a table top). Study 4 emphasizes the underlying mechanism responsible for the phonetic embodiment effect.

Our findings indicate that brand names which are comprised of sounds that create a movement of the articulation organs from the back(front) to the front(back) have a negative (positive) effect on attitudes, because the movement simulates food rejection(intake), which activates avoidance (approach) mechanism. In support for these results, the effect of articulation direction is attenuated in food products, as the intake embodied movement interferes with the direction of movement dictated by the sounds. Further research that will explore the effect of other product categories, as well as the combination of articulation direction and meaning, may reveal additional aspects to the question of the effect of articulation direction on attitudes towards brand names.

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# Wink, Wink, Nudge, Nudge: The Behavioral Science of Eating

Chair: J. Jeffrey Inman, University of Pittsburgh, USA

## **Paper #1: Paper #1: Interference of the End: Why Recency Bias in Memory Determines When a Food is Consumed Again**

Carey K. Morewedge, Boston University, USA  
Emily N. Garbinsky, Stanford University, USA  
Baba Shiv, Stanford University, USA

## **Paper #2: Paper #2: Happier with Less? Increasing the Hedonic Appeal of Smaller Portions with Enhanced Hedonic Sensory Imagery**

Yann Cornil, INSEAD, France  
Pierre Chandon, INSEAD, France

## **Paper #3: Paper #3: Making Choices when Sequentially Encountering Healthy and Unhealthy Options: The Role of Sensory Mode of Evaluation**

Dipayan Biswas, University of South Florida, USA  
Courtney Szocs, University of South Florida, USA  
J. Jeffrey Inman, University of Pittsburgh, USA

## **Paper #4: Paper #4: Consumption Patterns and Weight Loss**

Kelly Haws, Vanderbilt University, USA  
Peggy Liu, Duke University, USA  
Joseph P. Redden, University of Minnesota, USA

### **SESSION OVERVIEW**

Despite the fact that over 50% of Americans report wanting to lose weight (Brown 2013), the obesity rate has remained stable for nearly a decade (Cohen 2014). Regulators have attempted to aid consumers in their battle against obesity by imposing legislation to encourage more healthful eating (e.g., ban on large size sugary soft-drinks). However, many of these policies have been met with strong consumer reactance, and the effectiveness of these restrictive approaches has been questioned. In light of the limited success of these more paternalistic approaches, behavioral science has been advocated as an alternative means of nudging consumers towards more healthful consumption, since many behavioral interventions are subtle and less likely to evoke consumer reactance or resistance (Just et al. 2008; Sunstein and Thaler 2003). In addition, behavioral interventions are often easy and inexpensive to implement and have strong practical implications (Just et al. 2008). The theme of the proposed special session relates to “the behavioral science of eating” and how subtle behavioral interventions can nudge consumers towards more healthful consumption.

In the first paper, Morewedge, Garbinsky, and Shiv focus on how remembering end moments of a consumption experience can increase the interval between food consumption episodes. They find that recency effects lead consumers to remember the end (vs. initial moments) of a consumption episode. Since sensory specific satiety is higher at the end of a consumption episode, remembering the end (vs. initial moments) of consumption leads to longer interconsumption intervals. In the second paper, Cornil and Chandon identify hedonic sensory imagery as a possible means of nudging consumers towards more healthful food choices. Their results show that imagining consumption of small portions of hedonic foods leads to increased expected enjoyment of eating and can lead children and adults to choose smaller portions. Biswas, Szocs, and Inman examine how the sequential order in which consumers are exposed to healthy and unhealthy food items and the sensory mode of evaluation influence choice. They find that when consumers visually evaluate a sequence of healthy (H) and unhealthy (U) foods, preference for the healthy

option is greater for the H-U (vs. U-H) sequence. However, the effects reverse when consumers get to sample (i.e., taste) the products. Finally, Haws, Liu and Redden examine associations between consumption patterns and weight loss in a clinical weight loss trial and find that dietary variety as well as specific types of foods/beverages are associated with weight loss.

Collectively, the four papers in this session aim to address the important research question of how behavioral science can be applied to food contexts to aid consumers in making more healthful choices. The proposed special session brings together leading scholars and addresses behavioral science of eating using diverse methods (e.g., field experiments, lab experiments, and a longitudinal clinical trial) and multiple populations (e.g., adults, children, and dieters enrolled in a trial). We expect this session to have a broad appeal.

## **Interference of the End: Why Recency Bias in Memory Determines When a Food is Consumed Again**

### **EXTENDED ABSTRACT**

Portion sizes in the United States have been steadily increasing since the 1980s (Young & Nestle, 2002), which has affected both food intake and enjoyment. Larger portions imply larger normative amounts of food to consume, which increases overall intake. People finish the portion they are given whether it is a small or large portion (Geier, Rozin, & Doros, 2006). Increased intake also leads to greater sensory-specific satiety. As each bite of food is less pleasant than the one before it, eating more of a food reduces the average enjoyment of that food during a particular consumption experience (Rolls et al., 1981). Sensory-specific satiety is a major factor regulating food intake decisions in the present moment (e.g., Maier, Vickers, & Inman, 2007; Rolls et al., 1981), but if and how memory of past satiety affects future consumption decisions is unclear.

We suggest that a recency bias in memory leads satiety at the end of the food consumption experience to influence how long people wait until consuming that food again in the future. We argue that recency effects are especially likely to prevail in the gustatory domain because of memory interference. Interference is greater for more similar experiences, such that maximum interference occurs when experiences are identical (Oberauer & Kliegel, 2006). Eating, in many contexts, is a highly repetitive experience. A glass of juice, bowl of ice cream, or bag of potato chips contains many units of very similar stimuli that are consumed one sip or bite at a time until the entire portion has been eaten. We suggest that the repetitive nature of consumption should cause memory of the end of an experience to interfere with memory of the beginning, making the beginning less salient (Eysenck, 1977; Schank, 1982).

As memory for end moments of a consumption experience should interfere with memory for initial moments, we hypothesize that end enjoyment has a greater influence on the inter-consumption interval (ICI), defined as the number of days that pass until the consumption of a food is repeated. In this way, sensory-specific satiety influences future consumption as the more satiated a person is to a food, the lower their end enjoyment and thus the longer the interval until that food is consumed again. We report three experiments providing support for our hypothesis.

Experiment 1 examined whether recollection of initial or end enjoyment plays a greater role in determining the ICI. Controls ate a large or small portion of crackers and decided the next day when to

eat those crackers again. We used portion size to manipulate end enjoyment, as a larger portion should result in greater sensory-specific satiety at the end than a smaller portion. We also included two conditions in which participants were guided to recall a moment during their previous consumption experience before deciding when to eat the crackers again. In the end recall condition, participants recalled the end of their previous consumption experience. In the beginning recall condition, participants recalled the beginning of their previous consumption experience.

Recency effects played a larger role than did primacy effects in determining ICI. Participants in the control conditions who ate a larger portion desired a longer ICI than did participants who ate a smaller portion. Identifying the critical role of end satiety, end enjoyment of the consumption episode mediated the difference in ICI between the large and small portion conditions. Suggesting that better recollection of the end underlies this recency effect, participants in the end recall condition exhibited the same differences between conditions (and the mediating effect of end recall) as did controls. In contrast, participants in the beginning recall condition did not exhibit a difference in the desired ICI between the large and small portion conditions (so no mediation analysis could be performed).

Experiment 2 reversed the relationship between end enjoyment and amount eaten with a reset condition. *Controls* drank juice and then ate two crackers. Participants in the *reset condition* did the same, but also drank an additional sip of juice after a delay. The next day, all participants reported how soon (days until) they would like to consume the juice again. Our logic was that the crackers would partially reset adaption to the juice (Epstein et al., 1992), increasing end enjoyment for participants in the reset condition. We selected crackers to reset enjoyment because past research has shown that perceiving food as belonging to a different category is an important determinant of satiation (Redden, 2008). We found that end enjoyment rather than portion size determined ICI: Participants in the reset condition desired a shorter ICI than did controls despite having consumed more juice, and end rather than beginning enjoyment mediated this difference in ICI between conditions.

Experiment 3 directly tested whether end enjoyment is more influential because of memory interference. All participants drank 8oz of grape juice. After consuming each ounce, participants in the serial rating condition rated enjoyment on separate pages (one page per rating), whereas participants in the simultaneous rating condition rated enjoyment after each ounce on the same page (one page for all ratings). To rule out the potential influence of rating the food while consuming it (Larsen, Redden, & Elder, in press), we included a control condition that made no ratings during consumption. After consuming the juice, all participants retrospectively rated their initial enjoyment. The next day, all participants reported how soon (days until) they would like to consume the juice again.

As evidence that interference is responsible for the effect of end enjoyment on the ICI, the format of ratings in the simultaneous rating condition appeared to facilitate memory for initial enjoyment of the juice. Participants in the simultaneous rating condition better recalled their initial enjoyment of the juice than did participants in the serial condition. As we predicted, their better memory for initial enjoyment appeared to influence their desired delay: There was a shorter ICI for participants in the simultaneous condition than for participants in the serial and control conditions.

## Happier with Less? Increasing the Hedonic Appeal of Smaller Portions with Enhanced Hedonic Sensory Imagery

### EXTENDED ABSTRACT

Consumers generally expect that eating enjoyment increases with food quantity, especially if the food is palatable (Sorensen et al. 2003). In reality, eating a small portion is just as enjoyable as eating a large portion, and overall eating enjoyment can even decrease with larger portions (Rode et al. 2007; van Kleef et al. 2013). How can we make consumers realize that they will be happier with less food?

We know that the first bites of food are the most pleasant and that subsequent bites are decreasingly pleasant, a phenomenon called sensory-specific satiation, experienced by all individuals since infancy (Rolls et al. 1981). We also know that mentally simulating an experience makes people retrieve cognitive representations, emotions and bodily states related to that experience (Barsalou 2009). For instance, repeatedly imagining eating a food (at least 30 times) leads to a simulated state of satiety and decreases the desire to eat (Morewedge et al. 2010).

In the current research, we investigate how to lead consumers to choose smaller portions *without* satiating them or decreasing desire. We develop a new intervention, “enhanced hedonic sensory imagery”, which consists in vividly imagining the taste, smell and oro-haptic sensations of three tasty foods, prior to choosing a portion size. Mentally simulating a pleasurable sensory experience should help consumers retrieve more accurate representations of the relation between sensory pleasure and food quantity. Hence it should increase the hedonic appeal of smaller portions (higher pleasure anticipations from the first few bites), and simultaneously decrease the hedonic appeal of larger portions (better anticipation of sensory satiation), promoting the choice of smaller portions without affecting desire for the chosen portion. By considering hedonic sensory imagery as an ally of healthy eating, our hypothesis contrasts with past research, which identifies spontaneous sensory imagery as the trigger of food cravings, and suggests that blocking sensory cues or imagining negative consequences on health should help consumers control their food intake (Giuliani et al. 2013; Tiggemann and Kemps 2005).

In Study 1, 55 Americans were assigned to either an enhanced sensory imagery condition (imagine vividly the hedonic eating sensations of three desserts shown on pictures) or a control condition (rate office chairs). Then, all participants provided their maximum willingness to pay (WTP) for one small and one large slices of the same cake. The sensory imagery intervention had no main effect on WTP ( $F < 1$ ), but significantly interacted with portion size ( $F(1,53)=4.1, p < .05$ ): sensory imagery (vs. control) increased WTP for the small slice (resp.  $M=\$3.0$ ;  $M=\$2.3$ ) and directionally decreased WTP for the large slice ( $M=\$3.8$ ;  $M=\$4.0$ ).

In Study 2, we ruled out the alternative explanation that small portions are associated with higher-quality food by assigning 41 five-year old French children to a food sensory imagery condition (similar to study 1) or a non-food sensory imagery condition, in which they imagined non-food hedonic sensations such as feeling the sun on their skin. Subsequently, the children were asked to choose stickers of different sizes representing cakes and fruit juices and to choose portions of cake and juice for an afternoon snack. Across all four replications (cake sticker, juice sticker, real cake, real juice), food sensory imagery made children choose smaller portions (all  $p$ 's  $< .03$ ).

Study 3 compared the effects of sensory and health imagery on both expected and experienced pleasure. We assigned 336 young French women (with heterogeneous dieting tendencies) to a food sensory imagery condition, a control condition, or a health imagery

condition in which they imagined how eating three desserts would impact their health and weight. Subsequently, one group rated the expected enjoyment of five portion sizes of brownies and chose one portion. Three other groups ate the smallest, the medium, or the largest portion and rated their actual enjoyment. We also examined moderating effects of dieting, expecting that sensory imagery would backfire in dieters, for whom hedonic thoughts about food lead to compensatory overeating (Stroebe et al. 2013). For normal eaters, both sensory imagery and health imagery led to choosing smaller portions compared to control (resp.  $z=-2.19$ ,  $p=.03$ ;  $z=-2.45$ ,  $p=.01$ ). However, health imagery decreased expected enjoyment of all portions compared to control ( $z=-1.89$ ,  $p=.06$ ), whereas sensory imagery increased expected enjoyment of smaller portions ( $z=2.4$ ,  $p=.02$ ) and decreased expected enjoyment of larger portions ( $z=-2.05$ ,  $p=.04$ ). Furthermore, a conditional logistic regression revealed that the choice of smaller portions was more determined by pleasure expectations in the sensory condition than in the health condition ( $z=5.75$ ,  $p<.001$ ). For dieters, sensory imagery backfired: it increased expected enjoyment of all portions ( $z=3.5$ ,  $p<.001$ ), leading to choice of larger portions ( $z=2.03$ ,  $p=.04$ ). Actual eating enjoyment was unaffected by the intervention and consistently decreased with size ( $t=-4.8$ ,  $p<.001$ ). Thus, sensory imagery led normal eaters to choose smaller portions which were, indeed, preferred before and after consumption.

In the last study, we showed that it is possible to enhance sensory imagery simply by using more vivid menu descriptions. 89 online Americans had to choose one size among six portions of cake. We provided vivid sensory information about the cake (sensory condition), information about fat and calories (health condition) or no information (control). Then, all participants chose one size among seven portions of whipped cream (no information in all conditions). Participants chose a smaller cake in both sensory and health conditions, compared to control (resp.  $F(1,86)=4.7$ ,  $p=.03$ ;  $F(1,86)=3.7$ ;  $p=.05$ ). The effect carried over to subsequent portion choice of cream in the sensory condition ( $F(1,86)=3.7$ ;  $p=.05$ ) but not in the health condition ( $F<1$ ).

Overall, we show that enhanced hedonic sensory imagery increases the hedonic appeal of smaller (but not larger) portions, leading to moderation *without* hedonic cost. This suggests a way for food marketers to switch from a quantity business model to one focused on the quality of sensory experience. Thereby, marketers could decrease portions sizes and increase price per gram while keeping consumers satisfied. Marketers would also address the growing concerns about the contribution of increasing portion sizes to the obesity epidemic (Nestle 2003).

### Making Choices when Sequentially Encountering Healthy and Unhealthy Options: The Role of Sensory Mode of Evaluation

#### EXTENDED ABSTRACT

Suppose while browsing through a retail store (such as Costco), a consumer first encounters a healthy item and then encounters an unhealthy item versus if she encountered the unhealthy item first and then the healthy item. Would the sequence in which she encounters the healthy and unhealthy items influence her choice? Moreover, some stores, many restaurants in food courts and even some school cafeterias give consumers the opportunity to sample food items before purchase. Would the effects of the sequence in which healthy and unhealthy items are encountered influence choice when the consumer only sees the items versus if she gets to sample (i.e., taste) them? This is the focus of our research.

Prior research examining how consumers make choices between healthy and unhealthy food options (e.g., Dhar and Wertenbroch 2012; Shiv and Fedorikhin 1999) has presented the food items simultaneously. While Chernev (2011) examined calorie estimation for sequentially encountered food items, no study has examined effects of order sequence of healthy and unhealthy items on product choices. Equally importantly, in these prior studies, participants only evaluated the products visually without actually sampling/tasting them. We argue (and our studies show) that the effects are influenced by the sensory mode of evaluation (i.e., visual vs. gustatory through actual sampling), whereby the preference pattern observed when consumers choose between visually evaluated sequence of healthy and unhealthy options *reverses* when consumers actually sample the options.

We propose that when evaluating a sequence of healthy and unhealthy options, the first stimulus tends to become the reference point for evaluation of the subsequent stimulus in the sequence (e.g., Biswas et al. 2010, 2014; Carlson et al. 2006). Thus, if the first product encountered in a sequence sets the reference point for the mode of decision making and if healthy foods are superior on cognitive dimensions while unhealthy foods are superior on affective dimensions (e.g., Shiv and Fedorikhin 1999), then for a healthy-then-unhealthy sequence (H-U), cognitive processing should dominate while for an unhealthy-then-healthy sequence (U-H), affective processing should dominate. This would imply that consumers would be more likely to trade off affective aspects of taste in favor of cognitive aspects of calorie content when options are presented in the H-U sequence. That is, we are predicting primacy effects, whereby preference for the healthy product (which is cognitively driven) will be higher for the sequence of H-U (compared to U-H). However, we also predict that actually sampling the food items will reverse this effect leading to recency effects. With taste sampling, recency effects should occur since traces from later experiences tend to erase the traces from sequentially earlier experiences (Biswas et al. 2014). We tested our hypotheses with the help of four experiments.

Study 1A was a field experiment conducted at a cafeteria style restaurant at a major theme park; the restaurant layout allowed sequential encountering of food items when standing in the cafeteria line. For the H-U condition, the healthy dessert option (fruit) was displayed at the very beginning of the food line before the unhealthy option (cheesecake), while for the U-H sequence, this was reversed. Consistent with our hypothesis, the share of the healthy item was greater on the day when the items were displayed in the H-U (vs. U-H) sequence (65.45% vs. 40.48%;  $\chi^2 = 5.99$ ,  $p < .05$ ).

Study 1B was a single-factor between subjects experiment with three manipulated conditions (H-U sequence vs. U-H sequence vs. control condition of simultaneous presentation). Fruit salad (chocolate cake) was used as the healthy (unhealthy) option. A higher proportion of participants preferred the healthy food item in the H-U (vs. U-H) sequence (73.21% vs. 55.17%;  $\chi^2 = 4.03$ ,  $p < .05$ ) as well as versus the simultaneous presentation condition (51.79%;  $\chi^2 = 5.49$ ,  $p < .05$ ). Preferences were similar for U-H and simultaneous presentation ( $\chi^2 = .13$ ,  $p = .72$ ).

In Study 2, the results of a 2 (food sequence: H-U vs. U-H) X 2 (induced processing mode: cognitive vs. affective) between subjects experiment showed an interaction effect on choice (Wald  $\chi^2 = 5.89$ ,  $p < .05$ ). Consistent with our theorizing, when cognitive processing mode was induced, there was greater preference for the healthy item in the H-U (vs. U-H) sequence (53.13% vs. 22.73%;  $\chi^2 = 4.99$ ,  $p < .05$ ) with the effects getting attenuated under affective processing (37.50% vs. 46.15%;  $\chi^2 = .38$ ,  $p = .54$ ).

Study 3 examined the moderating role of sensory mode of evaluation. Study 3 was a 2 (food sequence: H-U vs. U-H) X 2 (sensory mode of evaluation: visual only vs. taste sampling) between subjects design experiment. The results of a logistic regression showed a significant interaction effect (Wald  $\chi^2 = 5.89$ ,  $p < .05$ ). When participants visually evaluated the food items, there was greater preference for the healthy item in the H-U (vs. U-H) sequence (52% vs. 29%;  $\chi^2 = 3.40$ ,  $p < .05$ ). In contrast, when participants actually sampled the food items, the pattern of results reversed, whereby there was marginally greater preference for the healthy item in the U-H (vs. H-U) sequence (48% vs. 29%;  $\chi^2 = 2.63$ ,  $p < .10$ ).

Collectively, the results of our experiments suggest that the sequence in which consumers are exposed to healthy and unhealthy food items and the sensory mode of evaluation influences their choice between the two options. When options are visually evaluated, we find primacy effects, whereby there is greater preference for the healthy option in the H-U sequence (vs. U-H sequence or simultaneous presentation). However, when the options are taste sampled, recency effects lead to greater preference for the healthy option in the U-H (vs. H-U) sequence. Overall, our findings provide insights into preference formation when sequentially encountering healthy and unhealthy items and the role of sensory mode of evaluation. In terms of conceptual and practical implications, choices for healthy versus unhealthy items are significantly influenced by the sequential order in which they are encountered and the sensory mode of evaluating them (through visual only versus actual taste sampling).

## Consumption Patterns and Weight-Loss

### EXTENDED ABSTRACT

According to a recent Gallup poll, around 30% of Americans are currently trying to lose weight (Saad 2011). Of those trying to lose weight, the majority reported various dietary changes as being the most effective strategies for losing weight (Saad 2011). Yet relatively little is understood about which consumption patterns relate to greater actual weight-loss. The present study aims to fill this gap by examining the associations between different consumption patterns and weight-loss.

This study includes data from 230 participants in a clinical weight-loss trial that lasted, on average, 94 days for each participant. Some participants were assigned to consume a high-fat diet, and other participants were assigned to consume a low-fat diet. All participants were weighed at the beginning and the end of the weight-loss trial. The majority of participants completed multiple dietary recalls ( $M = 6.7$ ), in which they provided detailed records of all of the foods and beverages that they consumed in the previous 24 hours. These records were then coded using the NCC Food and Nutrient Database.

Overall, we found that the average participant lost 11.2 pounds during the weight-loss trial. Surprisingly, the average weight-loss did not differ across participants in the low-fat and high-fat diets ( $M_{lowfat} = 11.5$  vs.  $M_{highfat} = 11.0$ ,  $p = .66$ ), yet there was considerable variation in weight-loss across participants in both diet groups ( $SD_{lowfat} = 8.6$  vs.  $SD_{highfat} = 8.9$  pounds). Thus, the focus of our research is to test for associations between different consumption patterns and weight-loss, and to examine whether such associations differ depending upon diet type (low-fat versus high-fat). Below, we report some initial analyses examining (a) the association between variety in foods consumed and weight-loss; and (b) the association between types of foods consumed and weight-loss; and (c) whether these associations differ by diet type. Beyond these initial findings, we will also have conducted a range of additional analyses on this extremely rich data set well before October 2014.

We first examined the association between dietary variety and weight-loss. Although there are multiple potential ways to calculate dietary variety, we chose to focus initially on across-day dietary variety (calculated as the number of unique NCC food groups consumed divided by the number of foods consumed). We found that across-day dietary variety was negatively correlated with weight-loss, but only for participants who were assigned to consume a high-fat diet ( $r = -.43$ ,  $p < .0001$ ). We replicated this result using the Herfindahl index as our measure of variety ( $r = .16$ ,  $p < .07$ ). These findings indicate that greater dietary variety is associated with less weight-loss, particularly for those on a high-fat diet (which is what many weight-challenged people consume). This finding is consistent with research showing that variety can increase intake (Rolls, van Duijvenvoorde, & Rolls 1984), thereby potentially deterring weight-loss.

We then examined the associations between consumption of different types of food (water, meat, grains, fruits, vegetables) and weight-loss. For participants on a high-fat diet, simple bivariate correlations showed that water consumption was positively associated with weight-loss ( $r = .43$ ,  $p < .001$ ), meat consumption and grain consumption were negatively associated with weight-loss (meat:  $r = -.38$ ,  $p < .001$ ; grains:  $r = -.31$ ,  $p < .001$ ), and fruit and vegetable consumption were not associated with weight-loss (fruit:  $r = -.10$ ,  $p = .22$ ; vegetables:  $r = .13$ ,  $p = .12$ ). When these different types of products were entered simultaneously in a linear regression predicting weight-loss, water consumption remained positively associated with weight-loss ( $\beta = .28$ ,  $t = 2.97$ ,  $p < .01$ ), meat remained negatively associated with weight-loss ( $\beta = -.26$ ,  $t = -2.99$ ,  $p < .01$ ), and fruit consumption remained unassociated with weight-loss ( $\beta = -.06$ ,  $t = .82$ ,  $p = .41$ ). Grain consumption was no longer associated with weight-loss ( $\beta = -.03$ ,  $t = -.33$ ,  $p = .75$ ), and vegetable consumption became positively associated with weight-loss ( $\beta = .19$ ,  $t = 2.49$ ,  $p < .02$ ). In contrast, for participants on a low-fat diet, simple bivariate correlations showed that consumption of the different products was not associated with weight-loss (water:  $r = .01$ ,  $p = .90$ ; meat:  $r = -.03$ ,  $p = .76$ ; grains:  $r = .07$ ,  $p = .51$ ; fruit:  $r = .04$ ,  $p = .70$ ; and vegetables:  $r = .11$ ,  $p = .31$ ). In addition, when these different types of food were entered simultaneously in a linear regression predicting weight-loss, consumption of the different products remained unassociated with weight-loss.

Future analyses will examine other ways of calculating dietary variety and how they relate to weight-loss. In addition, future analyses will examine whether dietary variety and different types of food may interact in their effect on weight-loss. Finally, this data set also contains data on participants' physical activity, and future analyses will examine whether physical activity is related to weight-loss, and whether physical activity and diet may interact in their impact on weight-loss.

This research offers an opportunity to examine the associations between different consumption patterns and actual weight-loss. Two key strengths of this research are that we have detailed data on what people consumed over multiple days and that we have substantial actual weight-loss (11.2 pounds on average). We anticipate that this research will help generate future research on consumption patterns that facilitate weight-loss and will be of broad interest both to consumer behavior researchers who study self-control, variety, and food, and to practitioners interested in the design of weight-loss interventions.

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# The Eyes Have It: New Insights From Tracking Attention Patterns in Consumer Research

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## Paper #1: Consumer Attention and Behavior: Insights from Eye-Tracking and Directions for Future Research

Milica Mormann, University of Miami, USA

## Paper #2: Coordination of Attention: Eye Fixations, Pupil Diameter, and Head Distance, Respond to Goals and Predict Memory

Rik Pieters, Tilburg University, The Netherlands

Michel Wedel, University of Maryland, USA

## Paper #3: Shopper Eye-Cue: Understating the In-Store Decision Process with Field Eye-Tracking Data

Aleksandra Kovacheva, University of Pittsburgh, USA

J. Jeffrey Inman, University of Pittsburgh, USA

## Paper #4: Media Multitasking and Visual Attention: Switch Triggers in Context and Content

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### SESSION OVERVIEW

A large portion of what informs our behaviors is perceived through our eyes; in fact, visual perception is such an important and complex activity that about 50% of the brain is involved with it (Bear, Connors, and Paradiso 2007). Research has demonstrated that overt attention can predict higher-order processes such as choice (e.g., Liversedge and Findlay 2000). More importantly, studying visual attention offers a detailed and unbiased measure of the consumer decision and its underlying process and often outperforms self-reported measures (Chandon et al. 2009). Surprisingly, there are few papers in marketing that use attention measures. The proposed session aims to bridge this gap by bringing together four papers that provide new insights into the role of attention in consumer behavior.

In the opening paper, **Mormann** draws on insights from several fields (neuroscience, psychology, marketing, etc.) to develop a comprehensive framework for studying visual attention in consumer research. Furthermore, the author provides valuable guidelines for using eye-tracking and discusses the unique insights that this methodology can bring to consumer researchers.

Next, **Pieters and Wedel** examine the predictive power of head position, eye fixation, and pupil size on memory. A particularly interesting finding of this paper reveals that participants had better implicit memory of the ads they saw earlier in the session when their head was positioned closer to the pictorial and farther from the text information, regardless of their viewing goals.

In a field study, **Kovacheva and Inman** examine the effect of visual attention and engagement with the category on in-store decision making and suggest several moderators. The authors also explore “failed engagements” – incidents in which the shopper actually picked up a product but eventually returned it to the shelf – and find support for their predictions that price considerations and consideration duration influence these returns.

Finally, **Brasel and Gips** explore a very relevant topic – media multitasking behaviors. They identify the individual, contextual, and stimuli-related factors that prompt switching from one media environment to another. Interestingly, they report that participants’ recollections of switching behaviors were far off from their actual behaviors, thus emphasizing the importance of using objective measures of visual attention.

Overall, the papers in this session provide new insights into the role of visual attention in consumer behavior and highlight the advantages of using unobtrusive observation to obtain process measures of consumer attitudes and actions. Using diverse methods (lab experiments and field studies) and drawing on insights from different fields (neuroscience, marketing, cognitive psychology), these papers collectively aim to answer the question: How does visual attention influence and predict downstream processes such as choice, consumption, and memory? We expect that this session will appeal to a broad audience of researchers interested in visual attention, advertising, media content consumption, and consumer decision making.

## Consumer Attention and Behavior: Insights from Eye-Tracking and Directions for Future Research

### EXTENDED ABSTRACT

Everyone involved with marketing appreciates the importance of gaining consumers’ attention (Bettman 1979; Lynch and Srull, 1982; Pieters and Wedel, 2004). In his seminal work, Bettman (1979) dedicated an entire chapter to attention and perception processes and recognized that “the particular information attended to and perceived can have a great impact on choice”. He further remarked that “attention and perceptual processes have important linkages to other components in (consumer choice) theory”, such as motivation, information search, memory, decision processes, and so on. Similarly, Lynch and Srull (1982) recognized that attention often affects decision outcomes by modifying the inputs that are considered. Yet, research on consumer attention is relatively scarce. Rosbergen, Pieters, and Wedel (1997; Pieters and Wedel 2004) recognized this gap in the literature and pioneered some early work on attention. Little research, however, has followed since (see Janiszewski, Kuo and Tavassoli 2013; Atalay, Bodur and Rasolofoarison 2012; Milosavljevic, Navalpakkam, Koch and Rangel 2012; Chandon, Hutchinson, Bradlow and Young 2009).

It has been suggested that the main impediments to research on attention stem from methodological challenges. Lynch and Srull (1982) recognized this lack of appropriate measurement and suggested that “[w]hen researchers introduce an equal degree of methodological sophistication to their empirical investigations [as they do to their theories], a rapid increase in the scope and depth of our understanding should result.” They looked for the required “methodological sophistication” in the field of cognitive psychology. In the current review, the range of useful methodologies is further broadened to include those found in vision science. Specifically, I will here focus on eye-tracking as a critical and sophisticated methodology that allows consumer behavior researchers to fulfill the promise of Bettman’s early research on attention and its effects on consumer behavior.

The current conceptual paper (1) develops a formal framework of attention and proposes future areas of research related to consumer attention and other downstream marketing processes, such as learning, memory, emotions, judgment and decision making, and (2) discusses eye-tracking as a solution to the previously identified measurement problem (Russo 1978; 2011; Payne and Venkatraman 2011) and explicate guidelines for the effective use of eye-tracking in academic consumer research.

The current framework of attention draws on a recent comprehensive review of attention found in the cognitive neuroscience lit-

erature (Knudsen 2007). Consumer attention has three fundamental components: (1) bottom-up attention, (2) top-down attention, and (3) competitive selection. First, bottom-up attention, or preattention, refers to the brain's automatic selection of the most important information that we are exposed to. This selection is based on the simple features of the environment: color, luminance, orientation, size, shape, motion. Second, top-down attention, also known as goal-driven selection, depends on the goals, expectations, and intentions of the observer. Thus, looking for a can of (classic) Coke will enhance the processing of red areas in our visual input by increasing the neuronal sensitivity for that particular color. The information that is relevant for goal attainment will be attended to more than irrelevant information. For example, when we are thirsty we pay more attention to drinks than other items (Aarts, Dijksterhuis and de Vries 2001). Finally, competitive selection refers to moving from the initial preattentive processing to focused, attentive processing. Visual selection is spatially organized, i.e., attention is allocated to a particular location in space. Once an item has been selected, top-down control determines whether to further process or not that particular information.

Building on this framework I will discuss a number of specific open questions related to consumer attention, including: which bottom-up visual features attract attention, how these features interact with top-down goal related information, and how bottom-up and top-down features interact with downstream consumer processes such as motivation, learning, memory, emotions, judgment and decision making. Specific topics for future research will be proposed for each of these categories.

In addition, drawing on 10 years of research on attention in an interdisciplinary setting (marketing, psychology, economics, vision science and cognitive neuroscience) I will develop recommendations how to effectively use eye-tracking for the study of consumer attention, answering, among others, the following questions: What are different eye-tracker options? How to design eye-tracking experiments? What is the appropriate sample size? How to obtain clean and useful data? What are the key dependent variables? How can we relate attention to other constructs of interest?

### **Coordination of Attention: Eye Fixations, Pupil Diameter, and Head Distance, Respond to Goals and Predict Memory**

#### **EXTENDED ABSTRACT**

The visual attention system developed to protect people from being overloaded by the massive stimulation in the environment, to select stimuli from this environment that are relevant to goal pursuit, and to coordinate attention to these stimuli for successful goal completion. These functions are of even more crucial importance in today's overstimulated marketing environments. This research proposes and provides an initial test of a model of attention coordination, which focuses on the role of three key observable parameters of the visual attention system: head position, eye fixations, and pupil diameter. Prior attention research in marketing and cognitive psychology has emphasized eye fixations during exposure to stimuli such as advertising or brand packaging. Early research in marketing on the role of the pupil diameter during ad exposure had inflated and perhaps biased claims and has not yet been replicated. No research to date has examined the role of the head position during ad exposure, despite the fact that the head position is under conscious control and calibrated during goal pursuit to have optimal viewing position. The present research is the first to examine the relationships between and

coordination of these three observable parameters of the visual attention system during ad exposure: eye, pupil, and head.

Two experiments are reported in which task goals were systematically varied, eye fixations, pupil dilation and the distance between the head and the stimulus were recorded, and advertising memory was subsequently measured.

A multi-level mixed response structural equation model was estimated to examine the relationships between the attention and memory measures, and their response to the task goals. The model makes it possible to disentangle relationships between the attention measures at the participant-level, due to person and goal characteristics, and relationships between the measures at the ad-levels, due to specific ad features.

Experiment 1 is a re-analysis of prior work with new measures and models. In the experiment, 220 participants saw display ads under one of five different task goal conditions, namely free viewing, brand learning, brand evaluation, ad memory, and ad attractiveness. After exposure, implicit memory was assessed with a brand identification task. Experiment 2 is new. In it, 203 participants saw display ads under one of two different task goal conditions, namely ad informativeness and ad attractiveness. After exposure, both implicit and explicit memory was assessed.

Random-ANOVA models show that, as expected, most of the variation in eye fixations is between ads. This reflects that the pictorial (intra-class coefficient  $\rho$ , respectively, .330 in experiment 1, and .228 in experiment 2) and text ( $\rho$  is, respectively, .311 and .219) in some ads receive much more fixations than others, independent of individual and task differences between participants. In contrast, most of the variation in head distance to the pictorial and text ( $\rho$ , respectively .792 and .584 in experiment 1 and .798 and .577 in experiment 3) is between participants. Also, variation in pupil diameter is predominantly at the participant level rather than the ad level (in all cases,  $\rho$  is greater than .880). This shows that in our experiments, the pupil varies only to a small extent between ads but varies mostly between participants. How goals specifically affect the attention measures, and whether the differences between ads predict down-stream communication effects was examined next.

Model estimations reveal that task goals have modest but reliable effects on the attention measures. Relative to the free viewing condition, the other task goals activate participants in experiment 1 to move the head a little closer to the ad, about one centimeter. In study 2, the informativeness goal activates participants to move the head a little closer as well. These effects are independent of the influence of task goals on eye fixations. All goals in experiment 1, and the informativeness goal in experiment 2 lead to more fixations of the text and on the picture of the ads. Pupil diameter responds less systematically to the task goals. Although no reliable task goal effect on pupil diameter was observed in experiment 1, a reliable effect was observed in experiment 2, probably due to the greater statistical power in the latter experiment. Importantly, there were reliable effects of the attention measures on implicit and explicit memory, independent of the direct goal effects. Specifically, a larger head distance to the text and a shorter head distance to the pictorial, larger fixation frequencies on the pictorial, and independent of these effects, a smaller pupil diameter all predicted better implicit memory in both experiments. Also, higher fixation frequencies and smaller pupil diameters predicted better explicit memory, even while controlling for task goals and the false alarm rate.

These findings are the first to show how three observable parameters of the visual attention system vary systematically between consumers and between ads, how they are contingent on task goals, and predictive of memory. They reveal that "attention coordination

takes place in the head” but in quite unexpected ways. A small but reliable movement of the head of about one centimeter and an even smaller change of less than a millimeter in the pupil diameter predicted better memory. The findings were obtained across a combined sample of over 400 participants and multiple ads from different categories.

### **Shopper Eye-Cue: Understating the In-Store Decision Process with Field Eye-Tracking Data**

#### **EXTENDED ABSTRACT**

Recent research has found that the majority of grocery purchase decisions are made in the store (e.g., Inman, Winer, and Ferraro 2009). Yet, our knowledge about in-store decisions is mostly inferred from consumers’ self-reports and the products listed on their receipt (but see Hui et al. 2013; Stille, Inman, and Wakefield 2010; Hoyer 1984). We still know little about the consideration process that happens between the start and the end of the shopping trip. This paper addresses this gap by exploring the role of visual attention and engagement in in-store decisions.

Research has shown that visually attending to a stimuli increases the probability of choosing that stimuli (Janiszewski, Kuo, and Tavassoli 2013; Pieters and Warlop 1999). Drawing on the literature on choice overload (Iyengar and Lepper, 2000) and visual clutter in ads (Pieters, Wedel, and Batra 2010), we propose that perceived assortment size in the store will moderate this effect such that greater perceived variety coupled with a greater number of fixations will be associated with a lower number of unplanned purchases since it will be more difficult to make a choice as the number of considered alternatives increases. Furthermore, physically touching a product has been related to unplanned purchase conversion (Hui et al. 2013). We aim to extend this finding by suggesting that shopping enjoyment will strengthen this effect since consumers who construe shopping as fun will be more receptive to in-store stimuli. Previous research has demonstrated that, as the shopper’s mental budget for the trip depletes, the number of unplanned purchases decreases as well (Stille et al. 2010). We expect that this mechanism will hold even at the category level and suggest that the higher number planned purchases (which deplete shopper’s mental account) will crowd out unplanned purchases.

To test these predictions, we analyzed a dataset containing the trips of 158 US shoppers who wore eye-tracking glasses while shopping. The field study was completed in 2012 by the Point of Purchase Advertising International (POPAI). The dataset consists of number and type of purchases (unplanned, planned, planned not purchased) for each shopper for each category considered (1034 data points), number of informational fixations (i.e. fixations related to orientation or reviewing the label), fixations on the price tag, product touches (i.e. touches to examine the product as well as to return it to the shelf), and several self-reported measures about shopper, trip and store characteristics (e.g., money pressure, perceived store variety, etc.)

Due to the nested structure of the data, we conducted a hierarchical model with number of unplanned purchases as the DV and shopper as the grouping factor. We find that shoppers who allocated more visual attention to the category had a greater number of unplanned purchases ( $\beta=.01$ ,  $p<.001$ ). More importantly, this effect is moderated by perceived product assortment – in stores rated as offering a greater abundance of products, the higher number of fixations is associated with fewer unplanned purchases ( $\beta=-.01$ ,  $p<.001$ ). This suggests that during the orientation stage, abundance of choice may cause confusion and deter choice. As expected, product engage-

ment (i.e. number of touches) is associated with higher incidence of unplanned purchases ( $\beta=.11$ ,  $p<.001$ ) and this effect is further enhanced for shoppers who report higher enjoyment from shopping ( $\beta=.02$ ,  $p=.01$ ). Interestingly, we find a significant positive interaction between perceived assortment size and product touches ( $\beta=.04$ ,  $p<.001$ ) such that product touches have a stronger effect on purchase conversion when the store was perceived as carrying a wide selection of products. We speculate that, once the shopper has oriented herself and identified a need, assortment variety helps seal the deal by ensuring preference match. Finally, we find that the number of planned purchases in the category decreases the number of unplanned purchases ( $\beta= -.33$ ,  $p<.001$ ).

In the second part of our paper, we focus on an in-store decision making process that can only be studied by observing the shopping trip through the eyes of the shopper – failed product engagements (i.e. instances when the shopper changed her mind and returned a product to the shelf). There were 334 occurrences of failed engagement in our field data ( $M=2.30$ ,  $SD=2.04$ , ranging from 1 to 13). The two categories with the highest incidence were fresh produce and refrigerated meat and seafood, suggesting that at least some of these rejected considerations may be driven by freshness concerns.

In order to explore what factors predict these returns, we ran a hierarchical model with number of returns per category as the DV and shopper as the grouping variable. We explored the effect of two main groups of factors – price salience and time resources allocated to making a decision. We hypothesized that attention to price and longer deliberation will result in more returns since they imply that the shopper processed the decision in more depth. Consistent with our predictions, we find that the number of price fixations is positively related to the number of returns ( $\beta=.16$ ,  $p<.001$ ). Furthermore, shoppers who indicated they are under greater money pressure (i.e. chronic price salience) were more likely to change their minds ( $\beta=.18$ ,  $p=.05$ ). These effects were qualified by a significant interaction such that shoppers who were chronically pressed for money and paid more attention to the price tags had more returns ( $\beta=.07$ ,  $p=.01$ ). Further, we find that the total number of fixations (a proxy for deliberation time) is positively associated with failed engagements ( $\beta=.01$ ,  $p<.001$ ). Finally, the number of purchased products (also related to time spent in the category) is positively associated with the number of returns ( $\beta=.13$ ,  $p=.03$ ).

In conclusion, our research provides unique insight into the in-store decision making process using field data. We show that visual attention and product engagement are associated with purchase conversion in a complex way – abundance of choice can decrease the positive effect of fixations during the orientation phase but enhance it during the purchase selection phase. Furthermore, we find that price saliency and time deliberation increase the number of times the shopper “changes her mind” and returns a product to the shelf.

### **Media Multitasking and Visual Attention: Switch Triggers in Context and Content**

#### **EXTENDED ABSTRACT**

Media multitasking is fast becoming the modal form of entertainment media consumption for consumers. In Nielsen data released in 2010, 59% of respondents reported using the television and internet simultaneously, with an estimated 34% of their internet usage occurring concurrently with television. Yet there remains calls in the literature for foundational experimental work in the area (McDonald and Meng 2009, as well as observational work using natural stimuli (Jackel & Wollscheid 2007). The current research argues that before



we can begin to build models of why consumers engage in media multitasking and how multitasking affects traditional marketing outcome variables, we must first establish *what* exactly media multitasking behavior looks like. Two studies using video observation and direct eye-tracking identify multitasking attentional patterns and begin to outline a basic framework of how context and content can modify multitasking behavior.

Unfortunately, self-report measures are ill-suited to explore this issue. Media consumption is habitual with little self-awareness (Saling & Philips 2007), and routinized mental scripts guide media selection and attention (Adams 2000). Prior work has also explored 'attentional inertia' within media (Anderson, Choi & Lorch 2007), and consumers have little real-time insight into their media consumption behavior. Applied multitasking research from educational fields is of limited use in entertainment environments, as it largely focuses on switching costs and performance degradation in splitting attention between two goal-driven tasks. In addition, people overestimate their ability to multitask, as self-reported good multitaskers are less able to focus and more easily distracted by irrelevant stimuli (Ophir, Nass & Wagner 2009). This suggests that our lay theories of multitasking behavior has little relation to our actual behavior, and there remains a strong need to establish basic patterns of multitasking activity.

In the first study, 42 participants were brought into the lab, seated in front of a laptop and television with remote, and told they had 30 minutes to use both however they wanted. Their behavior was recorded using high-definition video cameras that captured whether their point-of-gaze was on the laptop monitor or television. This attentional record was then matched frame-by-frame with the content on both screens to explore how different forms of content may encourage or discourage switching. After the 30 minutes were completed, they were asked to fill out a self-report survey of their multitasking behavior.

Results show that the average gaze duration between switches was quite low, with roughly 50% of gazes lasting less than 1.5 seconds on the television and less than 5 seconds on the computer. Indeed, participants switched an average of 120 times, or over 4 switches a minute, while they only recalled 15 switches in their post-hoc survey, and post-hoc descriptions of the strategies they used to multitask had no relationship with what the video data revealed. Interestingly, switching patterns appeared no different for television or commercial content. Instead, there was evidence of a strong 'switch trigger' effect for break points either from show to commercial or vice versa, with switching rates dropping quickly after 5 seconds. This effect also occurs on the computer, with far more switches occurring within 5 seconds of a new webpage versus afterwards. The increased switching at breakpoints was also not directionally agnostic, with a strong bias towards switching to the computer from the TV regardless of whether the break point was show-to-commercial or commercial-to-show.

A second study used eye-tracker analysis to explore multitasking behavior in more detail. A single computer was used where a television show (*The Life of Birds*) was displayed on the left side of the widescreen monitor while a series of interactive spring break travel webpages were displayed on the right. Assistants coded the TV video at 30 frames per second on over 100 content variables, such as "human figure present," "movement from left to right," "camera movement," and so on. An ASL eye-tracker system recorded point-of-gaze and fixation data that could then be mapped to the stimuli. Three conditions were run across 60 participants; a multitasking condition where both the TV and web content were available, and two monotasking conditions where only the TV or web content were available.

Results show that motion in the non-attended medium encourages switching towards the media, but does not discourage switching away when the motion is taking place in the current media. TV audio was ineffectual in generating switching towards the TV, but dialogue exhibited attentional capture and discouraged switching away from the television media. Similar to the first study, natural breaks in the media guided switching; when participants clicked to load the next webpage, their eyes moved to the TV content, and remained there until the next scene change gave them freedom to move back. And compared to the monotasking conditions, simultaneous media presentation not only generated split attention, it also led to shorter fixations and increased saccadic movement within each media. Interestingly, followup analysis using Fast Fourier Transformations did not find evidence of an internal driver of switching, suggesting that switching behavior is largely in response to external media trigger rather than any internal pressure or "need to switch."

In conclusion, this work establishes a ground-level picture of media multitasking behavior through video observation and eye-tracking analysis in a controlled laboratory environment. Switching was shockingly frequent and constant, with natural breaks in the media generating large amounts of switching behavior. Switch triggers such as motion and audio cues showed differing effects in their ability to generate switches towards media versus discourage switching away from media, and media multitasking generated increased visual movement within a media in addition to attentional shifts between media. Across both studies, objective recorded behavior shared little in common with participants' post-hoc behavioral recall, suggesting that further work must maintain direct observational techniques, and traditional survey and self-report measures may be ill-suited for multitasking research.

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# Becoming a Saver: Benefits, Obstacles, and Aids

Chairs: Eesha Sharma, Dartmouth College, USA  
Abigail B. Sussman, University of Chicago, USA

## **Paper #1: A Penny Saved is a Partner Earned: The Romantic Appeal of Savers**

Jenny Olson, University of Michigan, USA  
Scott Rick, University of Michigan, USA

## **Paper #2: A Dollar Saved is not a Dollar Earned: Financial Deprivation Shifts Focus to Earning Over Saving**

Eesha Sharma, Dartmouth College, USA  
Punam Anand Keller, Dartmouth College, USA

## **Paper #3: When One Error Elicits Another: Unnecessarily Costly Reactions to Personal Fault**

Abigail B. Sussman, University of Chicago, USA  
Rourke O'Brien, Harvard University, USA

## **Paper #4: The Effects of an Emergency Reserve on Self-Control Performance**

Marissa A. Sharif, University of California Los Angeles, USA  
Suzanne Shu, University of California Los Angeles, USA

### **SESSION OVERVIEW**

Common wisdom suggests it is prudent to budget and save; yet, savings rates among Americans have been declining since the 1980s (Bureau of Economic Analysis 2014; Economist 2013; McCully 2011). In light of this pattern, gaining a deeper understanding of consumers' financial decision-making process grows increasingly important. Indeed, the topic has been of mounting interest to consumer researchers, practitioners, and policymakers alike (e.g., Fernandes, Lynch, and Netemeyer 2014; NEFE 2014). Accordingly, this session aims to disseminate and stimulate discussion about recent findings pertaining to causes and consequences of consumers' saving behavior—specifically, perceptions of savers (Paper 1), obstacles that may hinder saving (Papers 2 and 3), and potential strategies to encourage more prudent budgeting (Paper 2 and 4).

In paper 1, Olson and Rick suggest that saving can reap interpersonal benefits as well as financial ones. Specifically, saving enhances perceptions of self-control and hence attractiveness; consequently, people who save are more romantically appealing. Papers 2-3 examine obstacles that may prevent people from spending prudently, including attention to saving and reactions to financial shocks. Specifically, paper 2 (Sharma and Keller) suggests that temporary feelings of financial deprivation increase the perceived security gained from earning rather than saving and in turn shift people's focus from saving opportunities to earning opportunities. Further, paper 3 (Sussman and O'Brien) examines how people spend in response to negative income shocks and suggests that people are likely to spend more than necessary when they are responsible for the shocks. Fortunately, strategies exist to encourage budgeting behavior, and paper 4 (Sharif and Shu) discusses one of them. Specifically, the authors suggest that creating an emergency reserve may improve progress towards goals, and may be useful in both financial and non-financial domains which require self-control.

Thus, although saving behavior may be attractive for multiple reasons (Olson and Rick), people might not be as focused on saving opportunities when they feel worse off financially (Sharma and Keller), and when they feel personally responsible for their adverse state (Sussman and O'Brien). However, considering older age, potential emergency expenses, and the benefits of saving can boost saving tendencies (Sharma and Keller), and having an emergency

reserve in a budget can improve self-control performance (Sharif and Shu). By utilizing these tactics, it may be possible to both improve the attractiveness of our financial position as well as our interpersonal standing.

Together, these papers examine a range of topics pertaining to consumer budgeting and saving, and may stimulate further questions and discussion about (1) factors that might hinder saving behavior, (2) factors that might encourage saving behavior, and (3) benefits to consumers who save. We believe this session will be of interest to researchers in many areas of study, including consumer financial decision making, economic psychology, goals, mental accounting, subjective well-being, and transformative consumer research.

## **A Penny Saved is a Partner Earned: The Romantic Appeal of Savers**

### **EXTENDED ABSTRACT**

What we consume conveys information about who we are. For example, in romantic contexts, men who are motivated to find a romantic partner are especially likely to buy luxury goods to signal their wealth (Griskevicius et al. 2007). This tendency echoes recent advice from the *Wall Street Journal* to (essentially) "burn a big pile of money on the first date," as a signal of wealth (Oyer 2014). Indeed, when women only have information about a single purchase, they tend to view men who recently purchased a luxury good (a Porsche) as more attractive than men who recently purchased a more basic good (a Honda), presumably because the luxury purchase is a better signal of financial viability (Sundie et al. 2011, study 4).

However, in almost any context, people will have more information about potential mates than a single purchase. The multiple consumption cues present in many contexts (e.g., clothing, accessories, phones, laptops, and cars) are likely to convey information about one's general spending habits (that is, whether one is generally a "spender" or a "saver").

We propose that people's general tendency to spend or save is likely to influence the inferences others draw about them, and thus their initial romantic appeal. Specifically, we hypothesize that savers are likely to be viewed as more attractive than spenders for both economic and psychological reasons. Economically, savers are presumably more likely to accumulate financial resources. Psychologically, savers may be viewed as possessing greater general self-control (applicable across many domains). For many people, saving requires actively suppressing the urge to spend. Individuals who possess self-control in one domain may be assumed to possess it elsewhere (e.g., savers may be assumed to be more likely to exercise and maintain a healthy diet). To the extent that general self-control makes one a better mate (e.g., by reducing the likelihood of cheating or saying hurtful things), savers should be viewed as more attractive than spenders.

Of course, our primary question of whether and why savers are viewed as more attractive is only relevant if people can accurately and easily distinguish between savers and spenders in the first place. Thus, our initial study sought to demonstrate that people can make this distinction in real time. We brought in groups of unacquainted participants to the lab and asked them to privately diagnose themselves as a saver or spender. We then asked participants to look around the room and guess, without discussion, whether the other participants were savers or spenders. Participants earned \$1 per cor-

rect guess (i.e., a guess that matched the self-diagnosis). Participants were 16% more likely to correctly guess that a saver was a saver than to incorrectly guess that a spender was a saver (significantly greater than the 0% chance baseline). These snap judgments displayed accuracy on par with the accuracy of common snap judgments documented in the personality literature (cf. Vazire et al. 2008).

Next, we examined whether, why, and when savers are romantically preferred to spenders. To carefully test our hypotheses and control for confounding factors that may be correlated with saving versus spending habits, our general experimental paradigm utilized online dating profiles in which targets disclosed their saving versus spending habits. (Describing your spending habits is common on popular dating websites such as eHarmony; Lieber 2010.)

In experiment 1A, we presented participants with an opposite-sex dating profile and manipulated whether the potential mates described themselves as a “saver” or a “spender” in a variety of ways (e.g., saving described as “love to save” or “hate to spend”). Participants reported how attracted they were to the potential mate. As predicted, there was a robust preference for savers over spenders (as well as “control” targets who did not describe their spending habits), regardless of how these habits were described. Experiment 1B demonstrated that savers are romantically preferred to spenders for both dating and longer-term relationships, though this preference does not persist within the context of one-night-stands (where saving versus spending habits are not actively considered). Experiment 1C extended beyond the domain of romantic attraction to physical attraction. A novel and direct implication of our proposed underlying mechanism (perceptions of general self-control, which encourages healthy practices) is that, when there is any ambiguity about true physical attractiveness, savers should be expected to be more physically attractive and viewed through this biased lens. As predicted, savers were perceived as being more physically attractive than spenders. We also found that savers were viewed as significantly less exciting than spenders (presumably due to the prudence encouraged by general self-control), ruling out a halo effect interpretation for the physical attractiveness finding.

Experiments 2A and 2B sought to directly establish evidence for the underlying mechanism of self-control perceptions. Experiment 2A demonstrated that savers benefit from greater perceived financial viability and greater perceived general self-control, but that perceived self-control was the primary mediator between spending habits and romantic attractiveness. Experiment 2B added converging process evidence by holding spending habits constant and manipulating perceived self-control directly. Spenders who otherwise appear high in self-control were viewed as just as attractive as savers, with both types exceeding typical spenders (low in general self-control).

In experiments 3 and 4, we examined dispositional and situational factors that may moderate the romantic appeal of savers. Potential mates high in general self-control possess a number of attractive attributes, but choosing such a mate may require sacrificing stimulation. Consistent with the notion that general self-control favors prudence over fun, we found that traits (e.g., boredom susceptibility; Zuckerman 1979) and states (e.g., situational need for excitement) that increase the desire for stimulation decrease the preference for savers.

In addition to the obvious economic benefits, our work documents interpersonal benefits of saving: savers are viewed as possessing greater general self-control, which enhances both their perceived romantic and physical attractiveness. Of course, self-control is not always desired in a prospective mate: dispositional and situational forces that increase the need for stimulation attenuate the relative ap-

peal of savers. Thus, savers may win in the mating market, but only when potential mates do not crave excitement.

## **A Dollar Saved $\neq$ a Dollar Earned: Financial Deprivation Shifts Focus to Earning Over Saving**

### **EXTENDED ABSTRACT**

Many people do not save despite knowing how and why they should save, and common explanations point to demographic and individual difference variables: lower income, younger age, lower education, lower financial literacy, self-control (e.g., Karlan, Ratan, and Zinman 2014). However, these explanations cannot address why older, wealthier, and more educated people also do not save. We suggest one reason why individuals do not save (and hence why it might be challenging to encourage them to do so): People are susceptible to transient states of deprivation, which shift their focus to earning rather than saving. Five studies demonstrate that financial deprivation enhances the perceived security associated with earning rather than saving, which in turn reduces people’s focus on saving opportunities in favor of earning opportunities.

Study 1 examined the correlation between perceived financial deprivation and financial security gained from earning over saving. Participants responded to the following measure: “I would feel more secure about my financial future if I” (7-pt scale; 1 = saved more, 7 = earned more) and rated their financial position using a version of Sharma and Alter’s (2012) subjective financial well-being scale. The worse participants felt financially, the more they felt that earning rather than saving would provide a greater sense of financial security,  $r(143) = -.29, p < .0001$ .

In Study 2 and the subsequent studies, we manipulated financial deprivation by asking participants to describe a time they felt they did not have enough money (deprived) or had more than enough money (flush). Participants then indicated the number of hours in a day they preferred to spend on two target activities (earning, saving) and filler activities. The ratio of time participants allocated to earning versus saving was the DV. As expected, this ratio was higher among deprived ( $M = 3.89, SD = 2.91$ ) than flush ( $M = 2.76, SD = 2.39$ ) participants, Mann-Whitney  $U = 791, p = .039$ .

In Study 3, we manipulated financial deprivation, measured participants’ selection between two jobs, and tested whether the effect of deprivation on job selection operated via feelings of financial security. The two jobs both offered a \$4,000 increase in income, but differed in the source. In one job, the increase was described as coming from a bonus of \$5,000 with an additional transportation expense of \$1,000 (earning-framing) whereas in the other job, the increase came from a bonus of \$2,000 and a \$2,000 decrease in transportation expenses (saving-framing). The percentage of participants selecting the earning-framed job was marginally higher in the deprived (70.2%) than flush (59.6%) condition,  $\chi^2(1, N = 268) = 3.20, p = .07$ . In addition, perceived financial security gained from earning was higher among deprived ( $M = 5.50, SD = 1.48$ ) than flush ( $M = 4.92, SD = 1.92$ ) participants,  $F(1, 266) = 7.62, p = .006$ , and this perception mediated the effect of deprivation on job choice (95% CI: .01, .26).

In Study 4, we manipulated financial deprivation and asked participants to read about a target individual seeking to improve her family’s financial position. Given that people tend to be able to save more as they grow older, we expected age to moderate the effect of deprivation on people’s focus on earning over saving. Accordingly, we varied whether the target was described as younger (30 years) or older (55 years), and asked participants to indicate whether they believed the target should earn more or save more using a seven-

point scale (1 = definitely earn more, 7 = definitely save more). We found the expected interaction,  $F(1, 317) = 5.83, p = .016$ . Follow up comparisons revealed that, in the younger-target conditions, deprived ( $M = 4.17, SD = 2.09$ ) participants were less likely to think the target should save rather than earn, compared to flush ( $M = 4.93, SD = 1.67$ ) participants,  $F(1, 317) = 8.01, p = .005$ . However, there was no difference between deprived ( $M = 5.51, SD = 1.67$ ) and flush ( $M = 5.30, SD = 1.70$ ) participants' ratings in the older-target conditions,  $F < 1$ . Critically, the age of the target had a significant effect on deprived (but not flush) participants' focus on earning over saving: Deprived participants thought it was more important for the target to save when the target was described as older ( $M = 5.51, SD = 1.67$ ) than younger ( $M = 4.17, SD = 2.09$ ),  $F(1, 317) = 21.99, p < .0001$ , whereas flush participants' ratings did not differ for the older ( $M = 5.30, SD = 1.70$ ) and younger ( $M = 4.93, SD = 1.67$ ) target,  $F(1, 317), 1.68, NS$ . These results suggest that the consideration of older age can moderate the effect of deprivation on people's 'earning-over-saving' focus.

Study 5 introduced interventions to encourage deprived people to consider the importance of saving. Since we were focused on the deprived population, we gave all participants the financial deprivation manipulation and then asked them to consider a target attempting to improve her family's financial position. A third of the participants received a scenario almost identical to that used in the younger-target condition in Study 4 (control condition), another third of participants received that control scenario plus educational information about saving ('education intervention'), and the remaining third received the control scenario plus information about unexpected emergency expenses ('emergency intervention'). The DV was the extent to which participants felt the target should focus on saving rather than earning. There was a significant effect of condition on the importance placed on saving,  $p < .001$ . Participants believed it was less important for the target to save in the control ( $M = 4.02, SD = 1.88$ ) versus each intervention condition ( $M_{\text{saving}} = 4.61, SD = 1.85, M_{\text{emergency}} = 5.27, SD = 1.64$ ), both  $ps < .01$ . Participants' beliefs regarding the financial security gained from earning, relative to the control condition, was significantly lower in the educational intervention condition ( $p = .001$ ) and marginally lower in the emergency-expense intervention ( $p = .075$ ), and feelings of deprivation (measured) affected the DV (ratings of earnings-importance) via the financial security mediator.

### When One Error Elicits Another: Unnecessarily Costly Reactions to Personal Fault

#### EXTENDED ABSTRACT

Negative financial shocks have become both more common and more severe over time (e.g., Warren, 2003), and have even been tied to an increase in personal bankruptcy claims (e.g., Zywicki, 2005). Thus, the way that people respond to these shocks has important consequences for their financial wellbeing. Existing literature in mental accounting has examined positive shocks (windfall gains), and suggests that non-economic factors related to incurring these positive shocks can influence how people spend them (e.g., Aarkes et al., 1994; Epley, Mak, and Idson 2006; Milkman & Beshears, 2009). While prior research has examined how circumstances leading to financial windfalls and corresponding emotions impact the spending of gains (Levav & McGraw, 2009), the current paper investigates the reverse: how do circumstances leading to negative financial shocks and corresponding emotions influence the payment of associated costs? Across four studies, we examine how financially equivalent negative shocks can lead to differences in debt perceptions, take-up

and repayment decisions when coupled with variations in personal responsibility and subsequent emotional reactions. Ultimately, unnecessarily costly financial outcomes will make it even more difficult for those incurring negative financial shocks to build savings.

In Study 1, 244 participants were asked to imagine situations where they encountered a negative income shock and needed to borrow money. In two cases, participants were responsible for the expense (car accident caused by their own texting while driving; and vacation travel), and in two they were not (car accident caused by another driver texting while driving; and emergency travel). Participants reported whether they would be more likely to borrow money from their friends/family or to use a credit card (1-7 scale), as well as the interest rate they expected to pay. When participants were responsible for the expense, they reported being more likely to use a credit card ( $M = 4.12$  vs.  $3.18, p = .005$  for car accident;  $M = 3.97$  vs.  $3.25, p = .005$  for travel) and expecting to pay higher interest on that card ( $M = 10.01$  vs.  $7.53\%, p = .012$  for car accident;  $M = 9.02$  vs.  $6.94\%, p = .022$  for travel).

Study 2 aimed to investigate how perceptions of the scenarios differed beyond responsibility, and how these perceptions correlated with different decisions. We presented 440 participants with the same two car accident scenarios used in Study 1, and asked them to report the highest interest rate they would be willing to pay to repair the car damage, assuming they were using a credit card for the payment. Participants were willing to pay higher interest rates when they were responsible for the expense ( $M = 10.93$  vs.  $9.57\%, p = .031$ ). They also completed the PANAS, indicating the extent to which they would feel each of 20 emotions in the situation they read about. People were most prone to associate responsibility for the accident with feelings of guilt ( $M = 4.02$  vs.  $1.53, p < .001$ ) and to associate another's responsibility with feelings of hostility ( $M = 2.26$  vs.  $2.99, p < .001$ ). Mediation analyses reveal that our measure of self-reported guilt mediates the direct effect of being in the fault condition on interest rates and our measure of hostility mediates the direct effect of being in the no fault condition.

To explore consequences of specific emotions, Study 3 manipulated them directly. Three-hundred four participants read a scenario about a costly car accident or a home break-in, and were then asked to focus on aspects of the incident that made them feel either guilty or hostile (see Small, Lerner, & Fischhoff 2006). Participants chose whether they would be more likely to borrow money to have their car fixed/possessions repurchased immediately, or wait until they had saved enough money (1-7 scale). In this situation, borrowing corresponds to a more costly behavior given associated interest payments. Participants in the guilty versus hostile condition were significantly more likely to report borrowing for an immediate remedy ( $M = 4.69$  vs.  $3.76, p = .001$ ).

Finally, to gain additional insight into how perceptions of guilt and personal responsibility may be influencing subsequent financial decisions, Study 4 examined deservingness as a possible mediator. Specifically, we hypothesized that people who felt responsible for their bad financial situation would believe that they deserved additional financial punishment. To test this possibility, we presented 139 participants with the same car accident scenarios (varying personal responsibility) used in Studies 1 and 2. Participants again reported the highest interest rate they would be willing to pay to fix their car assuming credit card payment, and also rated other measures including a four-item scale that measured beliefs about deserving bad financial outcomes. Participants were again willing to pay higher interest rates when they were responsible for the expense ( $M = 11.67$  vs.  $8.66\%, p = .012$ ). As hypothesized, beliefs that they de-

served worse financial outcomes when they caused the accident mediated this response.

Across studies, we find that personal fault can correspond to guilt about the situation and lead people to believe that they deserve subsequent negative financial outcomes. In turn, these patterns influence how people respond to identical expense shocks and differences in these responses can be financially costly beyond what economic factors would dictate. In other words, once a single misstep compromises a person's finances initially, she may be more likely to aggravate her situation by incurring additional unnecessary costs while attempting to remedy the situation, hindering her long-term ability to build savings.

### The Effects of an Emergency Reserve on Self-Control Performance

#### EXTENDED ABSTRACT

Prior research has shown that flexibility within mental budgets allows consumers to make exceptions to budget rules in order to justify indulgent choices, thus reducing self-control (Cheema & Soman, 2006). However, other research has suggested that too stringent of mental budgets can lead to self-control failure through self-control depletion and the "what the hell" effect (Muraven, Tice, & Baumeister, 1998; Polivy & Herman, 1985). We demonstrate that including an explicitly defined emergency reserve, an extra-defined amount above an initial limitation, in mental budgets helps improve self-control performance by providing a compromise between these two extremes. In four experiments, we show that including reserves within mental budgets improves self-control performance. Additionally, we reveal a moderator of our effect, the initial level of the mental budget.

In Study 1 and 2, participants imagined that they were part of a point-based weight loss program and made a series of 28 choices between different food options over two virtual weeks. After entering their demographics, they were given a fictional number of points that the average person of their characteristics consumes in a week to lose weight. Participants were then asked to estimate how many points they would use throughout one virtual week. In the No Reserve conditions, participants only made this single point estimate of total point use. In the Constrained Aim conditions, participants were asked to set a lower number of points to aim for after their initial estimation. In the Reserve conditions, participants were given lower reference points and also asked to set aside additional points in case of an "emergency" after their initial estimation. Participants in the Reserve condition used significantly fewer points than those in the No Reserve condition,  $F(1,154) = 7.19, p < .01$ , when they had standard mental budgets, while those in the Constrained Aim condition did not use significantly fewer points than those in the No Reserve condition,  $F(1,154) = 2.50, p > .1$ . Our results suggest that the harder boundaries of the emergency reserve are contributing to the increased self-control performance rather than flexibility and lower reference points alone (which Constrained Aim participants also have). However, participants who begin with deprived (poor) mental budgets in the Reserve condition did not use a significantly lower number of points than those in the No Reserve condition,  $F(1,154) = 1.38, p > .1$ , suggesting that the effect of reserves depends on having a reasonable initial budget. Study 2 (240 participants) used the same paradigm as Study 1 and found that emergency reserves in standard mental budgets: 1) reduce of self-control depletion, 2) increase perceived flexibility while still maintaining stringency, and 3) reduce the sense of failure and associated negative emotions.

In Study 3, participants were randomly assigned a time goal to type a series of CAPTCHAs (distorted images of letters that humans can read but computers cannot). Participants' goal was to finish the task within 210 seconds in the No Reserve-Easy condition, within 210 second but aim to complete the task within 180 seconds in the Aim Condition, within 180 seconds with an additional 30 seconds of emergency time available "in case they need it" in the Reserve condition, and within 180 seconds in the No Reserve-Hard condition. Participants in the Reserve condition typed CAPTCHAs at a significantly faster rate than participants in the No Reserve-Easy condition ( $b = .42, p < .05$ ). However, participants in the Constrained Aim condition did not type the CAPTCHAs significantly faster than participants in the No-Reserve Easy condition ( $b = .32, p > .1$ ), nor did participants in the No Reserve-Hard condition ( $b = .27, p > .1$ ). Study 3 thus demonstrates that participants with reserves are more motivated and thus perform better in monotonous tasks.

Studies 1-3 revealed that participants with reserves adhere more closely to the difficult reference point and perform better than participants with no reserves and an easier reference point. In study 4, we demonstrated that participants with reserves perform better than participants without reserves and the more difficult reference point if the task involves persistence in a task over time. Participants were randomly assigned a goal specifying how many days they need to complete a CAPTCHA task throughout a week. In addition to receiving \$1 daily for completing the task, participants received an additional \$5 bonus if they completed their goal. Participants' goal was to complete the task five days out of the week in the No Reserve-Easy condition, to complete the task five days but aim to complete the task every day in the Aim condition, and to complete the task every day of the week in the No Reserve-Hard condition. Participants' goal in the Reserve condition was to complete the task every day but they were also told "In case you need it, up to two days will be excused" and that they would still receive their bonus if they missed up to two days. Reserve participants were significantly more likely to receive their bonus than No Reserve-Easy Participants,  $\chi^2(1, N = 113) = 9.02, p < .01$ , Constrained Aim Participants,  $\chi^2(1, N = 115) = 4.00, p < .05$ , and No Reserve-Hard participants,  $\chi^2(1, N = 116) = 13.40, p < .00$ . Reserve participants were also more likely to complete the "easier" lower reference point goal (five days a week) than the No Reserve-Hard participants,  $\chi^2(1, N = 116) = 5.19, p < .05$ .

This paper presents an innovative strategy to improve self-control performance. While our studies were designed around self-control tasks that could be easily tested in a lab environment, the results suggest that emergency reserves have potential beneficial implications for other self-control goals, such as saving, budgeting, and spending. For example, individuals struggling to stay within a strict financial budget may feel less depleted and remain more motivated by knowing that they have set aside an emergency reserve, similar to the participants in our studies. However, this work also cautions that beneficial self-control strategies like emergency reserves can backfire for those with deprived mental budgets.

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# Compensatory Consumption: Triggers and Strategies

Chair: Monika Lisjak, Erasmus University Rotterdam, The Netherlands

## **Paper #1: Feeling Physically Short Increases Compensatory Consumption**

Gabriele Paolacci, Erasmus University Rotterdam, The Netherlands

Nailya Ordabayeva, Boston College, USA

Anika Stuppy, Erasmus University Rotterdam, The Netherlands

## **Paper #2: That's Not How I Should Feel: Emotion Profile-Inconsistent Emotions as Identity Threats**

Nicole Verrochi Coleman, University of Pittsburgh, USA

Patti Williams, University of Pennsylvania, USA

## **Paper #3: Compensatory Consumption as Self- and Social-Signaling**

Monika Lisjak, Erasmus University Rotterdam, The Netherlands

Jonathan Levav, Stanford University, USA

Derek D. Rucker, Northwestern University, USA

## **Paper #4: Socially Excluded People Value Money for What it Can Do for Them— Restore Belongingness or Control**

Echo Wen Wan, University of Hong Kong, Hong Kong

Zhansheng Chen, University of Hong Kong, Hong Kong

Kathleen D. Vohs, University of Minnesota, USA

### **SESSION OVERVIEW**

Consumers seek products not only for their functional properties, but also for their symbolic value (Belk 1988; Levy 1959). Indeed, consumers often use products to signal to the self and to others that they possess a desired trait or identity. For example, a person who wants to be perceived as high in status might drive a luxury car. Although consumers naturally use products that are imbued with symbolic properties, their propensity to do so intensifies when they feel threatened. After experiencing a threat, consumers have been shown to acquire, consume, and display products that boost a desired trait or identity. This broad set of behaviors is referred to as compensatory consumption (Lee and Shrum 2013; Rucker and Galinsky 2013).

Growing interest has focused on how compensatory consumption unfolds. That is, how do people use consumption to compensate for threats, and what principles guide their compensatory efforts? This session contributes to this body of research by a) investigating new triggers of compensatory consumption (Paolacci, Ordabayeva, and Stuppy; Coleman and Williams), and b) elucidating principles that guide people's compensatory efforts (Lisjak, Levav, and Rucker; Wan, Chen, and Vohs).

Paolacci and Ordabayeva examine a novel source of threat: experiencing physical shortness. They find that people who feel chronically or temporarily short (vs. tall) prefer products high in status. But, allowing these individuals to reinforce their identity buffers them against seeking status-related products. This suggests that perceived physical shortness poses a threat that consumers are motivated to repair. Coleman and Williams examine another source of threat: experiencing an emotion that is inconsistent with the emotion profile of the salient social identity. They show that when people experience an emotion that is inconsistent with their salient identity, they prefer and consume products that boost that identity, relative to individuals who experience an emotion that is consistent with their salient identity.

Lisjak and colleagues examine factors that influence how people compensate for threat. They show that when people are motivated to self-signal their self-worth following a threat, they prefer products that boost the self in the domain of the threat. In contrast, when people are motivated to signal their self-worth to others, they focus on their strengths and thus prefer products that boost the self in domains unrelated to the threat. Finally, Wan and colleagues build upon the first three papers by introducing the idea that sometimes people are motivated to compensate for a self-threat by preferring to keep rather than spend money. They show that when people feel socially excluded (vs. not) they experience a loss of their sense of personal control and save money as a means to regain control.

Together, these papers (all in advanced stages, comprising 14 completed experiments) provide value by exploring when and how people use consumption in a compensatory manner, and by providing insights that benefit consumers, marketers, and policy makers. We expect that this session will appeal to a broad audience interested in compensatory consumption, social identity, social status, goals and emotions.

## **Feeling Physically Short Increases Compensatory Consumption**

### **EXTENDED ABSTRACT**

Recent research has documented that physical height significantly impacts outcomes in people's personal and social life. However, no research has yet investigated whether and how the psychological experiences associated with physical height can affect people's decisions. We study whether feeling short can pose a threat to people's identity, and ultimately affect their behavior in the marketplace.

Height is a physical feature that is crucial for evolutionary fitness. In the ancestral past, being small was detrimental for survival as it entailed being inferior in the ability to gather resources and fight enemies (Freedman, 1979). Although these disadvantages are less critical today, even in modern day societies being short seems to negatively affect several life outcomes. Specifically, shorter people tend to have lower salaries, lower ranking jobs, and are generally less likely to become leaders (Egolf and Corder 1991; Frieze, Olson and Good 1990; Highman and Carment 1992; Melamed and Bozionelos 1992; Young and French 1996). Moreover, shortness triggers negative social perceptions, with studies reporting that short people are judged as less competent, confident, and successful compared to taller people (Jackson and Ervin 1992; Judge and Cable 2004; Lindeman 1999; Melamed 1994; Young and French 1996). Shorter people, finally, tend to have a more negative self-image compared to their taller peers (Brewer and Hood 1963; Riley 2009). In sum, large evidence indicates that shorter people might suffer from the actual and psychological experience of physical shortness.

In this research, we propose that feeling physically shorter than others can threaten a person's identity and social status. This feeling, that can be chronic or momentarily active, can in turn trigger compensatory behavior, such as privileging status-enhancing products in a consumption context and seeking high-power positions while interacting with others.

In Study 1 we explored whether chronic perceived height is associated with compensatory purchases of high-status products. Participants went through three scenarios in which they chose



between spending a certain amount of money on a high-status product (e.g., Armani sunglasses) and saving the money. In each scenario the participants expressed their relative preference between the two options on a scale from 1 (definitely save the money) to 7 (definitely spend the money). Afterwards the participants reported how short/tall they considered themselves to be (1 = very short, 7 = very tall) and how short/tall they felt relative to their peers (1 = much shorter, 7 = much taller). The results showed that participants who perceived themselves to be shorter had stronger preferences for spending money on high-status products as opposed to saving money. Importantly, participants also reported their actual height. Although actual height and perceived height were correlated, only perceived height predicted participants' preferences for conspicuous spending.

In Study 2 we examined the causal relationship between perceived height and compensatory behavior by considering people's preferences for a high-status role in an economic game. We manipulated perceived height by asking participants to recall three situations in which they felt short vs. tall. Participants were then explained the rules of the dictator game. These include that a sender can decide how much of her endowment to give to the receiver, who has no choice but to accept what she is given. We observed participants' preference for participating in the game as senders (a high-status role) or receivers (a low-status role). Reflecting their hypothesized stronger need to compensate, participants in the short condition were more likely to choose the role of a sender than participants in the tall condition.

In Study 3 we examined whether the opportunity to engage in self-affirmation can serve as a buffer against the identity threat induced by perceived shortness and thereby attenuate the effects of perceived shortness on compensatory consumption. We manipulated self-affirmation by asking one group of participants to rank and elaborate on personal values that are important to them in life (e.g., work, religion). Participants in the control condition were asked to rank and elaborate on several features of office chairs (e.g., cushion material, mobility). Afterwards, participants indicated their preferences for spending money on high-status products (=7) vs. low-status products (=1) in three categories (luxury vs. economy car, home decoration vs. maintenance, upscale vs. local restaurant). At the end of the survey we measured chronic perceptions of height with the measures used in Study 1. As expected, self-affirmation reduced preferences for high-status products for individuals who felt short, but not for individuals who felt tall.

Our findings contribute to the recent literature on the effects of physical and genetic traits on decision-making (Gorlin et al. 2011; Simonson and Sela 2011), by showing that physical height affects consumer decision-making. In particular, we showed that the experience of physical shortness threatens people's identity and leads to compensatory choices in the marketplace. This finding paints a less pessimistic picture of the psychological and social consequences of height. While previous work outlined that shortness seems to (inevitably) lead to detrimental life outcomes (Judge and Cable 2004), and counterproductive interpersonal coping-strategies, like aggression (Willoughby and Blount 1985), the present work illustrates compensatory strategies that are less socially harmful and could provide potent means to bolster people against the threat of feeling short. Importantly for our understanding the genetic and social causes of this phenomenon, *feeling* short affects status-seeking behaviors above and beyond *being* short. Future research should investigate the nature of the psychological process behind this effect (e.g., whether it operates with or without individuals' awareness) and whether and how the psychological experience of physical shortness

compares to other known identity threats (e.g., social exclusion). Additionally, it seems promising to identify situation- and person-dependent variables that aggravate or attenuate the threat of feeling and being physically short. This could enable researchers to suggest useful coping strategies for the consumers affected.

### **That's Not How I Should Feel: Emotion Profile-Inconsistent Emotions as Identity Threats**

#### **EXTENDED ABSTRACT**

Individuals possess identities—group level self-labels which can activate beliefs, attitudes, emotions, and behaviors providing behavioral guidance and reinforcing identity ownership (Reed et al. 2012). Research shows that consumers prefer and consume more of identity-consistent brands and products (Ahuvia 2005; Reed 2004). Recently researchers have investigated what happens when a consumer's identity is questioned or threatened. Undermining a consumer's belief in her identity performance encourages consumption to reinforce the threatened attribute (Gao, Wheeler, and Shiv 2009), as well as preferences for products that demonstrate possession of that attribute (Rucker and Galinsky 2008). Thus, when a consumer experiences an identity threat, she may engage in behaviors to "compensate" for the perceived lack of identity enactment.

We examine a new source of identity threats: experiencing an emotion that is inconsistent with the emotion profile of that identity. Social identities contain identity-relevant emotion profiles; consumers will engage in processes of emotion regulation to seek out consistent emotions while avoiding inconsistent emotions (Coleman and Williams 2013). In this research, we argue that experiencing identity-inconsistent emotions undermines identity enactment, creating a threat. We demonstrate that, compared to consumers experiencing emotion profile-consistent emotions, experiencing identity-inconsistent emotions creates greater preference for and consumption of identity-consistent products. Additionally, when consumers self-affirm (White and Argo 2009), "buffering" against the threat, these effects are attenuated. Across 3 studies, we see effects consistent with the proposition that emotion profile-inconsistency is threatening to a consumer's identity, prompting compensatory self-verification behaviors.

Study 1 used a 3 identity (athlete, volunteer, control) by 2 emotion (anger, sadness) design, to leverage the athlete-anger and volunteer-sadness emotion profiles (Coleman and Williams 2013). Participants completed a writing task, activating their athlete or volunteer identities (Reed 2004). Participants' emotions were manipulated via facial/bodily feedback (Duclos et al. 2007), generating anger or sadness. Finally, participants evaluated pairs of products; each included an identity-relevant (e.g., Adidas t-shirt, United Way hat) and identity-neutral (e.g., sunglasses) product. Relative preference for identity-relevant products measured compensatory consumption (Rucker and Galinsky 2008). A significant interaction between identity and emotion ( $F(2, 218) = 6.175, p < .05$ ) on evaluations of the athlete-relevant products emerged; when athletes experienced the emotion profile-inconsistent emotion of sadness, they had greater preference for athletic products than when they experienced anger ( $p = .034$ ). Similarly volunteers experiencing emotion profile-inconsistent anger had greater preference for volunteerism products than those experiencing the consistent emotion of sadness ( $F(2, 218) = 2.973, p < .05$ ; contrast  $p = .046$ ).

Study 2 examines whether self-affirmation (asserting personal values) will protect individuals when experiencing identity-inconsistent emotions. The study was a 2 self-affirmation (yes, no) by

3 identity (athlete, volunteer, control) by 2 emotion (anger, sadness) design, where identity and emotion were activated as in Study 1. Prior to the identity prime, self-affirmation condition participants wrote about values (Shrira and Martin 2005). The predicted three-way interaction emerged ( $F(2, 346) = 7.003, p = .001$ ); in the no self-affirmation condition, athletes experiencing sadness had a significantly greater preference for athletic products than those experiencing anger ( $p = .039$ ), while volunteers experiencing anger engaged in greater compensatory consumption than those experiencing sadness ( $p = .003$ ). However, individuals who had self-affirmed their values revealed no difference in preferences for identity-relevant products regardless of experienced emotion ( $p = .86$ ).

The final study examines the implications of identity-inconsistent emotions as a threat with actual consumption, using a 3 identity (athlete, volunteer, control) by 2 emotions (anger, sadness) by 2 water brands (H<sub>2</sub>Help, H<sub>2</sub>Sport) design. Participants' identities were activated with the writing task, then they experienced both the emotion induction (watching a 4-minute film clip pretested to elicit anger or sadness) and the consumption opportunity. During the film, they could freely drink an 8-ounce bottle of water, labeled H<sub>2</sub>Help (volunteer brand) or H<sub>2</sub>Sport (athlete brand). Water consumed (grams) was the dependent variable. The predicted three-way interaction of identity, emotion, and brand ( $F(2, 280) = 3.107, p = .046$ ) emerged. Athlete identity participants who viewed the identity-inconsistent sad clip consumed more of the athletic water (H<sub>2</sub>Sport) than the volunteer water (H<sub>2</sub>Help;  $F(1, 280) = 18.176, p < .0001$ ). When they watched the identity-consistent angry clip, this disappears; they drank equal amounts of athlete and volunteer water ( $F(1, 280) = 1.107, p > .25$ ). Further, those with an athlete identity and given H<sub>2</sub>Sport consumed significantly more when experiencing sadness than anger ( $F(1, 280) = 4.400, p < .05$ ). These results indicate athletes consumed more identity-consistent (H<sub>2</sub>Sport) water when experiencing an identity threat: viewing the sad clip.

Similarly, participants with a volunteer identity also strategically consumed water to compensate for an emotion profile-induced identity threat. Those who saw the (inconsistent) angry clip consumed more of the volunteer-oriented (H<sub>2</sub>Help) water than athletic water ( $F(1, 280) = 10.537, p < .001$ ). In contrast, when they viewed the identity-consistent (sad) clip, there was no difference in their consumption ( $F(1, 280) = .084, p > .75$ ). Those with a volunteer identity given H<sub>2</sub>Help drank more when experiencing anger than sadness ( $F(1, 280) = 7.057, p < .01$ ). Within the control identity conditions, there were no differences in consumption of the water based on either emotion or brand (all  $p > .2$ ).

Across 3 studies, with different emotion manipulations, two identities, and measures of preferences and actual consumption, we find consistent evidence that experiencing an emotion that is inconsistent with a salient identity's emotion profile can be a source of identity threat. This research demonstrates that emotion profile-inconsistency is threatening to a consumer's identity, prompting compensatory consumption. Just as with negative group stereotypes (Steele and Aronson 1995), doubting possession of an identity-associated trait (Gao, Wheeler, and Shiv 2009), or making unflattering cross-group comparisons (White and Argo 2009), emotions too can undermine identity-performance and incite compensatory consumption.

## Compensatory Consumption as Self- and Social-Signaling

### EXTENDED ABSTRACT

Consumers engage in signaling on a daily basis: they seek products, hold attitudes, and engage in behaviors to communicate information about themselves to others. This is referred to as social-signaling (Batra et al. 2000). Consumption can also be used to self-signal information (Quattrone and Tversky 1984). Thus, people occasionally consume in order to bolster their sense of self.

Consumers' propensity to engage in signaling behaviors increases when they feel threatened or insecure. Indeed, several studies have shown that after experiencing a self-threat, people are more likely to buy, use and display products that are associated with desirable traits, presumably in an effort to compensate for the threat (Lee and Shrum 2013; Rucker and Galinsky 2013; Wicklund and Gollwitzer 1981). Prior work has often examined how people respond when they feel insecure in private settings, such as receiving negative feedback in a lab experiment, which can be linked to a self-signaling motive—people want to affirm who they are to themselves. However, little is known about how people cope when they are made to feel insecure in public settings, which may elicit concerns both about the self and about how others view them. The objective of this research is to address this issue by examining how self- versus social-signaling influence the way people compensate for self-threats.

One approach people use to compensate for self-threats is to seek products that signal accomplishments and success in the domain of the threat. We term this approach within-domain compensation, as consumers seek to associate themselves with products or brands that signal strengths within the domain of the threat (Gao, Wheeler, and Shiv 2009; Levav and Zhu 2009; Rucker and Galinsky 2008; Stone et al. 1997). To illustrate, after participants received negative feedback about their intelligence, they were willing to pay more for products that signaled intelligence, relative to those who did not receive negative feedback (Kim and Rucker 2012). A second approach people use to compensate for self-threats is to associate themselves with products or brands that signal strengths in alternative important domains, unrelated to the threat (Steele 1988; Stone et al. 1997). We refer to this second approach as across-domain compensation. To illustrate, after receiving feedback that made salient their hypocritical behavior of practicing unsafe sex (vs. not), participants were more likely to donate money to a charity organization for homeless people in an effort to boost their views as altruistic and generous individuals (Stone et al. 1997).

We propose that when people feel insecure in private settings they will be motivated to self-signal repair and will thus prefer to compensate within-domain, relative to control participants (see also Gao et al. 2009; Stone et al. 1997). This is because within-domain compensation provides the most aligned means of addressing the threat. However, products that can self-signal repair may signal to others one's vulnerabilities. Indeed, if one were to engage in within-domain compensation others may question their competencies in the domain of the threat. Thus, we suggest that when people feel insecure in public settings, they will be more inclined to compensate across-domain because of their motivation to impress others.

Experiment 1. Participants were first threatened in the domain of intelligence either in a public or private setting. Specifically, participants were asked to recall a time in which they did not feel as intelligent as they wanted to either when they were with others or when they were alone. Participants in the control conditions were asked to recall a neutral episode that occurred either when they were with others or when they were alone. Next, as part of

an ostensibly unrelated task, participants were asked to indicate their preference between an intelligence-related product (within-domain compensation) and a status-related product (across-domain compensation). Compared to control participants, those who felt insecure about their intelligence and were in the private condition, preferred the intelligence-related product more. However, participants who felt insecure about their intelligence and were in the public condition preferred the across-domain product more, relative to control participants.

Experiment 2. Experiment 2 provides evidence for the psychological process that underlies our findings in Experiment 1 by showing that social-signaling motivates people to compensate across-domain only among those who are concerned with how they appear in front of others (i.e., high self-monitors), but not among those who are less concerned with how they appear in front of others (i.e., low self-monitors). Participants were either publicly threatened in the domain of intelligence or not. They were then asked to indicate their preference between an intelligence-related product (within-domain compensation) and a status-related product (across-domain compensation). Finally, participants completed the self-monitoring scale (Snyder and Gangestad 1986). Participants who were threatened publicly showed a greater preference for the across-domain product relative to control participants, but only when high in self-monitoring and not when low in self-monitoring.

Experiment 3. The final experiment provides further evidence for the underlying process by measuring people's concern to impress others. Participants were either publicly threatened in the domain of intelligence or not. Then, they were asked to indicate their motivation to impress others. Finally, participants indicate their preference between an intelligence-related product (within-domain compensation) and a creativity-related product (across-domain compensation). Results showed that when people experienced a threat publicly they preferred to compensate across-domain relative to control participants. Furthermore, the motivation to impress others mediated this effect in the public threat condition but not in the control condition.

As a whole, this research provides a first attempt to systematically examine the effects of self-signaling and social-signaling on compensatory consumption. The implications of this research for the broader topic of compensatory consumption and signaling are discussed.

### **Socially Excluded People Value Money for What it Can Do for Them—Restore Belongingness or Control**

#### **EXTENDED ABSTRACT**

The experience of being socially excluded, isolated, or alone is unfortunate and pervasive in daily life (Baumeister et al. 2005; Williams 2007). The current research tests how social exclusion influences consumers' spending by presenting a comprehensive model whereby social exclusion threatens and therefore heightens needs for both belongingness and control.

Prior research has suggested that social exclusion fundamentally threatens one's need for belonging and often motivates people to engage in behavior that can yield new social relationships (Baumeister et al. 2005; Maner et al. 2007). For example, Maner et al. (2007) found that social exclusion increases people's interest in making new friends and working with others, and that this effect did not occur when the contexts lacked the opportunity for social connection. Along this line, Mead et al. (2011) found that excluded participants were more likely than non-excluded participants to use their money to purchase a product favored by their interaction

partner, and that this effect was not observed when there was little chance of interacting with the partner. However, by far the existing research is mute on whether or how social exclusion might affect money spending when purchasing does not present opportunities for social affiliation.

We departed from prior work by proposing that in fact being socially excluded has significant implications for spending, due to a shift in attitudes about money. We predicted that social exclusion would reduce spending when consumers perceive that a purchase will not provide the chance for social inclusion, and that this reduction in spending would be due to an intention to compensate for the loss in personal control because money is seen as a source for control.

As a basic human motivation, personal control is defined as the capacity to change events, and perceptions of personal control are closely related to perceptions of competence and mastery over the environment (Burger 1989; DeCharms 1968). Prior research has found that social exclusion robs people of a sense of personal control (Lee and Shrum 2012; Williams 2007) and motivates them to boost their sense of control (Warburton, Williams, and Cairns 2006). For example, Warburton et al. (2006) found that social exclusion increases aggression - a coercive tool used to restore a sense of control, and that allowing participants to fortify their sense of control in other means diminished this effect.

Money enables people to work the social system to obtain their needs and wants. Having money means having the ability to secure what one needs and in doing so to gain some mastery over life. The concept of money might be linked to the concept of control (Lea and Webley 2006). For example, Lachman and Weaver (1998) found that low-income (vs. high-income) people reported poorer health and lower life satisfaction and feelings of low personal control. Suggestive of the power of control, however, low-income people who felt a high sense of personal control reported health and well-being patterns on a par with high-income people. Price, Choi, and Vinokur (2002) found in a longitudinal study that reduced personal control statistically accounted for the adverse effects of financial strain on poor health. A diverse set of research indicates that people see money as a symbol and source of power (Tang 1995; Yamauchi and Templer 1982), a concept associated with control (Fast and Chen 2009).

Drawing on the two sets of literature, we posited that social exclusion would decrease spending because socially excluded people would hold on to their money to compensate for the threats to their personal control. Money in these cases is seen as a means for personal control. Moreover, we predicted that social exclusion would increase spending on products that are seen as helpful for achieving social affiliation. Here money is viewed as a means for acquiring social affiliation through the product. Five experiments tested and supported our hypotheses.

In Experiment 1 participants first played a Cyberball game that manipulated social exclusion versus inclusion (van Beest and Williams 2006), and then indicated their willingness to pay for a computer and for having a casual meal in a restaurant based on customer review about the computer and the restaurant. Socially excluded participants were willing to pay less than included participants for the computer (M<sub>exclusion</sub> = HK\$3950 vs. M<sub>inclusion</sub> = HK\$5625,  $F(1, 36) = 11.95, p = .001$ ) and for the meal (M<sub>exclusion</sub> = HK\$55.55 vs. M<sub>inclusion</sub> = HK\$67.90,  $F(1, 36) = 5.28, p < .03$ ).

Experiment 2 replicated the result in experiment 1 by 1) using a recall task (Pickett, Gardner, and Knowles 2004) to manipulate social exclusion and 2) assessing willingness to pay involving a genuine purchase of a snack. Socially excluded participants offered less money for the snack (M<sub>exclusion</sub> = HK\$6.34 vs. M<sub>inclusion</sub>

= HK\$7.31,  $F(1, 54) = 3.85$ ,  $p = .055$ ). Experiment 2 also revealed the underlying mechanism. Excluded participants viewed money as the source of personal control more so, which mediated the effect of social exclusion on willingness to pay.

Experiment 3 tested the mechanism using a moderation approach. When participants did not fortify their personal control before spending, excluded participants were willing to pay less for a computer (Mexclusion = HK\$6685.57 vs. Minclusion = HK\$7335.33,  $F(1, 89) = 3.68$ ,  $p = .058$ ). However, after recalling a time in which they had personal control, this effect did not occur (Mexclusion = HK\$7630.43 vs. Minclusion = HK\$7343.35,  $F < 1$ ).

Using participants recruited at Amazon's Mechanical Turk, experiment 4 demonstrated that when a picture frame provided no affiliation opportunities, excluded participants were willing to pay less (Mexclusion = US\$5.57 vs. Minclusion = US\$6.80,  $F(1, 152) = 4.06$ ,  $p < .05$ ). However, when this product provided the affiliation opportunity, excluded participants were willing to pay more (Mexclusion = US\$8.20 vs. Minclusion = US\$7.33,  $F(1, 152) = 2.89$ ,  $p = .09$ ). Participants' social affiliation aspiration mediated this moderation effect.

Experiment 5 replicated the results in experiment 4 using a measure equivalent to Becker, DeGroot, and Marschak's (1964) procedure to assess willingness to pay.

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# Consumer Attention: Fresh Perspectives on a Classic Construct

Chairs: Ryan Rahinel (University of Minnesota)

Melanie Rudd (University of Houston)

## **Paper #1: Attention Modes and Consumer Decision Making: Merely Attending to the Physical Environment Makes Price More Important**

Ryan Rahinel, University of Minnesota, USA

Rohini Ahluwalia, University of Minnesota, USA

## **Paper #2: Expand Your Breath, Expand Your Time: Slow Controlled Breathing Boosts Time Affluence**

Melanie Rudd, University of Houston, USA

## **Paper #3: Attention Increases Emotional Intensity**

Leaf Van Boven, University of Colorado (Boulder), USA

Kellen Mrkva, University of Colorado (Boulder), USA

Jacob Westfall, University of Colorado (Boulder), USA

## **Paper #4: The Multi-Tasking Shopper: Mobile Eye-Tracking and In-Store Decision Making**

Jacob Suher, University of Texas at Austin, USA

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### **SESSION SUMMARY**

In an increasingly cluttered world, marketers are working harder than ever for a share of consumers' attention. This task is made difficult by the fact that attention typically ebbs and flows amongst a multitude of stimuli, from memories of the past, to thoughts about the present, to simulations of the future, and to perceptions of a variety of environmental stimuli that may be far afield from those related to a current purchase decision. And yet, despite attention's status as a classic construct in consumer research, our understanding of attention as a fluid process that is often directed away from a focal marketing stimulus is underdeveloped. As such, the papers in this session report new findings that answer questions such as: "What are the novel consequences of consumers attending to different types and categories of stimuli?" and "What strategies can marketers use to shift consumers' attention to different targets?" In doing so, the papers collectively uncover new and important ways that attention shapes consumer behavior.

The first two papers study the antecedents and consequences of attending to a broad category of stimuli, namely those in the present moment. In the first paper, **Rahinel and Ahluwalia** conceptualize attention as occurring along a spectrum from *experiencing*, where one attends to the current physical environment, to *mind-wandering*, where one instead attends to thoughts, feelings, and daydreams. They find that an experiencing (versus mind-wandering) attention mode leads one to believe that a changeable attribute—price—is more likely to change, and subsequently attach more weight to it in their decisions. **Rudd** shows that slow controlled breathing is an effective way to shift consumers' attention to the present moment, which subsequently leads consumers to feel that time is more plentiful. This expanded perception of time, in turn, boosts creativity, life satisfaction, and procrastination.

The second two papers study the processes underlying and outcomes associated with attending to individual pieces of stimuli. Specifically, **Van Boven, Mrkva, and Westfall** study the link between attention and emotional intensity and find that merely attending to an emotionally neutral object leads it to be perceived as more emotionally evocative. This effect of attention on emotional intensity decays over time; however, the effect of attention on salience and memory does not. **Suher and Hutchinson** use a novel mobile eye-tracking

method to record exact point-of-focus and field-of-vision for consumers on grocery shopping trips. They propose a general model of consumer multi-tasking that captures visual attention that is distributed between current and future purchase decisions.

These projects, all in advanced stages, offer new and interesting insights into the broad effects of consumer attention. Notably, they also appeal to a broad audience, as they intersect with a variety of other popular areas in consumer behavior such as attribute weighting, emotion, time-perception, in-store decision making, and creativity. Finally, the novel methodologies, interesting outcomes, and fresh perspectives on the topic promise a great fit with the conference theme by bringing fun back to this central and classic consumer behavior construct.

## **Attention Modes and Consumer Decision Making: Merely Attending to the Physical Environment Makes Price More Important**

### **EXTENDED ABSTRACT**

At any given moment, human attention varies along a spectrum from *experiencing*, where one attends to perceptions and cognitions related to their current physical environment, to *mind-wandering* where one instead attends to thoughts, feelings, and daydreams that are decoupled from their current physical environment (Barron et al. 2011; Smallwood and Schooler 2006). In this paper, we study how such attention modes systematically alter the weight attached to price in consumer decisions. Logic from previous work suggests that being an experiencing (versus mind-wandering) mode should lead one to consider more product attributes, thus decreasing the relative weight assigned to a salient attribute like price (Chakravarti et al. 2013; Lichtenstein et al. 1988; Rao and Monroe 1988). In contrast, we find the precise opposite: that an experiencing (versus mind-wandering) mode leads one to more heavily weight price in decisions.

Our framework describes this phenomenon as a byproduct of the intersection between attention modes and the importance one places on noticing change. Since attention is allocated based on one's current goals (Pashler et al. 2001), it follows that an individual's attention mode is governed by the emphasis one presently places on environment-related vs. environment-unrelated processes. We posit here that the more relative emphasis one places on environment-related processes (leading to more relative experiencing), the more interest one places in noticing change in their environment, since change signals that one may have to modify their interactions with the environment (Rensink 2002). Building from past work (Miller and Maner, 2012; Schaller, Park, and Mueller 2003), we suggest that such interest should lead one to believe that a changeable stimulus (e.g., price) is more likely to change and, thus, assign it greater weight. Five studies support our conceptual framework.

Study 1 tests our framework in a basic context: object encoding. Participants first completed an experiencing-versus-mind-wandering (EvMW) measure, which we developed (in several preliminary studies) to capture attention mode as a trait variable. We then exposed participants to a collage that contained 12 pretested objects: four that were typically unchangeable (e.g., teddy bear), four that were typically changeable (e.g., dog), and four that were dynamically changing (e.g., animated walking man). After a seven second exposure, participants were given a recognition test that included all the items

in the collage as well as 12 foil items. As predicted, experiencers recognized more changeable objects than did mind-wanderers. There were no effects for either unchangeable or dynamically-changing objects, both of which have confirmed states of change and therefore should not show the effect. The specific pattern of means showed that experiencers treated changeable stimuli like dynamically-changing stimuli, whereas mind-wanderers treated changeable stimuli like unchangeable stimuli, thus suggesting that differences in beliefs of change likelihood may underlie the effect.

In study 2, we extended the effect to a consumer decision making context, with price as the changeable attribute. Participants completed the EvMW and then viewed an advertisement for an office chair with six attributes, including price. Participants rated whether they would consider buying the chair and, as the dependent measure, how much weight they gave to each attribute. As predicted, experiencers attached more weight to price than did mind-wanderers, and this pattern did not exist for any other attribute.

In studies 3 and 4, we tested the proposed mechanism with different categories (all-weather running shoes and desk lamps, respectively) and non-price attributes. In study 3, we manipulated attention mode by having participants read a story and put themselves in the frame of mind of the protagonist, who was described as performing an activity in either an experiencing or mind-wandering mode. We then used an ad-viewing and attribute weighting procedure, similar to that in study 2. We also measured the degree to which participants believed the price for the product would change. Results again showed that an experiencing (vs. mind-wandering) mode led to a higher weighting of price. Moreover, this effect was mediated by beliefs that the price would change. Study 4 provided more process evidence by manipulating the changeability of price. Before completing the same attention mode manipulation as in study 3, participants read a fictional *Consumer Reports* article communicating that prices were either primarily changeable or primarily unchangeable. The basic effect found in study 3 was replicated in the price-is-changeable condition, but attenuated in the price-is-unchangeable condition.

Study 5 tested the effect in a different decision making context (quality judgments), and in doing so, sought to rule out alternative explanations related to thrift motivations, construal level, and price diagnosticity. Before responding to the EvMW, participants read a description of a bottle of water and were asked to rate the quality of the water. The water was described using several attributes, with the final attribute being a low price, high price, low-reputation brand, or high-reputation brand. Results showed that experiencers predicted high-priced water to be of better quality than low-priced water, but there was no effect of price for mind-wanderers. Notably, this effect pattern did not carry over for brand (which was pretested as more diagnostic than price in this context), as *both* experiencers and mind-wanderers predicted that high-reputation branded water would be of higher quality than low-reputation branded water.

In sum, an experiencing (vs. mind-wandering) mode of attention leads one to believe that a changeable stimulus is indeed more likely to change and, therefore, attach more weight to it. This framework explains the weighting of price across the two attention modes, since price is a uniquely changeable attribute. Taken together, these theoretically counterintuitive findings shed new light on both price weighting and the underlying psychology of attention modes. More broadly, they also demonstrate how cognitive mechanisms built for the physical environment are co-opted for fundamental decision-making processes.

## Expand Your Breath, Expand Your Time: Slow Controlled Breathing Boosts Time Affluence

### EXTENDED ABSTRACT

Modern-day consumers frequently experience “time famine” (Perlow 1999): They feel there is too much to do and too little time. Unfortunately, such perceptions can take a toll on social, physical, and mental well-being (Hochschild 1997; Roxburgh 2004; Zuzanek 2004). Although science cannot expand the amount of time in each day, could it shift consumers’ perceptions of how much time they have? This research examines whether engaging in slow controlled breathing would increase consumers’ perceived time affluence and, consequently, impact their behavior and well-being.

Breathing can be either automatic or under voluntary control. Voluntary breathing can be performed either fast or slow and consists of conscious inhalation, retention, and exhalation (Chodzinski 2000). But, can slow controlled breathing increase perceived time affluence? Prior research and theory suggest so. For instance, a drug-induced reduction in breathing rate can reduce the perceived speed of one’s internal clock (Hawkes, Joy, and Evans 1962). Moreover, activities like mindfulness meditation and yoga, which generally involve slow controlled breathing, help direct the mind’s attention to the present moment (Brown and Gerbarg 2009; Brown and Ryan 2003; Kabat-Zinn et al. 1992). This is important because there is evidence that a stronger focus on the present expands time perceptions (Rudd 2013; Vohs and Schmeichel 2003). Taken together, these results suggest slow controlled breathing would increase consumers’ perceived time affluence by strengthening their present-focus.

In Experiment 1, participants completed either a slow-controlled-breathing or fast-controlled-breathing exercise. Exercises differed in the breathing rate used, but took the same amount of time to complete. Posture, method of inhalation and exhalation, and depth and force of breath also did not differ across conditions. To manipulate breathing rate, participants in the slow- [fast-] controlled-breathing condition were instructed to “breathe so each complete breath (i.e., inhale plus exhale) lasts 11 counts [4 counts]” and told the inhale should last 5 [2] counts and the exhale should last 6 [2] counts. Participants in the slow- [fast-] controlled-breathing condition completed 3 “sets” of 7 eleven-count-long breaths [19 four-count-long breaths]. Because one could argue that any observed differences in time perceptions might be due to differences in arousal, feelings of arousal were measured after the breathing exercise. However, because both fast and slow controlled breathing exercises are often immediately followed by a physiological and psychological calming (Brown and Gerbarg 2005; Cappel and Holmes 1984; Kaushik et al. 2006; Khemka, Ramarao, and Nagarathna 2010), arousal was not expected to differ across conditions. The other dependent variables were temporal focus (i.e., the extent participants were currently focused on the past, present, and future) and perceived time affluence (i.e., the extent participants currently felt “pressed for time”). Consistent with the hypotheses, those who engaged in slow (vs. fast) controlled breathing were more present-focused and felt less pressed for time. Moreover, a mediation analysis revealed that slow controlled breathing expanded perceptions of time by heightening people’s focus on the present. Importantly, arousal could not account for these effects.

One’s sense of time availability is often an indicator of psychological health, with mental health and well-being suffering when time feels compressed (Robinson and Godbey 1997; Roxburgh 2004). Thus, Experiment 2 tested whether slow controlled breathing would boost life satisfaction by increasing perceived time affluence. Experiment 2 followed the same procedures as Experiment 1, ex-



cept this time the dependent variables were perceived time affluence (i.e., participants' current feelings of impatience) and life satisfaction (Kahneman et al. 2006). The results revealed that after engaging in slow (versus fast) controlled breathing, participants felt less impatient and more satisfied with life. Moreover, a mediation analysis demonstrated that those who engaged in slow controlled breathing experienced greater life satisfaction because they felt less impatient.

Prior research suggests feelings of time pressure can hinder creative thinking (Amabile, Hadley, and Kramer 2002; Andrews and Smith 1996). Therefore, Experiment 3 tested whether, by increasing perceived time affluence, slow controlled breathing would enhance creativity. For convergent validity, Experiment 3 added a control condition. After completing either the slow-controlled-breathing, fast-controlled-breathing, or no breathing exercise, participants reported their current feelings of time pressure and completed a divergent thinking task (in which they generated creative uses for a brick; Silvia et al. 2008). Creativity scores were determined by two independent raters and followed the scoring method outlined in Silvia et al. (2008). The results revealed that those who engaged in slow (versus fast or no) controlled breathing felt less pressed for time and were more creative. Moreover, mediation analyses demonstrated that those who engaged in slow controlled breathing were more creative because they felt less pressed for time.

A link between greater perceived time and greater procrastination is also suggested by prior research (Shu and Gneezy 2010; Vodanovich and Rupp 1999). Thus, Experiment 4 examined whether, by boosting perceived time affluence, slow controlled breathing would increase procrastination tendencies. After completing either the slow-controlled-breathing, fast-controlled-breathing, or no breathing exercise, participants reported the extent they currently felt pressed for time and the extent they would procrastinate in two scenarios (Scenario 1: They imagined they had just been assigned a 5 page paper that was due in 7 days and reported on what day they thought they would complete it; Scenario 2: They imagined they had to fill-out a 1 page form before the end of the week and reported on what day they thought they would return the completed form). The results revealed that participants who engaged in slow (versus fast or no) controlled breathing felt less pressed for time and reported a greater tendency to procrastinate in both scenarios. Moreover, mediation analyses demonstrated those who engaged in slow controlled breathing had greater procrastination tendencies because they felt less pressed for time—suggesting the consequences of expanding perceived time are not always positive.

In conclusion, slow controlled breathing strengthens one's focus on the present, and this greater present-focus can increase perceived time affluence. Importantly, this greater perceived time affluence has important consequences for consumer behavior and well-being: it boosts life satisfaction, enhances creativity, and heightens procrastination tendencies.

### Attention Increases Emotional Intensity

#### EXTENDED ABSTRACT

A growing number of studies have shown that attention influences emotional responses. Most of these previous studies have been designed to examine whether attention is necessary to produce emotional reactions. They have shown that introducing attentional distractors, attentional load, or shifts of attention away from a task decrease emotional responses to stimuli involved in the task. Affective reactions are weaker under high and moderate levels of attentional load compared to low load (Pessoa, Padmala, and Morland 2005). We intend to address a related question with more practical

significance and applications: Does focused attention increase the intensity of emotional reactions? Does this increase in emotion have downstream consequences for variables like interest, memory, and choice? Our results seek to build on work showing that emotional responses are malleable and can have important effects on memory and decision making.

Past work has examined the emotional consequences of differential attention using distractor paradigms. Raymond, Fenske, and Tavassoli (2003) randomly assigned stimuli to serve as either targets or distractors in a perception task. Stimuli which served as distractors were subsequently rated lower on self-report measures of emotional tone (i.e. "cheeriness") compared to target and neutral stimuli. Dickert and Slovic (2009) used a similar paradigm, presenting pictures of humanitarian crisis victims either as focal targets or as distractors. Participants reported less emotional sympathy for the victims assigned as distractors compared to those assigned as targets. The attention manipulation had downstream consequences. Participants were less willing to donate money to help victims who had been randomly assigned as "distractors". These previous studies all demonstrate that the emotional intensity of unattended stimuli can decrease.

The current studies extend this work in a variety of ways, showing for the first time that directed attention can increase emotional intensity, and that attention also increases perceived distinctiveness and salience. They also demonstrate that attention has long-term effects on the processing of images (study 2). Finally, study 3 demonstrates applications to person perception and decision-making.

Across three studies, directed attention increased the intensity of emotional reactions to images. Participants were presented with a slideshow of images and were exposed to each image for the same duration but were instructed to attend most closely to one randomly-assigned image. Afterwards, they rated each image on emotional valence and intensity. They also completed a free recall task to assess memory, and the perceived salience of each image was measured. Study 3 added measures of choice and judgments about the stimuli, examining whether attention influences decisions, perhaps via its effects on emotional intensity.

Following the attention manipulation, participants judged the image they attended to as more emotionally intense than other images. Images that were neutral and low-intensity at baseline showed the largest effects, increasing sharply in intensity. This attention X baseline arousal interaction was significant in both studies. Study 2 further demonstrated that attention also improves memory and the salience of the image in memory. The effect of attention on emotional intensity went away after a delay of two days. However, enhanced memory and salience of the target stimuli remained. Study 3 used a similar study design to the first two, but used images of people as stimuli and assessed whether trait judgments about each person were influenced by attention. It demonstrated that attention increases the perceived distinctiveness of each person, influences judgments of each person's trustworthiness, and may influence interest and choice.

Overall, these findings demonstrate that emotional reactions towards images and evaluations of objects are malleable, especially when those objects are initially neutral and low in emotional arousal. They also extend previous research in cognitive psychology and demonstrate that the relationship between attention and emotion is reciprocal. A large literature on attention has demonstrated that emotionally-intense stimuli capture and hold attention more than unemotional stimuli (e.g. Ohman, Flykt, and Esteves 2001), and our program of research shows that attended-to stimuli take on greater emotional intensity. These findings have clear implications for marketing and consumer research. Brand names and products which are

initially neutral can become more emotionally-intense and evoke stronger reactions in consumers after being repeatedly attended to. Advertisements which are able to best capture and direct consumers' attention towards their products and brands may be most successful, increasing the salience of the product and increasing interest.

### The Multi-Tasking Shopper: Mobile Eye-Tracking and In-Store Decision Making

#### EXTENDED ABSTRACT

Of all the ways to read a consumer's mind during a decision making process, the most direct is to look through her eyes to see what she is seeing. This paper examines the pattern of attention to visual stimuli throughout a whole shopping trip. We conduct a grocery field study using mobile eye-tracking technology to record consumers' exact point-of-focus while navigating the store and at the point-of-purchase. Each visual fixation is classified for its spatial and temporal position along with its visual content, such as price or brand. Using these rich data, we describe the patterns of attention throughout an entire shopping trip and propose a general model of consumer multi-tasking.

Eye-tracking technology has been used extensively in scene perception research, especially in advertising contexts. This body of work provides a broad consensus that eye-movements are informative about processes such as attention, information acquisition, and choice. While this technology has been used to "see through consumers' eyes" for decades, there has been limited work on visual attention at the point-of-purchase (Chandon, Hutchinson, Bradlow, and Young 2009). The research that has examined point-of-purchase decision making has been limited to the laboratory setting. We contribute to this pool of research by using a novel data set that captures point-of-focus data in the field.

Our data consist of shopping trips made by 6 consumers in a medium-sized U.S. grocery store, including 68 purchases and eye-tracking of all visual search during each trip. Each consumer wore a mobile eye-tracking device to record her exact point-of-focus and field-of-vision throughout a complete shopping trip. To make our quantitative analyses possible, the video data was coded in two ways by video technicians. First, for each purchased product, technicians identified the start-point of the purchase and then watched the videos frame-by-frame, recording the spatial location and content of each visual fixation over time. Each fixation was mapped onto a still "snapshot" of the purchase display to make the points-of-focus spatially meaningful. The content of each fixation was categorized as picture, brand, description, price, variety, or other. Additional variables, such as product display characteristics and within and between shopper variables were also included in our database. Second, to gain greater insight into the whole shopping process, especially product categories that were considered but did not lead to a purchase, a number of scanning segments were analyzed in their entirety (i.e., including fixations while the consumer was walking and fixations on products far from the consumer's current location). For these scanning segments, video technicians recorded the content of each fixation (e.g., product category, in-store signage, shoppers, etc.) and the distance between the fixation target and the shopper.

When making a purchase, the majority of consumers' visual attention is on graphic elements of the product (26% of fixations) or brand name (25%). Textual messages and shelf edge prices together constitute another one third of the fixations (20% for text; 13% for price). The remaining visual fixations address variety or flavor (10%) and non-price shelf-edge messages (6%). Of the six types of visual fixations, the brand name or logo dominates the beginning of most

of the purchase events. Graphic images, particularly of the product, closely follow brand identity and exceed the brand attention in the latter half of the purchase process. Attention to visual content varies widely across product categories. For instance, brand information makes up 38% of visual attention for snacks and sweets, whereas it constitutes only 22% of fixations for dairy products. Purchase duration also affects the patterns of fixations. When making longer purchases, shoppers pay more attention to price and brand information and less attention to the photo and product description.

An analysis of whole shopping trips revealed that while considering a nearby shelf or making a specific purchase, consumers are continuously monitoring the shopping environment with quick glances that fixate on objects that are further away. Some scans appear to be automatic (or even reflexive), such as people entering the aisle or approaching the shopper. Others are clearly related to planning later shopping decisions, such as glancing at more distant shelf displays and signage. State transition analysis demonstrates that shoppers tend to refixate at the same distance from the shopper 26% of the time, while shoppers refixate in a new location at least 3 feet further or closer to the shopper 68% of the time. The frequent changing of fixation distance supports our conjecture that shoppers sequentially switch between multiple tasks during the shopping trip.

Finally, to illustrate the multi-tasking nature of real-world shopping, we propose a general model of consumer multi-tasking that extends current work on specific purchase (usually eye-tracking data) and store navigation (usually shopper-view video and/or RFID cart location data) by interrelating these two areas in terms of information search and decision planning. We find that a finite mixture model with three distinct distributions explains the distribution of fixation distances better than a model that assumes a single cognitive process.

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# Antecedents and Consequences of Beliefs about Stability and Change in Identity over Time

Chairs: Rob St. Louis, University of Chicago, USA  
Oleg Urminsky, University of Chicago, USA

## Paper #1: The Belief in a Favorable Future

Todd Rogers, Harvard Business School, USA  
Michael Norton, Harvard Business School, USA

## Paper #2: Less Than We Know: The Effect of Trait Importance in Connectedness to the Future Self

Rob St. Louis, University of Chicago, USA  
Oleg Urminsky, University of Chicago, USA

## Paper #3: Belief in the Immutability of Attitudes Both Increases and Decreases Advocacy

Omair Akhtar, Stanford University, USA  
S. Christian Wheeler, Stanford University, USA

## Paper #4: Are Artworks More like People than Artifacts? Individual Concepts and their Extensions

George Newman, Yale University, USA  
Dan Bartels, University of Chicago, USA  
Rosanna Smith, Yale University, USA

### SESSION SUMMARY

Consumer behavior research increasingly recognizes the importance of identity for understanding consumer cognition and choice (see, for example, the JCR research curation “Self-Identity and Consumer Behavior”), and recent research has shown that people’s beliefs about stability vs. change in identity can have profound consequences for consumer behavior (Bartels & Urminsky, 2011, Petrocelli, Clarkson, Tormala, & Hendrix, 2010). However, much remains to be learned about both (i) the mechanisms underlying people’s beliefs about changes in identity over time and (ii) the downstream consequences of those beliefs. This session will explore both sides of this topic. Two papers, from **Urminsky and St. Louis and Rogers and Norton**, investigate some of the characteristics of people’s beliefs about identity change and stability. **Akhtar and Wheeler and Newman, Bartels, and Smith** document some of the diverse consequences of people’s beliefs about the stability of identity.

How do people think about change in their identity and the identity of others over time? **Rogers and Norton** explore people’s beliefs about change in attitudes and preferences. They find that people believe that the general population will eventually grow to share their attitudes. Furthermore, they demonstrate that a motivated projection of a favorable future, rather than a projection of the current state of affairs, underlies people’s belief that the attitudes and preferences of others will change into alignment with their own.

**Urminsky and St. Louis** examine the straightforward idea (endorsed by respondents) that if you think your most important and stable traits will change, you view your future self as less connected to the current self. However, they find people’s sense of overlap with their future self—and the future oriented decisions influenced by this overlap—does not depend more on the traits rated by participants as most important for determining one’s identity. Change in more peripheral or transient aspects (like one’s level of happiness and life experiences) is just as destabilizing to future self connectedness and forward-looking consumer decisions as change in more important aspects of one’s identity (like one’s values and personality).

**Akhtar and Wheeler** find that general beliefs about one’s own attitude immutability can have profound implications for confidence

in and motivation to advocate for a belief. These beliefs also influence one’s appraisal of how those with differing beliefs would respond to such a persuasion attempt. These two effects could cancel each other out, but by changing where participants directed their focus, Akhtar and Wheeler were able to significantly influence the effect of attitude immutability on advocacy behavior. This work probes both an important pathway through which beliefs about identity change can influence behavior and the role of attention in mediating the consequences during the act.

**Newman, Bartels and Smith’s** studies show that beliefs about human identity continuity appear to generalize to the way that people think about identity-related one-of-a-kind objects—namely, art (and not tools). Their studies find that artworks (unlike other artifacts) are restricted in the kinds of changes they can undergo and still maintain their original identity. Specifically, people care about the continuity of physical aspects of artworks because they believe the original pieces are imbued with the artist’s essence. This has downstream consequences for the value that people perceive in and are willing to pay for these objects.

Taken together, these four papers address the important next questions in the literature on stability and change in identity over time: what psychological processes give rise to our beliefs about identity change or stability, and how do these beliefs then influence other judgments, motivations, and behaviors? We believe this session will be of interest to a broad audience, including consumer and decision researchers and policy practitioners interested in the potential use of identity change manipulations as an intervention. We hope this session will help the diverse group of researchers studying the antecedences and consequences of identity change and stability develop new ideas and more effective research directions.

### The Belief in a Favorable Future

#### EXTENDED ABSTRACT

People frequently construct beliefs about the unknown in self-serving ways. People believe others agree with them more than they actually do (the false consensus effect), and that good things that are out of their control will happen to them (optimism). We explore whether people exhibit a belief in a “favorable future” – a tendency to predict that future states of the world will align with their motivations and desires, and reflect favorably on them. We find that people believe that their ideological, policy and entertainment preferences will be more common in the future than they are today. Importantly, however, people do not believe that all of their proclivities will become more common. The constructed future favors the self: people believe that their bad attributes will become more common in future but that their good attributes will become rarer – such that only people’s positive aspects will stand out in the crowd.

Study 1 shows that liberals are more likely than conservatives and moderates to believe that in twenty years a greater proportion of people will identify as liberal. Conservatives, on the other hand, are more likely than liberals and moderates to believe that in twenty years a greater proportion of people will identify as conservative. Moderates demonstrate a similar pattern.

Study 2 replicates Study 1 and extends the belief in a favorable future to entertainment preferences, policy preferences, and environ-

mental beliefs. People who are fans (not fans) of the television show *American Idol* are more likely to believe that the show will be more popular (less popular) in five years; people who believe that having an abortion or being involved in a same sex marriage should be easier (harder) are more likely to believe that in twenty years having an abortion or being involved in a same sex marriage will be easier (harder); and people who believe the climate is warming (not warming) are more likely to believe that in twenty years more (fewer) people will believe the climate is warming.

Study 3 shows that the belief in a favorable future is distinct from the false consensus effect. Participants report their current ideology, the ideology they believe is most common today, and which ideology will become more common in twenty years. People believe that their current ideology will be more common in the future (favorable future). People also believe that their current ideology is the most common ideology today (false consensus). Importantly, however, the favorable future effect is substantially larger in magnitude than the false consensus effect, suggesting that beliefs about the future are magnified beyond one's (biased) perceptions of the present.

Finally, Study 4 demonstrates that the favorable future effect is motivated. People do not necessarily believe that all aspects of themselves will become more common in the future. Participants self-reported attributes about themselves that they liked and disliked, and then predicted the commonness of those attributes in twenty years. Participants believed that their disliked attributes will become more common in the future – making their faults less notable – but that their liked attributes will become less common – making their strengths more prominent. People's construction of the future appears to be not simply a projection of their current self, but a motivated projection of a favorable future.

One ironic implication of the tendency to construct a favorable future may be that it demotivates behavior in the present: if the way I want the world to be is inevitable, why bother to go out and try to change it? For example, believing that same sex marriage is inevitable may decrease one's motivation to cast a vote when same sex ballot initiatives arise.

### Less Than We Know: The Effect of Trait Importance to Connectedness to the Future Self.

#### EXTENDED ABSTRACT

Prior research has demonstrated that people's sense of connection to their "future self" — the person they will be in the future— can substantially influence intertemporal tradeoffs, including delay discounting tasks (Bartels & Urminsky, 2011). Building on prior literature, people's future self connectedness has been operationally defined by whether the full set of features and attributes that define one's identity are shared between the present and future self. Past research has suggested that people view some traits as more important for self-identity than others (Strohming & Nichols, 2014). We conducted three studies to identify whether one's sense of connection to the future self rested more heavily on the believed stability of important traits. Our results indicate that while consumers believe that stability or change on important traits is relatively important for connectedness, the effect of the stability of a trait on future self connectedness was not, in fact, moderated by the importance of that trait. We show similarly that manipulating the stability (or change) in less important traits is just as effective at increasing (decreasing) revealed preferences for the well being of one's future self.

In Study 1 (n=142), we tested a comprehensive list of 49 attributes identified from prior work and pre-tests as potentially critical components of one's identity (e.g., intelligence, honesty, humor,

personality, level of friendliness, values, morality, everyday experiences, memories, etc.). Participants indicated whether they believed a change on each attribute would result in a change in their personal identity. They also rated expected magnitude of change on each attribute, in the coming year.

We found that beliefs about whether a given change would impact connection to the future self were negatively correlated with beliefs about whether that change would occur. In effect, people believed that changes in stable identity traits would affect their connectedness, but would be unlikely to occur, while changes in transient identity traits were likely but would not impact connectedness.

In Study 2 (n=61), we again tested participants' lay beliefs, by asking them how their connection to the future self would be differentially affected by learning that they shared transient or stable traits with the future self, using a within-subject design. We tested 12 scenarios in which participants were told about one attribute which would change and one which would remain the same over time. Participants rated how connected they believed they would feel to their future self, based on each scenario. On average, participants said that their connectedness with their future self would be 30% lower ( $p < .01$ ) when they were asked to imagine that the stable trait would change in the future, compared to when they imagined that the transient trait would change. This suggests that participants believed that learning that their more stable traits would change would have a larger effect on their connectedness.

In Study 3 (n=473), we tested how people's connectedness to the future self and resulting decisions would actually be affected by information about the likelihood of traits changing or staying the same over time. We presented each participant with one scenario, similar to those in Study 2 but tested between-subjects. We conducted a 2x2 between subjects ANOVA, comparing how participants responded to learning that transient or stable attributes were likely to change or stay the same in the future. While we found a main effect of learning that any trait was likely to change, we did not find any evidence of interaction with the transience or stability of the trait ( $F = .075$ ). This shows that while participants said that change on stable traits would be far more devastating to connectedness than transient traits, this is not what actually happened when they were presented with information about the likelihood of the identity changing over time.

In addition, in Study 3, learning that specific attributes were likely to change significantly reduced patience in a delay-discounting task ( $F = 5.17$ ) indicating that people's beliefs about change on these attributes have important implications for future-oriented decision making. However, there were no significant differences in patience based on changes in transient vs. stable traits ( $F = 1.02$ ).

Taken together, our results suggest that there is an important discrepancy between the attributes people believe make up the critical components of their self-identity and the way they actually use predicted change on those attributes to generate a sense of connectedness to their future self. Our evidence suggests that consumers believe they are using the relative importance of attributes in their calculations of similarity to the future self, but their actual connectedness and future oriented choice behavior do not actually evince any such calculation. This discrepancy suggests that consumer's implicit -self-identity may differ from their explicit conceptualization, leading them to underestimate the contribution of their more peripheral traits to their connection to their future self, and thus their future-oriented decision-making.

## Belief in the Immutability of Attitudes Both Increases and Decreases Advocacy

### EXTENDED ABSTRACT

Research on implicit theories (i.e. the beliefs people have about human characteristics) shows that people with a fixed mindset about attitudes (i.e. the belief that attitudes are relatively stable and unchanging) are more certain of their attitudes (Petrocelli, Clarkson, Tormala, & Hendrix, 2010) than are people with a growth mindset (i.e. the belief that attitudes are malleable). Separately, research on the relationship between attitude certainty and advocacy generally shows that people with greater attitude certainty are more willing to express their opinions and try to persuade others (Visser, Krosnick, & Simmons, 2003; Akhtar, Paunesku, & Tormala, 2013). A synthesis of these literatures would suggest that people with a fixed mindset about attitudes are more certain of their own attitudes and consequently more willing to try to persuade others to their beliefs. However, it is also conceivable that people with a fixed mindset about attitudes may be more likely to perceive *others'* attitudes as difficult to change, rendering people with a fixed mindset less willing to try to persuade others. Across four studies, we show that both of these countervailing effects occur simultaneously, resulting in the absence of an overall direct relationship between implicit theories of attitudes and advocacy. By shifting whom people focus on (themselves or others) or how advocacy is framed (as sharing, persuading, or defending), implicit theories can directly influence willingness to advocate.

*Study 1.* Participants were told that we were conducting public opinion research on a variety of issues. All participants reported their attitude, likelihood of trying to persuade others, and perceived persuadability of others regarding the death penalty. After completing a ten-minute filler task of personality scales, participants completed the eight-item implicit theory of attitude stability (ITAS) scale (from Petrocelli et al., 2010). Results indicated that a higher score on the ITAS scale (i.e. a fixed mindset) was inversely correlated with perceived persuadability of others but uncorrelated with likelihood of trying to persuade others. However, as expected, there was a negative indirect effect of ITAS on advocacy through perceived persuadability of others. These results provide initial correlational evidence that a fixed mindset leads to lower likelihood of trying to persuade others because of lower perceived persuadability of others, but that another, opposing mediator may be canceling out the direct effect.

*Study 2.* Study 2 was designed to (1) allow for causal claims by manipulating implicit theories, (2) replicate the indirect effect from Study 1, (3) replicate the effect of implicit theories on attitude certainty from Petrocelli et al. (2010), and (4) simultaneously identify attitude certainty as an opposing mediator contributing to the non-significant direct effect of implicit theories on advocacy. Participants were told that they would be completing two unrelated tasks. The first task was an implicit theories of attitudes manipulation under the guise of a reading comprehension test (adapted from Chiu, Hong, & Dweck, 1997). For the second task, participants reported their attitude, attitude stability, attitude certainty, perceived persuadability of others, and willingness to try to persuade others regarding the death penalty. First, replicating previous research, we confirmed that a fixed mindset led to greater perceived attitude stability, which led to more certainty of one's own attitude. Replicating Study 1, we also found that a fixed mindset decreased perceived persuadability of others but had no direct effect on willingness to try to persuade others. A bootstrapped multiple mediation analysis (Preacher & Hayes, 2008) confirmed that implicit theories indirectly affected advocacy through the opposing forces of attitude certainty and perceived persuadability of others. Thus, people with a fixed mindset are simultaneously

more likely to advocate because they are more certain of their attitudes and less likely to advocate because they perceive others to be less persuadable, rendering the direct impact of implicit theories on advocacy inert.

*Study 3.* Participants were involved in a 2 (mindset: fixed vs. growth)  $\times$  2 (focus: self vs. others) between-subjects design in which they wrote about life experiences in which they (or others) have changed (or have not changed) their attitudes over time. Participants then completed an ostensibly unrelated second task in which they reported their attitude and willingness to try to change the opinions of others regarding the death penalty. Results showed a significant interaction. Consistent with the notion that people with a fixed mindset are motivated to advocate because of their own attitude certainty, people with a fixed mindset were more willing to advocate when they focused on their own attitudes rather than others' attitudes. Those with a growth mindset, on the other hand, were more willing to advocate when they focused on others' attitudes rather than their own.

*Discussion.* Taken together, these findings reveal that implicit theories can play an important role in motivating advocacy, even if there appears to be no direct relationship between the two. A fixed mindset about attitudes simultaneously motivates and demotivates advocacy through greater certainty in one's own attitudes and lower perceived persuadability of others, respectively. Thus, although greater attitude certainty generally leads to greater advocacy, this is not necessarily the case when that certainty is derived from a fixed mindset about attitudes. However, people with a fixed mindset actually can become more or less willing to advocate than people with a growth mindset, depending on whom they focus their attention. Implications for understanding implicit theories of attitudes, multiple mediation analysis, and determinants of advocacy are discussed.

### Are Artworks More Like People than Artifacts? Individual Concepts and Their Extensions

#### EXTENDED ABSTRACT

The literature on concepts has typically focused on general concepts—concepts like PERSON, CAT, or PAINTING. However, our concepts of individuals, such as my brother *Robert*, my cat *Jack*, or Van Gogh's *Starry Starry Night*, play a key role in how we interpret the world around us.

The majority of the research on this topic has examined how people track the persistence of humans. For example, how people decide whether Jim is still *Jim* across time or various transformations. Previous research suggests that people's beliefs about the continuity of persons tend to be dualistic: People believe that the continuity of an individual's mental states (their thoughts, memories, and personality traits) is necessary for identity continuity, but at the same time, they also seem to place considerable importance on the continuity of the person's physical *stuff* (e.g., Blok et al., 2001). Moreover, continuity judgments about persons seem to be somewhat unique in this respect—for example, people are more likely to say that a molecule-for-molecule copy of a hammer *is* the same individual hammer (provided that the original is destroyed when it is duplicated).

Here we extend research on continuity judgments for persons to examine a second domain in which people seem to place considerable importance on the continuity of the same physical stuff—namely, one-of-a-kind artifacts. For example, like persons (and unlike hammers) people do not tend to believe that an identical duplicate of a painting is the *same* painting, and they view duplicates as considerably less valuable than the original (Newman & Bloom 2012). To explain this pattern, we draw on the notions of the 'extended self' (James, 1890; Belk, 1988; Olson, 2011), which proposes that the

self concept goes beyond a person's physical body to include certain artifacts that are seen as extensions of the self. Therefore, we suggest that observers may place special emphasis on original artwork, because the original is thought to physically contain some part of the person who created it (which cannot be duplicated).

The goal of the Study 1 was to examine whether people's continuity judgments are more materialist for artworks than comparable artifacts. Participants read hypothetical scenarios in which an artwork or a tool was duplicated and the original was destroyed. In all cases, participants were told that the original artwork [tool] was made by a college student (to control for potential differences in value), and were given specific information about how it was made (e.g., using a mold and poured plastic), which was the same in both cases. We hypothesized that duplicate artworks should be *less likely* to be seen as continuers of the original compared to duplicate tools.

To test the notion of the extended self we also varied whether the duplicate object was made by the original creator or by another person. Specifically, participants read scenarios in which the original creator "agrees to make an exact duplicate" and scenarios in which he "agrees to have someone else make an exact duplicate."

As predicted, we observed that duplicate artworks were *less likely* to be seen as continuers of the original compared to duplicate tools. Additionally, there was a main effect of creator such that objects made by the same individual were *more likely* to be seen as continuers of the original compared to objects made by someone else. However, this effect marginally interacted with object type, such that there was an effect of the creator for artworks, but not for the tools.

The goal of Study 2 was to explore some of the reasons why people may be more materialist when reasoning about the continuity of art versus other types of artifacts.

In this study, participants were asked to read a scenario about a painting. Between subjects we manipulated information about the painting, varying the dimensions of contagion (whether it was made by the original artist or an assistant), creativity (whether it was an original design or not) and personal attachment (whether the artist was personally attached to the artwork). In each condition, participants were told that painting was duplicated and the original was destroyed. Then, they indicated the extent to which they thought the resulting (duplicate) object was the same painting.

Overall, participants were more likely to agree that the duplicate was *not* the same painting when the artist painted it himself versus when it was painted by his assistant (contagion). The other factors, however, did not produce significant main effects or interactions. Thus, in this study, the central factor seemed to be whether or not the artist physically created it himself. This result is consistent with the results of the first study and our hypothesis that people might be more materialist about artworks because the original pieces are imbued with the artist's essence. Some participants even spontaneously referenced this idea in their justifications.

In sum, when reasoning about the continuity of art, people appear place greater emphasis on the sameness of 'physical stuff' (i.e., materialism), because the original possesses an essence that cannot be duplicated. The first study demonstrated that even when all other information is held constant (the artist is unknown, the objects are not valuable, etc.) the mere categorization of an object as 'art' versus a 'tool' makes the duplicate artwork *less* likely to be seen as a continuer of the original object. And, the results from both Studies 1 and 2 provide further support for this proposal by demonstrating that physical contact with the original artist seems to play a crucial role in these judgments. Thus, in terms of judgments about identity continuity, the present studies demonstrate that there are important ways in which judgments about art appear to be more similar to judgments about persons (in their reliance on sameness of substance) than judgments about other kinds of artifacts

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# More than Music: Sound and Sonic Elements in Consumer Psychology

Chair: Michael Lowe, Texas A&M University, USA

## **Paper #1: “Sound and Safe”: The Effect of Ambient Sound on Perceived Safety of Public Spaces**

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## **Paper #2: I Like the Way It Sounds: The Influence of Which Instruments and How Many Instruments are Audible on Music Preferences**

Joseph C. Nunes, University of Southern California, USA  
Andrea Ordanini, Bocconi University, Italy

## **Paper #3: Sounds Big: The Cross-Modal Effects of Auditory Pitch on Product Perceptions**

Michael Lowe, Texas A&M University, USA  
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## **Paper #4: Pitch, Threat and Risk Aversion**

Kate Loveland, Xavier University, USA  
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### **SESSION OVERVIEW**

Hearing has been described as “The Universal Sense” (Horowitz 2012). Sound is our constant companion, and provides us with a tremendous amount of information about the world around us. As a sense, hearing is unique. Sight captures only what is illuminated, unobstructed, and directly in front of us. Taste and touch both require physical contact. Even smell is somewhat limited in human beings. We can hear, however, in any direction, for a considerable distance, and with no deliberative effort on our part. This session brings together four rather novel papers that explore the impact of sound on human perceptions and preferences. In addition, underscoring the pervasive influence of sound, the set of papers address a variety of important outcomes including preferences, feelings of safety, perceptions of size, and risk taking behaviors—all clearly relevant to consumption.

Music has long been employed by marketers in practice, but music is only one of a vast array of sounds that, intentionally or unintentionally, may affect consumer psychology and behavior. Even music itself is simply a structured combination of sounds that can be studied individually along various dimensions. Accordingly, the papers in this session examine more fundamental questions relating to the components and/or nature of sound. Specifically, all four papers address the question, “How do various individual, identifiable dimensions of sound – whether from music, voices, or environments – alter consumer cognitions and behavior?”

Due to the focus on deconstructing sound into unique elements in order to link specific dimensions of sound with cognitive and behavioral responses, these papers all apply a theoretical rigor to understanding sound that has often been overlooked in prior research. We organize the session’s papers from more high-level components to more low-level components of sound. In the first paper by Sayin et al., the social presence afforded by sounds of human or human-like animal voices provides enhanced perceptions of safety as compared to instrumental only or no sound. The second paper by Nunes and Ordanini deconstructs sound in a musical context to examine how timbre affects the popularity of a song, demonstrating the most ef-

fective ways to combine various sound elements to enhance musical popularity. The final two papers both examine effects based on the pitch of a given sound. The third paper demonstrates the cross-modal effects that affect consumer’s perceptions of a product’s physical size and strength using both music and voices (Lowe and Haws), while the final paper by Loveland et al. uses an evolutionary perspective to demonstrate that the pitch of an environmental noise affects consumer risk aversion.

Overall, the session adds to the literature on sensory experience in marketing and attempts to broaden marketer’s consideration of sound and music to include new sound sources, new contexts, as well as a more thorough application of psychoacoustic theory. We feel that this session will lead to interesting discussion regarding the way in which music and sounds impact consumers throughout a wide-range of daily experiences.

## **“Sound and Safe”: The Effect of Ambient Sound on Perceived Safety of Public Spaces**

### **EXTENDED ABSTRACT:**

People are frequently exposed to crime in news programs, books, movies and television series. After such exposure, they often feel fearful of being alone in public places. Thus, many public spaces such as car parks, subway stations, and bus stops are considered “anxiogenic” (Loukaitou-Sideris, 2006). Such anxiety results in avoidance of places that are perceived as unsafe (Warr, 2000). For example, if people do not feel safe at the underground park of a mall, they may not go to that mall. However, such anxiety about public spaces may be mitigated by using appropriate environmental cues (Pain, 2000).

In this research, we focus on “ambient sound” as one such environmental cue that can influence perceived safety in public areas. Much research has shown that music (as an ambient sound) can affect mood, perceptions and behaviors of individuals (Hui, Dube, and Chebat, 1997; Mattila and Wirtz, 2001; Yalch and Spangenberg, 1988). Music has also been shown to reduce anxiety (Tansik and Routhieaux 1999). The aforementioned research on the effect of music is mainly on instrumental music. However, vocal sounds can also impact individuals’ emotional states (Juslin and Laukka, 2003). Social presence literature suggests that vocal sounds are potent social cues that “enhance the illusion of interaction with a social entity” (Lombard and Ditton, 1997). The presence of others has a soothing effect under imminent threat and provides a sense of security (Mikulincer, Shaver, and Pereg, 2003). Interestingly, bird songs closely resemble human language. Both rely on specific arrangements of vocal elements in a sequence to communicate with others (Kuhl, 2003; Lipkind et al., 2013). Accordingly, we expect when individuals are exposed to vocal sounds (whether human or bird sounds), these sounds will create a sense of social presence and people will feel safer.

Building upon the “sound and emotion” and “sound and social presence” literatures, we propose that ambient sound which gives the impression of having a social presence will positively affect perceived safety. Additionally, vocal sounds (whether human or bird) will be more effective than instrumental sounds in reducing anxiety because they will convey a greater sense of social presence. Furthermore, perceived social presence will mediate the effect of ambient sound on perceived safety.



We test our hypotheses in three experiments – one in the field and two in a laboratory setting. In study 1, we test the effect of ambient sound (instrumental, animal vocal, control) on perceived safety in a real car park in a European metropolitan city (field study). We got permission from the management of the car park to broadcast ambient sounds in the stairwells of the car park (human vocal sounds were not approved). All people parking in this car park need to use the stair wells to exit the car park. People were exposed to the sound conditions, after they parked their cars, and before they were approached by the experimenters. We found a significant main effect of the sound conditions on perceived safety. Simple contrast tests showed that animal vocal sounds had a significant effect on increasing perceived safety versus instrumental sounds (and versus no sound).

In study 2, we repeated the field experiment in a laboratory environment where we created and used a video of an indoor car park. The video was recorded from the viewer's perspective with the intention to create an environment where participants could imagine that they were actually in the car park. Thus, the body of the participant was not visible and she could hear (her own) footsteps in the video. The same ambient sounds used in the field study were incorporated into this video. The results of the field study were replicated.

Study 3 was also a laboratory study to see how robust the results of the first two studies were, and also to see if perceived social presence mediates the effect of sound on perceived safety. Furthermore, we added human vocal sounds as a fourth ambient sound condition. We used the same video as in study 2, but changed the sounds. While we controlled for sound volume across the sound conditions in studies 1 and 2, in study 3, we also controlled for tempo and rhythm. The instrumental and human vocal sounds were selected to be different versions of the same music (the music was either played with only instruments, or was created by human voices alone).

We found a significant main effect of ambient sound on perceived safety. Simple contrasts demonstrated that both vocal sounds (human and animal) had a significantly higher effect on perceived safety compared to instrumental sound or no sound. Additionally, human vocal sounds had the highest effect on social presence, followed by animal vocal sound, instrumental sound and no sound. Simple contrasts demonstrated that human vocal and animal vocal sounds had similar effects on perceived social presence, and that both these vocal sounds increased perceived social presence more than the non-vocal sound (instrumental) or no sound. Furthermore, as proposed we found that perceived social presence mediated the effect of ambient sound on perceived safety.

To the best of our knowledge, this is the first study to systematically investigate the connection between auditory input, social presence and safety perception. Our results have important implications for managers of public areas that might be perceived as unsafe.

### **I Like the Way It Sounds: The Influence of Which Instruments and How Many Instruments are Audible on Music Preferences**

#### **EXTENDED ABSTRACT**

Why do people like some songs more than others? We know very little about why people like the music they do and how different aspects of music shape their preferences. When asked, people often refer to a song's seemingly ineffable combination of instruments and vocals, described simply as *the way it sounds*. A major determinant of the way a song sounds is the specific combination of instruments audible to the listener. Each type of instrument has a distinctive and recognizable sound known as its timbre. Combinations of instru-

ments (e.g., a guitar with a piano) are identifiable as timbre mixtures. This research investigates how preferences for popular music depend on a song's timbre mixture, or the particular combination of instruments employed.

Timbre mixtures play a critical role in people's perceptions of music. They enable listeners to identify, classify and categorize pieces of music, suggesting common perceptual mechanisms are at work whether the listener is processing polyphonic or monophonic instrument sounds. In fact, Schellenberg, Iverson, & McKinnon (1999) have shown song recognition depends on timbre. Participants in their studies were able to identify popular songs from excerpts of only 100 and 200 milliseconds, leading them to conclude the timbral qualities of everyday music appear to trigger memory in ways rhythm, pitch, and tonality cues cannot. Some psychoacoustic scholars have gone as far as arguing timbre is "the most important and ecologically relevant feature of auditory events" (Menon et al., 2002, p. 1742).

Our work documents the relationship between the type of instruments and the number of instruments audible in a song on music preferences under ecologically valid conditions. We extrapolate song preferences from weekly popularity rankings on *Billboard's* Hot 100 singles chart by comparing songs that reached #1 (hereafter Top songs) with a comparison set of songs that, while making it onto the Hot 100, never climbed above the #90 spot (hereafter Bottom songs). By restricting our sample as such, we control for exogenous factors that might facilitate or inhibit a song from attaining national exposure; once on the Hot 100, a song's relative ranking reflects market preferences.

We apply two different analytic techniques to the data, drawn from the United States' most popular songs from the past 55 years. First, we employ crisp-set qualitative comparative analysis (QCA) to examine specific combinations of instruments and their impact on preferences (Ragin 2000). The premise underlying QCA is that for certain types of outcomes, the best causal explanation involves complex combinations of the causal variables. For these types of outcomes, the direct impact of single variables is not informative (as they might be the case in a typical regression); instead, the outcome depends on how the variables are combined, creating one or more specific "recipes." Methodologically, QCA allows the researcher to derive which bundles or combinations lead to which specific outcomes (being a Top versus Bottom song in our data). Next we use logit regression to test the relationship between the number of different instrument types audible and the probability of being a Top versus a Bottom song.

We identify three specific configurations sufficient for a song to make it to the top of the chart (77% of songs with these instruments account for nearly 20% of all Top songs). Common across all three is the inclusion of background vocals. The three core sufficient configurations include: (1) background vocals with a synthesizer and a clean guitar; (2) background vocals with a synthesizer and distorted guitar, or (3) background vocals with an electronic piano and no synthesizer. We also identify three specific configurations that lead a song to be more likely to stagnate at the bottom of the charts as opposed to climb to the top (86% of songs with these instruments account for 13% of all Bottom songs). Predicated on the absence of background vocals, one recipe for a less "successful" song is: (1) the presence of a bass guitar and synthesizer without any other guitar and without an electric piano. The two other configurations include are predicated on there being no background vocals and no strings (orchestral) audible, but do include; (2) the presence of an electric piano and an acoustic guitar; or (3) the presence of an electric piano with a clean electric guitar. We should emphasize that there are always exceptions, but that our analysis reveals historically these com-

binations have led to these outcomes. In other words, some combinations have been far more likely to find their way to the bottom of the charts while others have been far more likely to find their way to the top of the charts.

Our configurations define the set of “core” instruments, but it is important to note that other instruments can be layered on top without changing the result. For this reason, we also examine how the number of distinct instrument types perceptible in a song impacts its popularity. Logit regression reveals a positive curvilinear effect such that the likelihood of being a Top song as opposed to a Bottom song increases more than proportionally as the number of instruments audible in a song increases. If we consider the typical song in our data includes five instruments ( $\mu = 5.3$ ), we have strong evidence that people prefer more than the average number of instrument sounds. Taken together, the results suggest strong underlying preferences among the specific timbre mixtures identified in popular music.

Music critics frequently lament the perceived homogenization of popular music. On the one hand, our findings regarding the impact of specific instrument configurations on preferences could be viewed as consistent with this commentary. There is enough overlap in core configurations to provide us with three combinations that characterize Top as opposed to Bottom songs. On the other hand, our findings also point to a need for artists to make their sound distinct. Our results suggest the artist is free to, and should, add additional instrument sounds, perhaps considering them a personal embellishment in a generic recipe.

## Sounds Big: The Cross-Modal Effects of Auditory Pitch on Product Perceptions

### EXTENDED ABSTRACT

Whether from music in a commercial or store, the voice of a spokesperson or salesman, the sound of a product itself or the variety of sounds in a shopping environment, sound can influence consumer cognitions, perception and behavior in various ways. While researchers have explored several mechanisms explaining precisely how sound influences consumer thought and behavior, including mood (Bruner 1990), semantically-related meaning (Zhu and Meyers-Levy 2005), and phonetic or sound symbolism (Yorkston and Menon 2004, Klink 2000), there is a sensory mechanism by which sound may affect consumer cognitions that has not yet been explored by marketers – cross-modal correspondence.

“Cross-modal correspondence” is the perceptual compatibility of a stimulus experienced by one sense (in this case, hearing) with a sensory experience of a different sensory modality (Spence 2011). Almost every human experience is multisensory in nature. Our various senses so often work in symphony with each other that associations are formed between particular attributes of a stimulus in one sense and attributes pertaining to other senses. For example, correspondences have been identified between sound and color (Marks 1975), shape and taste (Ramachandran and Hubbard 2003), physical texture and taste (Bult, de Wijk and Hummel 2007) and several others. Thus, in the realm of audition, a particular attribute of a sound may influence consumer beliefs and behaviors by virtue of the fact that it is intrinsically associated with other physical characteristics unrelated to sound. We propose that a single dimension of sound, that is pitch, can affect consumer perceptions of product size. In addition, because individuals naturally make additional size-based inferences about products, we propose that the effects of pitch may have downstream effects beyond affecting perceptions of just product size.

*Study 1.* Participants (N=205) were seated at individual computer stations and were told that they would be listening to a radio advertisement for new product. All participants heard one of the two versions (high voice vs. low voice) of an advertisement for the new “Southwest Turkey Club” sandwich at “Cosmo’s” – a fictitious sandwich chain. Half of the participants also saw an image of the advertised product while listening to the ad, while the other half did not. Participants responded to measures regarding their perceptions of and interest in the sandwich.

Participants believed the product was bigger in the low-pitch condition, even when they had seen an image of the product ( $F(1,204)=8.814, p<.01$ ). There was no significant difference in perceptions of product size between participants who saw the product image and those who did not. Auditory pitch affected perceptions of size even when the product was visible.

*Study 2.* The purpose of study 2 was to further examine the effect of pitch on size perceptions and to see how they might affect product evaluation and preference. Undergraduate students (N=167) participated in exchange for course credit and again the study took place at private computer stations in a behavioral laboratory. Participants were told that for this particular study they would hear the audio from a recent television advertisement for a laptop computer and that the voice-over had been removed, leaving only the background music. Participants heard one of two versions (high pitch vs. low pitch) of a 60-second segment of an obscure instrumental rock song. Following the song, participants were asked to use 7-point scales to rate the advertised laptop on six dimensions; size, power, durability, weight (“lightweight”), technological sophistication, and ease of use. Participants also indicated their own personal preference for laptop characteristics and indicated their interest in owning the advertised laptop.

Consistent with study 1, the main effect of music pitch on size perceptions was significant ( $M_{Low}=4.95, M_{High}=4.11; F(1,165)=12.91, p<.001$ ). Lower pitch, even in background music, cross-modally communicated greater physical size. There was also a significant interaction between pitch condition and participants’ stated dimension preferences when predicting interest in the product, such that participants who preferred a larger and more powerful laptop showed more interest in the product in the low-pitch condition.

In addition, perceptions of size mediate several other differences in product perception that occur between pitch conditions, demonstrating the “downstream” effects of cross-modal correspondence.

*Study 3.* The purpose of study 3 was to examine the effects of pitch on the credibility of various ad claims. Participants (N=255) heard one of two versions of an ad for a laundry detergent. One version of the ad made product claims regarding gentility while the other version made claims regarding strength. These ads were played in one of two pitch conditions (high or low pitch). Participants were then asked questions indicating how much they believed the claims of the advertisement. There was a significant interaction between ad claims and pitch condition when predicting ad credibility,  $F(1, 242)=3.884, p<.05$ , such that the low voice was seen as more credible in the “strong” ad ( $M_{Strong/High}=4.89, M_{Strong/Low}=5.09$ ), and the high voice was more credible in the “gentle” ad ( $M_{Gentle/High}=5.08, M_{Gentle/Low}=4.68$ ). These differences were again tied to a significant difference in product (container) size ( $M_{High}=4.25, M_{Low}=4.61, F(1, 244)=9.251, p<.01$ ).

In summary, the cross-modal effects of pitch in advertising dramatically altered product perceptions and preferences in several different domains. This introduces yet another means through which sound can affect consumer psychology and behavior in a way that is significant to both theory and practice.

## Pitch, Threat and Risk Aversion

### EXTENDED ABSTRACT

Part of the evolutionary purpose of audition in humans and animals alike is to serve as a warning of danger, alerting a listener to the presence of a potential threat (Davies and Halliday 1978). When interpreting a sound as threatening or non-threatening, there are likely various structural elements of that sound that are relied upon. Pitch, for example, has reliably been associated with size, such that lower pitch communicates larger size and higher pitch indicates smaller size (Parise and Spence 2009). From an evolutionary standpoint, the presence of something large could certainly be associated with threat. Anecdotally speaking, everyone who has paid attention to the sound design in a horror film has undoubtedly noticed the frequent usage of deep, menacing tones to heighten the tension (see Horowitz 2012, Huron et al. 2006). Furthermore, low pitch in voice has been associated with greater power and dominance in both human beings (Puts et al. 2006) and other animals alike (Morton and Page 1992). If a low pitch indeed elicits fear due to the imagined presence of an unseen threat, or makes us feel powerless by signaling the presence of a dominant counterpart, we should anticipate a decreased willingness on the part of a consumer to accept additional risk (Anderson and Galinsky 2006; Lopes 1987).

However, it is possible that males and females may respond differently to high and low pitches in an environment. For example, if the source of the pitch is perceived as a threat, females may be more likely than males to engage in “tend and befriend” behaviors, in an attempt to build and strengthen social bonds for safety’s sake (Taylor et al. 2000, Turton and Campbell 2005). Thus, both risk aversion and affiliation behaviors may be affected by the presence of a low auditory pitch.

*Study 1.* The purpose of study 1 was to test how the presence of a low pitched sound in an environment would influence both risk taking and affiliation behaviors. The study involved 98 individuals participating in a lab session in exchange for course credit. Participants were taken 2 at a time (matched on gender and race) into an interview room to play a gambling game. For half of the dyads a hidden subwoofer played a very low pitched tone (60hz sine wave) at a very low volume, while the subwoofer was turned off for the other half of the dyads (control condition). Sitting facing away from one another, and using real money provided them, each participant wrote down one amount for a “self” wager and another for a shared “communal” wager. After wagers were recorded, participants moved their chairs to a table where the game would be played. The distance between their chairs was recorded as a measure of affiliation.

Results show that, compared to the control, participants wagered less of their money when there was a low pitched tone present in the room ( $M_{\text{LowTone}}=84.8\text{¢}$ ,  $M_{\text{Control}}=93.7\text{¢}$ ;  $F(1, 97)=4.38$ ,  $p<.05$ ). There was no effect on the amount placed in the communal bet. However, there was a significant interaction between gender and pitch-condition on the physical distance participants put between chairs ( $F(1,97)=4.29$ ,  $p<.05$ ) such that, compared to the control, males distanced themselves directionally, but not significantly, further apart when there was a low pitched tone present ( $M_{\text{LowTone}}=41.9\text{in}$ ,  $M_{\text{Control}}=40.5\text{in}$ , NS) whereas females sat closer together when there was a low pitched tone present ( $M_{\text{LowTone}}=34.9\text{in}$ ,  $M_{\text{Control}}=38.0\text{in}$ ,  $F(1,94)=3.61$ ,  $p = .06$ ).

*Study 2.* Whereas study 1 compared risk aversion between low-pitch tone and no-tone conditions, study 2 compares risk aversion between low-pitch tone and high-pitch tone conditions. It is possible that any environmental sound with an ambiguous source will cause increased risk aversion; thus, the purpose of study 2 is to demon-

strate that risk aversion will only increase if the sound is low pitched, and consequently associated with “something large” that poses a potential threat.

Undergraduates participating in exchange for course credit (N=376) sat at individual computer stations with privacy partitions in an on-campus behavioral laboratory. Speakers in the ceiling of the room consistently played a sine wave of either a relatively low pitch (80hz) or a relatively high pitch (720hz), alternating randomly across lab sessions (5 sessions each). During the session, participants worked on various computer-based tasks, one of which was specifically related to risk. Participants made a series of 50 dichotomous financial choices between a smaller, certain payoff and a chance at a larger payoff (see Griskevicius et al. 2011 for details). The primary dependent variable was the sum total of “risks” each participant preferred relative to the smaller certain payoff.

Participants in the low-pitch tone condition opted to take significantly fewer financial risks than those in the high-pitch tone condition ( $M_{\text{LowTone}}=13.8$ ,  $M_{\text{HighTone}}=15.7$ ,  $F(1,375)=8.66$ ,  $p<.01$ ) suggesting that our findings from study one are due specifically to the presence of a low pitched sound, rather than to the presence of an ambiguous sound per se.

*Study 3.* The purpose of study 3 was to directly measure our proposed mediator of anxiety or fear. Participants (N=130) entered a lab where either a low pitched tone (80 Hz) or no tone (control condition) were playing at a very low volume through ceiling speakers. Participants completed a computer-based word identification task. After an ostensibly masked word flashed on the screen for an imperceptible amount of time, participants were asked to identify the word from a list of 4 possibilities. Of the 17 trials, 7 lists contained words related to anxiety or fear. The dependent variable was the total number of target words selected.

Overall, participants selected significantly more fear/anxiety related words when the low pitch was present ( $M_{\text{LowTone}}=2.35$ ,  $M_{\text{Control}}=1.77$ ,  $F(1,129)=7.77$ ,  $p<.01$ )

In two studies, the presence of a low pitch decreased study participants’ willingness to take risks while a third study linked this risk aversion to increased anxiety or fear. In addition, different social behaviors were observed based on gender. Researchers and practitioners alike can benefit from better understanding the effects that a sound may have on real-world behavior.

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# Changing It Up: Consumers Transforming Their Lives

Chair: Hope Schau, University of Arizona, USA

## **Paper #1: Embracing A “Fresh Start”: How Consumers Engage To Change Their Lives**

Ainslie Schultz, University of Arizona, Eller School of Management, USA

Linda L. Price, University of Arizona, Eller School of Management, USA

Robin Coulter, University of Connecticut, School of Business, USA

## **Paper #2: Consuming and Consumption in Third Space Communities: Constructing Sanctuary**

James H. McAlexander, Oregon State University, School of Business, USA

Beth DuFault, University of Arizona, Eller School of Management, USA

## **Paper #3: Single Mothers By Choice: Putting Aside One Life Goal and Embracing Another**

Sarita Ray Chaudhury, Humboldt State University, School of Business, USA

Pia A. Albinsson, Appalachian State University, Walker College of Business, USA

## **Paper #4: Changing the Script: Family Collectivity Formation in the Neonatal Intensive Care Unit**

Beth DuFault, University of Arizona, Eller School of Management, USA

John Schouten, Aalto School of Business and Economics, Finland

Hope Schau, University of Arizona, Eller School of Management, USA.

### **SESSION OVERVIEW**

The objective of this session is to investigate how consumers embrace change in their lives. All four papers focus on processes of change, and describe the obstacles, emotions, and challenges of making changes. Much consumer research addresses the power of consumer habits and goal striving and how they affect consumer welfare (c.f. Verplanken and Wood 2006; Baumgartner and Pieters 2008). Research has also focused on understanding goal striving and persistence and how they are shaped by cultural discourses (Fisher, Otnes and Tuncay 2007). In addition, a variety of consumer research uncovers the important role of goal directed activities and goal persistence on wellbeing (for example, Fishbach and Dhar 2005; Seligman 2006). By contrast, our session focuses on the less commonly explored domain of whether and how consumers change directions and establish new goals and patterns of behavior and how this relates to a meaningful life (Feldman 2013; Mukhopadhyay and Johar 2005). Only a small amount of consumer research has focused on these processes of letting go and moving forward in a different direction (Schouten 1991; McAlexander 1991, Schau, Gilly and Wolfenbarger 2009). This is extremely important because persistent pursuit of personal goals is only part of healthy human adaptation (Wrosch, Scheier, Miller, Schulz and Carver 2003, Miller and C’De Baca 2001). When is it time to embrace change? How does this change unfold? How do consumers disengage from their past and their ideas of what would be, and engage with creating their new lives? Explicit in all four papers is an examination of the resolve to embrace a change that involves leaving something else behind—an important life goal, family and community, or a cultural narrative of

the birth of a new family member. The first paper explores consumers’ ideas of the construct “Fresh Start.” The second paper investigates goal disengagement and engagement with a new goal in the context of single mothers of choice. The third paper picks up on the themes of leaving things behind and engaging with a new community. The fourth explores how the shattering of a treasured imagined future eventually can lead to a new narrative being embraced across obstacles and constraints. All four papers speak to changes in consumption and consumer behavior patterns that accompany these changes, sometimes as small as making a novel choice of a snack item, as in study five reported in the first paper, to complete changes in consumption realms, as described in the second and third papers. Both the second and fourth paper also investigate how an evolving, hoped for family collective is shaped and constrained by surrounding technologies and service providers. We ask in multiple complex contexts: 1. How does goal disengagement and goal re-engagement shape consumer behavior? 2. What consumer behaviors do consumers employ to navigate the transition between changed life narratives?

## **Embracing A “Fresh Start”: How Consumers Engage to Change Their Lives**

### **EXTENDED ABSTRACT**

This paper introduces the construct, *fresh start*, which focuses on a consumer’s pursuit of new goals, accomplishing new things, and creating and making a new life. In other words, our research examines consumer engagement in “life” change (Andreasen, 1984; McAlexander, 1991; Schau, Gilly & Wolfenbarger, 2009; Silver, 1996), and is at contrast with much of the literature that focuses on goal adherence, progress and velocity with regard to a specific goal (e.g., changing eating habits, losing weight, or stopping smoking). We know that consumers do change, and when they change it can have dramatic consumption consequences (Schouten, 1991). Moreover, consumption is often profoundly implicated in what consumers seek to change, including for example, their health and budgeting (Soman & Cheema, 2004; Fishbach & Dhar, 2005; Oyserman, 2007). However, with few notable exceptions, we know little about life transformations. In this paper, we explore fresh start using five studies; Studies 1, 2 and 3 focus on the explication of the construct, measurement, and nomological net, and Studies 4 and 5 examine the ability to trigger behavior by priming individuals with the idea of a fresh start.

Study 1 (n=62) used a series of open-ended questions to gain insights into how consumers think about a fresh start. Findings indicate that “fresh start” resonates with consumers, and they understand it as starting anew and pursuing new life goals and experiences, as having a future-focus. Most respondents reflected on a fresh start as involving large, sweeping life changes, but others reported on focused goals, such as taking up a new exercise routine. With regard to desired fresh starts involving sweeping life changes, many noted the uncertainty of, as well as the difficulty and perhaps even impossibility linked to getting a fresh start. Hard work and commitment are paramount to getting a fresh start. Notably, our findings document that fresh starts are encumbered with emotions, efforts and obstacles.

Study 2, using insights from Study 1, was focused on scale development for our fresh start construct. Our online survey (n=178

adults; M-Turk) participants responded to 14 (7 point Likert-scale) items focused on getting a fresh start, as well as items designed to measure the related constructs of: optimism, future temporal focus, and psychological closure. Exploratory factor analysis (oblique rotation) results facilitated identification of four items (“I am creating a new life for myself,” “I am changing the way I live my life,” “I am pursuing new goals,” and “I am accomplishing new things”) with high internal consistency ( $\alpha=.88$ ), and confirmatory factor analysis with these four items to measure fresh start demonstrated convergent and discriminant validity between fresh start and optimism, future temporal focus, and psychological closure.

Study 3, another online survey (n=236 adults; MTurk), further validates our four-item fresh start measure, extends the nomological network and advances a model of how consumers embrace a fresh start and how fresh starts translate into behavioral intentions. Our results indicate that fresh start (measured by our four items) is positively associated with engagement in new consumption choices generally, and desire to enact new behaviors, including live healthier lives and reduce spending. We find the relationship between fresh start and new consumption choices is moderated by goal reengagement, such that goal reengagement boosted the ability to enact new behaviors when getting a fresh start.

Study 4 considered the effects of priming individuals with the idea of a fresh start to assess impact of a fresh start (vs. not) relative to a recent failure on future performance. We used a 2 (fresh start, control) x 2 (self-affirmation, no self-affirmation) between subjects design (n=136 undergraduate students). Participants first engaged in the five-minute Remote Associations Test (RAT; Mednick, 1968; Vohs et al., 2012), and upon completion received (false) feedback from the computer, saying they performed worse than average on this “intelligence” task. Participants in the fresh start condition read, “Start anew” and clicked to the next page; those in the control condition simply clicked to the next page. Next, participants received our second manipulation, with half affirmed by writing about their top-ranked value and half not affirmed by writing about their 7<sup>th</sup> ranked value (from Fein & Spencer, 1997). Participants again completed a five-minute RAT, and the number of correct items served as our “performance” dependent variable. Consistent with expectations, individuals primed with getting a fresh start (vs. control) performed significantly better on the second RAT ( $b = 0.70$ ,  $p < .05$ ;  $R^2 = .04$ ), suggesting that engaging the idea of getting a fresh start may cause individuals to move past failure. We note no significant difference in performance between the self-affirmed and control group ( $b = 0.70$ ,  $p > .05$ ;  $R^2 = .04$ ).

Study 5 also considered the effects of priming individuals with the idea of a fresh start to assess how thinking about a fresh start would affect the choice of a novel and familiar product. Seventy-five undergraduate students participated in the fresh start prime (vs. control) lab experiment. Participants were randomly assigned to the fresh start prime condition (and asked write a short statement about opening a door to the future following acceptance to the business college) or the control condition (and asked to write a short statement the about a movie they had seen recently). Participants responded to our four-item fresh start scale as a manipulation check, and then were asked to choose between two spreads (the novel almond butter and the familiar peanut butter) to eat with their crackers. Next, they complete the grit scale items (a measure of perseverance) and answered several demographic questions. As expected, for participants with stronger (vs. weaker) grit, we find a larger percentage (57%) of the individuals primed with a fresh start (vs. control; 29%) chose the novel almond butter ( $\chi^2 = 1.35$ ,  $p < .05$ ), suggesting that grittier people may hold stronger to experimenting with new future selves.

Taken together, our research systematically introduces the fresh start construct and offers a set of studies that establish a valid and internally consistent measure within a nomological network. Across our discussions and surveys of consumers we learned that for the majority embracing change through a Fresh Start, while difficult, is filled with desire and promise and connected to making better and new choices, leading to a better life. Our experiments suggest that we can empower consumers to get a fresh start and change behavior.

### **Consuming and Consumption in Third Space Communities: Constructing Sanctuary**

#### **EXTENDED ABSTRACT**

We are beginning to better understand that experiences that are associated with identity transition can extend for many years, and may never be fully accomplished (cf. Arsel and Thompson 2011; Penalzoa 1994; Ustuner and Holt 2007). Although transitions have been long postulated as a linear experience, the reality for consumers is that the lived experience of change may be much more complex than the accepted “model.” In recent work, we see that the experience of leaving a consumption-related community is, in some ways, like Dr. Dolittle’s pushmi-pullyu character. The attendant relationships can be integral to one’s life and severing these can be painful and protracted—and can last for months, years or even decades (McAlexander, DuFault, Martin and Schouten 2014; Vaughn 1986).

For the informants in the current study who are contemplating leaving or who have left an identity-central community, this exit process is preceded and accompanied by the acute awareness of a critical choice: “Do I leave to something, leave to nothing, or resign myself to staying?” This angst appears to undergird much of the decision of whether or not to leave. The majority of the informants in this study left to ‘something.’ This study examines the consumer behavior involved in the creation, consumption, and experiences of a new community of that ‘something.’ These consumers redirected the emotional and material resources they had previously poured into their former community, and used them to effectively buy membership (cf Sana 2005) into third places. In these places, they co-construct a new something with other ex-members. In addition to consuming the new community, in eschewing the practices of their old community they substitute new brands and different consumption patterns. These new consumption patterns have been the preferred consumption selections of the new community and now become important and meaningful to their new consumer life. An entire consumption realm was lost and another one gained.

Feeling the need to find an alternative to their perception and fear of the feeling of impending nothingness upon leaving, the informants we observed and interviewed largely joined alternative communities composed partly or mostly of ex-members. Parents Without Partners, ex-Mormon conventions, and online ex-Harley owner forums are just a few examples of these kinds of third places for leavers of, respectively, marriages, faith, and brands. Unintentionally in the spirit of the conference topic “Back to Fun,” we found that third places for the leavers in our study include: perennially attending ex-community conferences and gatherings where “sin baskets” are given as raffle prizes; meeting at Starbucks for young atheist meetings to discuss newest transgressions of former faith tenants; weekly poker games that first began as “Drinking 101” upon initial exit; continuing to post on ex-faith member secret Facebook groups to give advice on meet-ups, dating and hook-ups for new defectors; starting transitions groups in other churches; joining a BMW enthusiasts’ club after using former tithing money to buy a BMW; and ritually attending sporting events, having family outings, or power-shopping on Sundays during

former church time. In short, much of what they have moved to is social, pleasurable, and/or fun.

Oldenburg (1989) describes traditional third places as neither work nor home, where people gather and find community. In the current research we report findings that show that these transitional third place communities play a very different role than that which has been postulated before in the consumer behavior literature. Extant literature suggests that leavers pass through these exit communities on their way out as they move toward a new identity (Schouten 1991). Those third places where people come together to establish new connections with others of similar “ex” status have been viewed as liminal and temporary (Turner 1969; McAlexander and Schouten 1989; Young and Wallendorf 1989; Ozanne 1992). However, we find that these liminal spaces, on the contrary, became an important and stable part of the ex-members’ transformation of their lives, not only in the initial exit stage, but throughout the exit process, and after they felt they had established their new identity. The consumption pattern changes also remained constant.

27 informants were depth interviewed on multiple occasions over a period of three years. A sub-sample of these informants and other community members were also observed and interviewed at gatherings for ex-members, ceremonial experiences, on secret online Facebook pages to which we were invited, and in various formal and informal groups specifically for ex-members of this community for two years. Our emergent findings show that these third places fill an under-reported and very important role for leavers that are far beyond the liminality of temporary community (cf Arnould and Price 1993). For leavers they can become a permanent and stable home, culturally and socially. Consequently these new consumption patterns, in addition to the resources spent on the new community, are lasting and can become as much a part of a leaver’s identity as the former community. In these third place communities consumers find both community and reinforcement and validation of their agency for change, giving them a feeling of collective strength to push back against family, cultural and social resistance. They also give leavers a comfortable community with other members of the same frame of reference in regard to the community they have left. These new communities, far from being ephemerally liminal, appear stable, and continue to impact consumption choice and consumer behavior in a lasting relationship. They contribute to the leavers’ well-being as they make the transition from faithful community member, to the individual they envision who has volition, agency and strength to make independent choices.

### **Single Mothers By Choice: Putting Aside One Life Goal and Embracing Another**

#### **EXTENDED ABSTRACT**

Consumer well-being research has emphasized the adaptive role of being optimistic, believing in one’s abilities and persisting in the pursuit of important life goals (Seligman 2006). However, people can’t always attain their goals and hence an equally important adaptive human process that can contribute to subjective wellbeing and health is the ability to disengage from unattainable goals and re-engage with new meaningful goals (Wrosch, Scheier, Miller, Schulz and Carver 2003; Wrosch, Miller, Scheier and Brun de Pontet 2007). Examining the adaptive process of giving up and moving on has received virtually no attention in consumer research, although it likely has applications in numerous domains from diet and exercise to procreation strategies (Fischer, Otnes and Tuncay 2007). When is it time to give up, and do something different? How do people reorganize their lives to pursue a different life goal? To date, we

know almost nothing about the process through which consumers move from a persistent engagement with one important life goal to reorganizing their lives, resources, networks and market behaviors to engage with pursuit of a different goal.

The purpose of this research is to uncover that process in the context of Single Mothers by Choice. An estimated 30,000 American babies are born with the help of donor sperm each year and close to 50 percent of human sperm and eggs are purchased by single women (Hundhausen 2010). Recent research suggests that for many heterosexual women this involves a process of giving up on finding a partner and shifting resources and attention to making a baby (Hertz 2006; Graham 2012). However, research has not uncovered this process or how women shift goals and mobilize networks, markets, resources and myriad behaviors from dating to procreation. This paper presents the findings from a two-phase study. Phase one is a netnographic discourse analysis of posts and blogs from select online communities of self-identified SMCs (Single Mothers by Choice) and phase two is based on depth interviews with 19 heterosexual SMCs about their disengagement from what to many of them seems the unattainable goal of finding a partner and father for their children to engaging the goal of motherhood through donor sperm (Assisted reproductive technologies—ART). In addition, we included interviews with five women who were expanding their family from one child (either born naturally or through ART) to two in order to better understand how the ideal of the nuclear family is re-negotiated and extended over time and to compare differences in process. In order to establish boundary conditions, we also sought negative cases of women who wavered and decided not to pursue ART. The data was analyzed independently through iterative readings by the two authors and emergent themes were compared and contrasted. Discrepancies were either resolved through discussion or additional data collected until a clearer picture evolved through further interpretive analysis.

Our findings illustrate how women transition their resources, networks and consumption domains as they let go of one goal and embrace another. Our informants find emotional difficulty in this transition—for many it feels like ‘giving up on love.’ There is also physical pain and exhaustion; the in vitro fertilization process can be grueling. On the other hand, they also describe exhilaration and joy on realizing their freedom as they embark on this new path, free of the expectations of finding a mate and empowered to take control of their own reproduction. The liminality of moving between these goals has been described in prior research (Graham 2012; Hertz 2006), however, by focusing on how the two processes of disengagement and re-engagement interplay we counter prior descriptions of liminality and theoretically inform the significant differences we find among our informants in their experience of motherhood and how they imagine their futures. For example, while the process of disengagement is sometimes demarked by the liminal process described in prior research that then leads to embracing this new goal, many of our women have a tighter and more iterative interplay and move back and forth, pursuing both goals simultaneously or sequentially (cf McAlexander, Martin, DuFault, Schouten 2014). This relative inability to successfully let go of one goal and fully engage with the pursuit of motherhood can contribute to stress and ambivalence about this new lifestyle choice and goal (Otnes, Lowry and Shrum 1997). A post on the SMC board illustrates this ubiquitous ambivalence:

When I decided to become a single mother, I had to deal with society’s notions of the perfect family, and the fact that I was choosing to have a child in a way that was not ‘ideal’ or ‘normal’ by today’s standards. I had to grieve

that I did not have the white picket fence and the husband rubbing my belly while it grew with our child inside, a child we got to make the fun way. I got mad and sad that this ideal was not for me and that I had to do it differently because somehow I was not good enough for the norm. (Changes, 2014)

Our informant data in this study greatly enriches and gives depth to many aspects of this choice, including the time of birth. Most importantly, it adds to the literature by addressing more fully the resources and consumption constellation changes that are resultant from this goal disengagement. Moreover, because the move from the traditional nuclear family choice to Single Mother by Choice is fraught with stigma and structural hurdles, engagement with this new goal is full of obstacles. While this is certainly not unique to this context, and would be applicable to other consumer changes (Schouten 2014; Ruvio and Belk 2013), it adds a significant hurdle to re-engaging with the prior goal. Further, our informant data reinforces the nascent findings of other consumer behavior researchers about the iterative non-linear nature of exit transitions (Arsel and Thompson 2011; McAlexander, Martin, DuFault, Schouten 2014); Penalzo 1994; Schau and Russell 2014; Ustuner and Holt 2007).

### **Changing the Script: Family Collectivity Formation in the Neonatal Intensive Care Unit**

#### **EXTENDED ABSTRACT**

*When you're going to have a baby, it's like planning a fabulous vacation trip - to Italy...It's all very exciting. After months of eager anticipation, the day finally arrives. You pack your bags and off you go....The stewardess comes in and says, "Welcome to Holland." "Holland?!?" you say. "What do you mean Holland? I signed up for Italy! I'm supposed to be in Italy. (From "Welcome to Holland" by Emily Perl Kingsley-given to many new NICU parents)*

The time of birth is a momentous change, surrounded with cultural scripts and logics that have been created and ingrained over generations by family lore, personal experience, entertainment tropes, advertising, marketing, and media hype of celebrity and royal births. Many expectant parents prepare for the new baby with common consumer behaviors: acquiring baby clothes and infant paraphernalia, making birthing plans, preparing the nursery. Parents imagine themselves holding their newborn, bringing their new baby home in accordance with the traditional narrative.

But some babies do not follow this script, and parents' imagined narrative of birth and baby is shattered as it hits the neonatal intensive care unit doors of an unexpected reality. They arrive at the bedside of the tiny human to whom they've just given birth, separated by the enclosed box of glass that is the warming isolette. Ropes of tubing and lines attach their baby to life-giving air and nutrients, hooking them to machines that randomly cry alarm. The family has arrived in Holland, not Italy. As one staff member told us:

It's like they need a guidebook: "This is our land. These are our laws. These are our customs. These are our rules. This is what's around here... You can be an active participant in this land by knowing this and learning that and speaking this language."(Sandy, NICU caregiver)

Listening to parents talk about this time of acclimation is much like watching Bill Murray in "Lost in Translation" as he navigates Tokyo without knowing Japanese, staring at flashing billboards and listening to conversations and sounds that have no meaning to him. Parents describe a sound track that falls like the noises of a foreign country's streets on uncomprehending ears: medical acronyms, beeping, chiming, flashing cacophony of alarms, overhead pages, the hiss of ventilators. How do parents create a new script to form their family collectivity?

For background, we draw upon a body of work in the nursing and medical literature about the family and sounds in the NICU (Seideman et al. 1997, Stromsweld and Ward 1997, Board 2004, Fisher et al. 2008, Pineda et al. 2013, Lahav 2014). The importance of teamwork between staff and parents has been shown to improve parent feelings of comfort (Brandon et al 2009). In the consumer behavior literature, notable works have been written about difficult decision making and end-of-life in neonatal and pediatric intensive care units (Botti, Orfali, & Iyengar 2009; Orfali and Gordon 2004; Luce, Bettman and Payne 2001). But there is still a large lacuna in our consumer behavior literature about the much more common parental hospital service scape experience of a shorter NICU stay and a happier outcome. There is similarly a lack of research into the active role that equipment has upon the family collectivity formation (Dent 2003, Agrawal et al 2009). Our research works to fill this gap. We investigate how an evolving, hoped-for family collective is shaped and constrained by unexpected events, surrounding technologies, discourses and service providers, and how the new family collective assembles, bonds and moves forward. We employ a methodological lens of assemblage and actor network theory (Latour 2005, DeLanda 2006, Deleuze and Guattari 1987, Epp and Price 2010, Epp et al. 2011, Martin and Schouten 2013) that has been used in medical contexts (Berg and Timmermans 2000; Brown and Middleton 2005). Both parents and staff describe the unit in emic language that reveals its assemblage qualities and the equipment as actors:

You don't think of it as equipment. The equipment is extensions of the child—like you think of the ventilator as the lungs of the baby outside the baby, and the tubing is just its extended trachea. (Sam, NICU caregiver)

Parents can feel as if they are intruding on the baby/staff/unit assemblage. As one informant described:

They couldn't go home until they <her twins> could "kan-garoo." They literally had to spend 30 minutes trying to get them to lie right on top of me and rearrange the tubes so that the alarms wouldn't go crazy. I kept thinking, "It's me, it's my body that's wrong. They need to do this without me here." (Marianne, mother)

Using depth interviews of parents and NICU staff, observations, and netnography on NICU forums, we triangulate our findings to show that parents who increase their capacities to become part of this NICU assemblage appear to increase their feelings of empowerment over their baby's care. It appears that this is a vital component of effectively bonding as a family collectivity. Parents describe feelings of competence and pride as they increase their capacities by learning the language and mastering use of the machinery (cf Muething 2007). As one mother told us:

Finally it got to the point where I could understand the language. It was like learning French. Desats, bradycardia,



tachycardia, A's and B's...Then I could be there for rounds and participate. I was part of the team.

Parents also reveal this enhances their ability to cope. Coping further improves family bonding and leads to better decision making (Melnyk et al 2006; Wrosch et al. 2011; Robbins et al 2013). In addition to the important work of improving parent/infant bonding, this research has the potential to make an impact upon consequent parental satisfaction with the neonatal unit service scape and the hospital itself (cf Popper et al 1987, Mitchell-DiCenso et al 1996, Cescutti-Butler and Galvin 2003, Conway et al 2006).

A growing body of work suggests that there are genuine benefits to purchasing experiences, intangible purchases such as vacations and concerts, instead of purchasing material possessions, tangible goods such as clothes, trinkets, and electronics (Carter & Gilovich, 2010, 2012; Howell, Pchelin, & Iyer, in press; Nicolao, Irwin, & Goodman, 2009; Rosenzweig & Gilovich, 2011; Van Boven & Gilovich, 2003). Experiences, compared with possessions, appear to be ultimately more satisfying because they are less likely to suffer from invidious comparisons to unchosen options or new information (Carter & Gilovich, 2010), and are more central to one's self-concept (Carter & Gilovich, 2012). What's more, the general tendency to choose experiences over possessions is associated with well-being and life satisfaction (Howell et al., in press). However, as all of this work acknowledges, the categories are not very clearly defined. What makes an experience an experience? What makes a possession a possession? While there are certainly purchases that are clearly experiential (e.g. concerts) or material (e.g. clothes), there are also quite a few that cannot be so easily categorized. An mp3 player is a tangible object, but it also allows one to enjoy the experience of listening to music. How do these ambiguous purchases fit into the overall pattern of findings? What's more, what does such ambiguity say about the underlying properties that define the categories?

To start, we endeavored to examine the types of purchases that participants generated when prompted to recall a material or an experiential purchase. In Study 1, we found that independent raters were easily able to guess, based on the description provided by the participant, which type of purchase they had been assigned to recall. This suggests that, regardless of any fuzziness in the categories, most participants seemed to have little trouble using them. There were some purchases, however, that fell somewhere in the middle, and also appeared to be somewhat middling in terms of their satisfaction. Would it be possible to take advantage of that ambiguity, to take those same purchases and emphasize aspects of one category or the other, to produce the same psychological effects?

In Study 2, we again had participants recall either a material or an experiential purchase, and again found that participants in the experiential condition were more satisfied with their purchases. However, we also asked a third group of participants to recall a material purchase, but we asked them to take a moment to think about its experiential qualities. As expected, we found that this group was just as satisfied as participants in the experiential condition. While the previous study suggested that there are real differences between the categories, this finding indicates that there is a certain amount of latitude in how one thinks about a given purchase.

In the next three studies, we examined that very latitude. We took the same purchase, one that was smack in the middle of that fuzzy boundary between the two types of purchases, and emphasized either its material or its experiential qualities. Participants in Study 3 were asked to think about a boxed set of music either as part of a music collection, something one puts on a shelf, or as an experience, something one listens to. Participants who had been led to think

of it as an experience were less bothered by negative comparative information (learning it was now available for a lower price), and thought it would be more satisfying than participants who framed it as a possession.

In Study 4, participants were asked to think about a new 3-D TV as either a possession, emphasizing where it would go in their home and fit in with their other possessions, or as an experience, emphasizing experiencing television in a whole new way and how it would fit with their other activities. We then showed participants several sets of overlapping circles, as in the Inclusion of the Other in the Self scale (Aron, Aron, & Smollan, 1992), and asked them to choose which matched how much they thought the TV would be a part of their self-concept. As predicted, participants in the experiential framing condition chose circles that overlapped to a greater degree, thinking that the more experiential television would be more closely associated with their self-concept.

In Study 5, we looked at the flip side of satisfaction: regret. People tend to feel regrets of inaction about their experiences (i.e. missed opportunities) and regrets of action about their possessions (i.e. buyer's remorse). Would framing a purchase as an experience or possession produce similar patterns of regret? When a 3-D TV was described as an experience, participants felt that the regret of a missed opportunity would be stronger than the regret of buyer's remorse, but not when it was framed as a possession.

It's worth noting that reframing ambiguity may be asymmetric. That is, it may be fairly easy to think of a tangible object in terms of the experiences it affords, but rather difficult, if not impossible, to think about an intangible experience in terms of its material qualities. Fortunately, turning possessions into experiences appears to be the reframing that is most psychologically beneficial.

These studies taken together suggest the differences between the categories appear to have something to do with real, tangible differences between possessions and experiences, but also with certain psychological processes, such as comparison and regret, and perhaps it is those psychological processes that underlie what makes an experience an experience. What's more, the ambiguity in category definitions can actually be taken advantage of – producing greater satisfaction and reduced susceptibility to negative comparative information. In sum, although it's possible that the categories are largely in the mind, it may be the mind that matters.

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# It's All Green to Me: How Intrapersonal and Interpersonal Factors Shape Consumers' Financial Decisions

Chairs: Chiraag Mittal, University of Minnesota, USA

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## **Paper #1: Psychological Tangibility of Money Influences Loss Aversion and Propensity for Gambling**

Avni Shah, Duke University, USA

Jim Bettman, Duke University, USA

John Payne, Duke University, USA

## **Paper #2: Greedy Loss Prevention in Economic Decision-Making**

Goedele Krekels, Ghent University, Belgium

Mario Pandelaere, Ghent University, Belgium

## **Paper #3: The Planning Paradox: Increased Economic Uncertainty Decreases Retirement Planning**

Chiraag Mittal, University of Minnesota, USA

Vladas Griskevicius, University of Minnesota, USA

## **Paper #4: Managing Debt and Managing Each Other: Debt Management Decisions in Interpersonal Contexts**

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### **SESSION OVERVIEW**

Consumers' everyday lives are strongly affected by financial decisions large and small. Individuals and households need to successfully build cash reserves, manage investments, eliminate debts, and plan for retirement. It is no surprise that in all of these domains, consumers are influenced considerably by personal and social factors. Despite the significance and ubiquity of such factors, little is known about their effects on consumers' everyday financial decisions. The goal of this session is to present novel research demonstrating how and why consumers' financial decisions and welfare are influenced by intra and interpersonal factors. Featuring multiple methods and diverse theoretical frameworks, this session provides new insights into how financial decisions are influenced by such factors as the subjective value of money, greed, childhood environments, and social relationships.

**Shah, Bettman, and Payne** investigate how one's subjective value of money influences individuals' loss aversion tendencies. Using a set of behavioral experiments, the authors find that subjective value of money moderates the degree to which people experience loss aversion. Specifically, they find that less painful forms of money (e.g., credit cards) decrease sensitivity to losses and the negative associations with losing wealth.

**Krekels and Pandelaere** identify a previously unexplored and counterintuitive aspect of greed: a chronic focus on loss prevention (vs. pure acquisitive behavior). The results from three studies show that people higher versus lower in dispositional greed are more focused on preventing losses. For example, in an online auction paradigm, those higher in dispositional greed bid a larger amount in order to ensure not losing an endowed product.

**Mittal and Griskevicius** extend beyond intrapersonal factors to explore how an interpersonal factor—childhood environment—influences financial planning behavior in the face of uncertainty. Four experiments suggest that childhood resources play a moderating role on people's motivation to plan. Specifically, individuals from impoverished backgrounds planned significantly less under resource uncer-

tainty. The authors find that sense of personal control mediates this effect and that boosting people's control beliefs helps in mitigating it.

As many important financial decisions are made within the context of relationships (e.g., between spouses), **Olson and Rick** examine whether and why dyads navigate debt management decisions differently than individuals. In an incentivized game, dyads performed significantly worse than individuals and were more likely to pay off smaller debts even when larger debts had larger interest rates. Further analyses among the dyads and a simulation suggest that the partner with the least optimal preferences had greater influence on joint outcomes.

Taken together, these four papers advance our understanding of how intra (i.e., valuation of money, dispositional greed) and interpersonal factors (i.e., childhood environments, deliberation with a partner) influence consumers' financial decisions. Overall, this session offers a coherent set of novel findings that enhance the breadth of our knowledge in an emerging area of research. We expect this session to appeal to a broad, interdisciplinary audience including researchers interested in consumer welfare, decision making, financial planning, debt management, loss aversion, childhood environments, and social relationships.

## **Psychological Tangibility of Money Influences Loss Aversion and Propensity for Gambling**

### **EXTENDED ABSTRACT**

Loss aversion is one of the key constructs in understanding how consumers make household financial decisions, and has been a topic of great interest across a variety of academic disciplines. Loss aversion refers to the phenomenon that the disutility of experiencing a loss weighs greater on the individual than experiencing the utility of an equal amount gained. In other words, it holds that "losses loom larger than gains" (Kahneman and Tversky 1979, 279). Research has demonstrated that whereas gambling preferences for large amounts of money were consistent with loss aversion, gambling preferences for small amounts of money showed a reversal of loss aversion (Harinck et al. 2007). Individuals expected small gains to be more favorable than equivalent small losses were unfavorable. Harinck et al. demonstrate that the objective value of money can influence the degree to which individuals are loss averse.

Whereas research demonstrates that people are loss averse and are unlikely to select gambles that have an equal chance of winning or losing the same amount of money, empirically, the results indicate a different story. Casino revenues in Nevada alone for 2012 have exceeded \$10.8 billion, up 1.5% from 2011, and continue to grow (Nevada Gaming Control Board 2013). Casinos regularly require patrons to use poker chips or casino tokens, a less salient and less painful form of money than cash. Furthermore, as consumers are moving toward payment forms such as debit/credit cards and even mobile payment technologies (which all decrease the salience and vividness of the payment experience), an important question emerges: Can the form of money lead individuals to be less sensitive to losses and more focused on gains?

Recent research has demonstrated systemic psychological and behavioral biases in the way individuals evaluate the value of money based on the payment form (e.g., Raghubir and Srivastava 2002; So-

man 2001). More salient forms of money (i.e., paying with cash vs. a debit or credit card) influence the amount of pain individuals feel when paying. Paying with a less painful form of money increases the propensity to spend and to evaluate products more favorably (e.g., Chatterjee and Rose 2011; Hirschman 1979). We propose and find that loss aversion is moderated not only by the objective value of money, but also the subjective value of money. Specifically, we show that less painful forms of money moderate the degree to which individuals experience loss aversion. This leads to an increased propensity to gamble, a greater likelihood in selecting gambles with a lower probability of winning or higher buy-in amount, and increased recall errors in the amount of money played and earned when gambling.

In study 1, we gave participants a chance to play as many gambles as they desired out of a set of gambles, using their own money. We varied the form of payment they gambled with (cash or plastic student card) and the number of gambles they could choose from (2, 6, 10, 14, or 18 gambles). For each of the gambles, we also manipulated the buy-in amount in order to play the gamble (\$0.50 or \$1), the probability of winning (10%-90%), and the amount earned if the participant won, such that the expected value of all gambles was equal to +\$0.50. In each of the conditions, participants could choose to purchase and play all, some, or none of the gambles. We find that individuals gambling with a plastic, less salient form of money gambled more overall, chose lower probability gambles, and were significantly more likely to choose \$1 gambles.

In study 2, we use a similar gambling paradigm but examine individuals' ability to recall the money spent gambling after a 5-minute filler task. In comparison to those gambling with cash, we find that individuals paying with plastic had higher recall errors regarding their gambling choices, underestimating the amount of money they gambled and overestimating the amount of money earned.

Our research shows that loss aversion can decrease and even reverse when the subjective value of money is attenuated, altering one's decision-making abilities under risky choice settings. Paying with a less painful form of money decreases the sensitivity to losses and the negative associations with losing wealth. These results have important theoretical and substantive implications. Theoretically, our findings indicate that the cognitive and affective components associated with risk can be influenced by the salience of the gain and loss. Individuals may be buffered more against emotions associated with financial loss when the salience of the loss is low. Cognitively, while people may want to discount negative outcomes (i.e., the hedonic principle), the psychological strategy of discounting may be more effective when the salience of the loss is reduced. Our findings also contribute to the precise understanding of the psychological underpinnings behind the pain of payment, the biases associated with payment form differences, and consumer self-regulation.

## Greedy Loss Prevention in Economic Decision-Making

### EXTENDED ABSTRACT

Greed is omnipresent in our current society and highly relevant to financial decisions. For instance, the media and public opinion attributed the recent financial crisis to the greediness of bankers and stockbrokers, who risked clients' money to ensure greater turnover to satisfy their greed (Papatheodorou, Rosselló, and Xiao 2010). Greed has also been related to corporate fraud (Smith 2003) and higher levels of consumer debt (Lunt and Livingstone 1991).

When people think about the concept of greed, they typically focus on acquisitive behavior (Wachtel 2003), classifying greed as an insatiable desire. Although we endorse this view of greed, we believe that an important aspect is missing from prior conceptualiza-

tions: avoiding losses might be another important characteristic of greedy people.

This dual vision on greed is often indirectly incorporated in research, where the same behavior might be explained as preventing losses in pay-offs, labeled fear, or increasing pay-offs, labeled greed (Rapoport and Eshed-Levy 1989). We believe that both labels are an essential part of dispositional greed. An initial study ( $N = 184$ , 91 males,  $M_{\text{age}} = 30.9$ ,  $SD = 11.8$ ) revealed a positive correlation between dispositional greed and both promotion and prevention foci (Grant and Higgins 2003;  $r = .25$  and  $.26$ ,  $p < .001$ ). To further examine our predictions, we conducted three studies that investigated whether preventing losses (above and beyond acquisitive behavior) is an essential part of a greedy disposition in economically relevant contexts.

In study 1, we employed a validated measure of loss aversion borrowed from previous research (Tom et al. 2007). In this paradigm, respondents indicate their willingness to participate in a coin toss gamble with an equal chance of winning (10 - 45€, increments of 5€) or losing (5 - 25€, increments of 2.5€). These amounts were chosen because previous studies indicate that people are roughly twice as sensitive to losses as to gains (Tversky and Kahneman 1992). Next, participants completed a measure of dispositional greed (i.e., participants rated their agreement with six statements such as "Even when I am fulfilled, I often seek more"). Analyses showed that dispositional greed predicted respondents' loss aversion. Individuals high in dispositional greed (+1  $SD$ ) exhibited an average loss aversion ratio of 5.62 ( $SD = .59$ ), indicating a willingness to participate in the gamble when the gain is more than five times the loss. For those lower in dispositional greed (-1  $SD$ ) this ratio was 3.82 ( $SD = .59$ ). These results show that greedy people are not just oriented towards gaining more, but are also focused on preventing losses.

Study 2 featured an auction paradigm, which is common in economic research (Bajari and Hortascu 2003; Cilia and Buchmann 2002). Prior work has shown that bidding can produce a pseudo-endowment effect (Ariely and Simonson 2003), which might result in loss experiences when people do not become the final owner. A total of 471 U.S. participants (244 males,  $M_{\text{age}} = 32.5$ ,  $SD = 11.3$ ) imagined being in an online auction. They viewed ten items (e.g., an iPhone, a table lamp) and indicated the highest price they were willing to bid, ranging from 10% to 120% of the retail price. They also completed a measure of dispositional greed.

The results showed that greed predicted the amount respondents were willing to bid ( $\beta = .16$ ,  $F(1, 469) = 12.82$ ,  $p < .001$ ). A binomial logistic regression showed that greedy people were more likely to bid at least 100% of the retail price (Wald = 5.57,  $\beta = .30$ ,  $p < .05$ ). Thus, greedy people are willing to bid more in an online auction, possibly to ensure not losing the object they already feel ownership over, even if it means paying more than their value.

In study 3, we investigated the consequences of when greedy people experience losses. Previous research has shown that allocators in an ultimatum game feel ownership of the money endowed to them and experience losses when the recipient rejects their offer (Leliveld, van Dijk, and van Beest 2008). As such, 184 U.S. participants (93 males,  $M_{\text{age}} = 34.6$ ,  $SD = 11.0$ ) played a \$1 ultimatum game with a computer programmed to reject any offer. Answers to an open-ended question ensured that respondents were unaware of this fixed response. They then indicated their feelings following this rejection on an 8-item bipolar scale (e.g. *frustrated* to *relaxed*, *disappointed* to *not disappointed*). After some filler items, they were allocated the role of proposer in a \$1 dictator game with a different recipient, to exclude a punishing explanation.

Greed significantly predicted the proposed amount in the ultimatum game ( $\beta = .22$ ,  $F(1, 182) = 9.50$ ,  $p < .01$ ) but not their emotions following rejection of their offer ( $\beta = .08$ ,  $F(1, 182) = 1.19$ ,  $p = .28$ ). In the dictator game, both greed and their emotions associated with rejection predicted the amount people kept for themselves. Moreover, there was a significant interaction between greed and the emotions associated with rejection: Whereas non-greedy individuals' emotions predicted how much they would keep, no negative emotional response was needed to increase greedy people's portion.

In three studies, we show that loss prevention has a significant impact on greedy behavior in financial decision-making contexts. A prevention focus is an essential part of dispositional greed, and has an even larger impact than the promotion focus. We also find that when greedy people experience imagined ownership of an object, they are willing to pay more to prevent losing this object. Finally, when they are confronted with an actual monetary loss, it causes them to behave more acquisitive in later, unrelated financial decisions, possibly to make up for this imagined loss.

### The Planning Paradox: Increased Economic Uncertainty Decreases Retirement Planning

#### EXTENDED ABSTRACT

Financial planning is pervasive in consumers' lives. Not only does it impact how we spend money in our everyday lives, but it also has a profound effect on wealth accumulation and retirement satisfaction (Ameriks, Caplan, and Leahy 2003; Elder and Rudolph 1999). Because a principal reason to plan is to have a better and more comfortable future, might uncertainties about the future change people's planning psychologies? For example, can cues indicating looming resource uncertainty and scarcity lead people to change their valuations and importance of financial planning? Would they overvalue planning or undervalue it? Would everyone respond to uncertainty cues the same way or would there be predictable individual differences among people?

Recent work indicates that people respond in adaptive and divergent ways when faced with threats of resource uncertainty based upon their childhood resource conditions (Griskevicius et al. 2013). Whereas adults raised in relatively resource-rich environments took fewer risks and became less impulsive under cues of resource uncertainty, those from relatively resource-deprived backgrounds responded to the same cues by taking more risks and becoming more impulsive. In the present work, we draw on the cost-benefit framework of life history theory to investigate the effects of resource uncertainty on people's financial planning behavior.

In study 1, we experimentally manipulated resource uncertainty by having people read either a news article about the recent economic recession or a control article. We then assessed their motivation for financial planning by using an adapted version of the propensity to plan scale (Lynch et al. 2009). The results revealed that resource uncertainty *decreased* the motivation to plan among those from poorer backgrounds but not for those from richer backgrounds.

In study 2, we sought to replicate the results of study 1 by using a behavioral measure of the value of planning. Economic uncertainty was manipulated by asking participants to recall and briefly describe a situation in which they felt that they could not financially obtain something that they wanted. In the neutral condition, there was no manipulation, meaning that people simply responded to the measure of financial planning. Then, in an ostensibly unrelated task, respondents were informed that the experimenters were interested in knowing the kinds of information people are interested in learning in the context of retirement planning. They were provided with a list

of topics pertaining to retirement finances that they could choose to learn about. Importantly, they were informed that they could choose as many or as few of the topics they were interested in. The dependent measure was the amount of time respondents spent on learning about retirement planning. Findings conceptually replicated the results of study 1. Specifically, economic uncertainty led respondents who grew up with relatively lower levels of family resources to spend significantly less time on the retirement planning task. No significant differences were observed for those growing up with higher levels of family resources.

Study 3 had two goals. First, to ensure the robustness of the experimental findings in studies 1 and 2, we sought to conceptually replicate the results using a third methodology to prime uncertainty—a photo slideshow. Second, we tested whether people's sense of control could be a potential mediator of the relationship between resource uncertainty and planning. Resource uncertainty cues were manipulated by having participants view a slideshow with visual images suggestive of economic uncertainty or control images. Next, participants rated their motivation to plan and their perceived sense of control. Consistent with the results from studies 1 and 2, study 3 found that uncertainty cues significantly *decreased* the tendency to plan only for those growing with lower levels of family resources. Additionally, this effect of resource uncertainty on planning was found to be mediated by people's sense of control.

Study 4 tested an intervention strategy for buffering individuals from the negative effects of uncertainty. Given that resource uncertainty lowers sense of control for individuals from deprived childhoods, Study 4 attempted to experimentally re-affirm people's sense of control in the face of uncertainty. Participants were randomly assigned to one of three experimental conditions: uncertainty, uncertainty *plus sense of control boost*, or neutral. Uncertainty was manipulated using the same procedure as in study 2. However, prior to this manipulation, participants recalled and described either an ordinary purchase transaction or a time when they felt in complete control of a situation (Whitson and Galinsky 2008). In the neutral condition, participants simply advanced to the dependent measure. Next, all participants worked on the retirement planning task used in study 2. The time spent reading about retirement planning served as the dependent measure. Consistent with previous studies, we found that whereas uncertainty cues did not affect planning among people from wealthier backgrounds, the same cues led to significantly reduced planning among those from poorer backgrounds. Importantly, however, enhancing sense of control led to a significant increase in planning in this group. This suggests that an intervention which aims at boosting people's sense of control can help in alleviating the effects of economic uncertainty on planning among those who are most vulnerable.

These studies provide important new insights into the complex relationship between resource uncertainty and people's financial behaviors. It draws upon life history theory to explore why people from different childhood backgrounds might plan differently during uncertain times such as economic recessions. It also identifies sense of control as an important variable that guides people's subsequent behaviors pertaining to financial planning. Furthermore, it documents the ameliorating role of a sense of control in getting people from poorer backgrounds to plan more during tough times. In sum, this work has important implications for public policy professionals and others who wish to foster better financial planning behaviors in people from disadvantaged backgrounds.

## Managing Debt and Managing Each Other: Debt Management Decisions in Interpersonal Contexts

### EXTENDED ABSTRACT

The past few years have witnessed a surge of interdisciplinary research aimed at understanding and improving consumer financial decision-making (Lynch 2011). The vast majority of work in this area has focused on how individual consumers process information and make decisions. However, outside the lab, many important financial decisions are subject to social influence and are made within the context of relationships (e.g., between spouses and business partners; Simpson, Griskevicius, and Rothman 2012). Moreover, the outcomes of such decisions can be important determinants of relationship satisfaction (e.g., Dew 2008). Our work begins to address this important gap in the literature by examining whether and why dyads navigate a common financial decision (how to manage debt) differently than individuals.

When individuals are faced with multiple debts, they tend to repay the smallest debt first rather than the debt with the highest interest rate, a costly tendency known as debt account aversion (Amar et al. 2011). A number of psychological factors appear to contribute to debt account aversion, including the temptation of pursuing goals nearest completion and the pleasure of eliminating an obligation. However, whether debt account aversion would persist in a joint decision-making context is unclear. On the one hand, people may find it difficult to publicly defend their desire to pursue the financially suboptimal strategy of closing small debts because it is pleasurable (Lerner and Tetlock 1999). Thus, the accountability inherent in joint decision-making may encourage more financially optimal debt repayment behavior. Performance within dyads may also be enhanced because having a partner offers an additional perspective, which encourages greater discussion and may ultimately enhance decision quality (i.e., by identifying and implementing the financially optimal strategy). On the other hand, dyads may focus their discussion on attributes that are easier to understand (e.g., the number of debts, in this context; Hsee 1996) and attempt to reach agreement on how to manage those attributes. Deliberation among like-minded people can also amplify existing preferences (e.g., Schkade, Sunstein, and Hastie 2007). Thus, if most people naturally prefer to focus on closing small debts (Amar et al. 2011), joint decision-making may make this preference even more pronounced.

Based upon work in social psychology indicating that groups value harmony and conformity (sometimes to the detriment of decision quality; Asch 1956; Janis 1972), individuals may be motivated by normative pressures. Specifically, dyads might “go along to get along” and thus focus on hedonically rewarding outcomes (which may be different than financially optimal outcomes). To test whether typical repayment behavior among individuals resembles happiness-maximizing behavior, we first examined the motives underlying debt account aversion. We presented individuals with a scenario in which they could either completely repay a low-balance debt with a low interest rate (APR) or partially repay a high-balance debt with a high APR. We asked participants what they would actually do in such a situation, what they rationally should do, or what they should do to maximize their happiness. We found that participants’ actual and happiness-maximizing preferences both favored paying off the small debt, whereas rational preferences favored chipping away at the high-balance, high-APR debt. The results suggest that individuals understand that, economically, they should focus on interest rates, but that the pleasure associated with eliminating debts is difficult to resist.

Our primary experiment examined whether these hedonic preferences would be enhanced or minimized in an interpersonal context. We randomly assigned 87 (previously unacquainted) participants to complete a debt management game individually or in pairs. In the game (Amar et al. 2011), participants are initially saddled with six debts varying in size and interest rates. Critically, larger debts tend to have larger interest rates, meaning participants must avoid the temptation of closing small debts to perform well. The game lasts 25 “years” (rounds), and participants receive annual salaries they must use to repay one or more debts. In addition to a show-up fee, each participant could earn up to \$7.50 (\$15 for each dyad) based upon his or her final debt amount at the end of the game.

We found that dyads performed significantly worse than individuals (i.e., they had significantly greater final debt levels) and were 38% more likely to pay off the smallest debts. Follow-up analyses among the dyads and a simulation suggest that the partner with the least optimal preferences “wins” by having greater influence on joint outcomes. We then conducted the same experiment with 25 groups of three people to examine whether the results were specifically driven by one-on-one interaction or generalize to other types of social interactions (i.e., interactions where “majority rules” and alliances were possible). The pattern among groups was virtually identical to the pattern among dyads, suggesting that any kind of social deliberation may intensify debt account aversion.

Our work challenges the generalizability of debt management research conducted among individuals. Analysis of measures collected after the experiment suggests that dyads may have been more motivated to get along than to behave optimally. If participants who advocate closing debts are more passionate about their beliefs than participants who advocate focusing on interest rates, this (combined with heightened affiliative motives) could help explain why dyads struggle. We are currently examining (among individuals) whether suboptimal preferences are indeed held more passionately than financially optimal preferences. We are also further examining the “go along to get along” hypothesis by manipulating the extent to which dyads are motivated to get along (i.e., by manipulating whether dyads are fixed for the duration of the experiment or are randomly re-paired at the end of each round). We also plan to examine whether these effects replicate with real couples, as familiarity and an existing bond may increase one’s willingness to challenge others’ suboptimal preferences.

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# A Matter of Taste: Consumer Tastes and Judgments of Artistic Quality

Chairs: Amit Bhattacharjee, Dartmouth College, USA  
Klaus Wertebroch, INSEAD, France

## Paper #1: Discrepant Beliefs About Quality Versus Taste

Stephen Spiller, UCLA, USA  
Helen Belogolova, Facebook, USA

## Paper #2: Judging Good Taste: True Preference or Pretense?

Klaus Wertebroch, INSEAD, France  
Amit Bhattacharjee, Dartmouth College, USA  
Alixandra Barasch, University of Pennsylvania, USA

## Paper #3: The Impact of Artistic Ownership on Aesthetic Judgment and Preference

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## Paper #4: Selling Out: Producer Motives in Markets for Art

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## SESSION OVERVIEW

*"Art is the proper task of life"*—Friedrich Nietzsche

Artistic expression may be an essential aspect of what makes us human. Developing and communicating tastes for art and culture is fundamental to social life. The subjective nature of taste contributes to the tremendous richness and diversity of human culture (Hirschman 1983) but also to the difficulty of conclusively understanding this area of consumer behavior. Though some prior consumer research has demonstrated that cultural tastes serve to signal identity and facilitate social behavior (e.g., Berger and Heath 2007; Levy 1959), many principal elements of the defining qualities and drivers of consumer taste remain underexplored.

For instance, how do choices and social judgments involving art and taste differ from those involving other sorts of products? What factors influence consumer preferences for art, and what standards of evaluation are applied to judgments of taste and artistic quality? The four papers in this session examine some basic underpinnings of consumer taste and judgments of artistic quality.

The first two papers examine how tastes are formed and communicated within social groups. First, **Spiller and Bologolova** investigate how viewing a choice as a matter of taste, relative to objective quality, influences how it is perceived, communicated, and enacted. **Wertebroch, Bhattacharjee, and Barasch** then examine how including some low-quality tastes in a set of consumption choices can balance signals of good taste and authenticity, thus better indicating *true* good taste. The final two papers investigate how perceptions of the creative process undertaken by artists drive consumer judgments of artistic quality within the marketplace. **Valsesia, Nunes, and Ordanini** find that the extent of artistic ownership shapes critical evaluations but not necessarily consumer preferences. The last paper by **Bhattacharjee, Berman, Dana, and Mellers** examines how perceived artist motives shape consumer judgments of artistic quality: consumers prefer artists who create only to satisfy their own tastes, while artists who seek to satisfy the tastes of others are seen as sellouts.

Together, these papers highlight novel aspects of the antecedents and consequences of consumer taste judgments. All four presentations have at least three studies complete and manuscripts in preparation. Given the primacy of taste to social and marketplace life, we expect this session to generate interest among researchers of consumer preference, decision making, self-concept, aesthetics, creativity, culture, and social judgment.

The goal of the session is not only to provide concrete insights, but also to stimulate deeper questions about the role of cultural and artistic tastes within our lives. Why do we care so deeply about taste and how artists approach their work? How do tastes develop and come to drive important life decisions? In the spirit of the session theme, we hope these ideas will encourage reflection about the nature of consumer research: like artists, researchers are creative producers who are deeply passionate about their work. Accordingly, we hope to provoke a discussion at ACR that is both fruitful and fun.

## Discrepant Beliefs About Quality Versus Taste

### EXTENDED ABSTRACT

Is a cinephile's choice between a superhero movie and a romantic comedy a matter of which is better or which she likes more? Understanding whether consumers believe a choice set is a matter of taste or quality, is critical because such beliefs affect behaviors and inferences. The question of quality versus taste is a question of perceived objectivity versus subjectivity. Advice seeking differs between domains of knowledge and domains of preference (e.g., Goethals and Nelson 1973; Gorenflo and Crano 1989; Olson, Ellis and Zanna 1983), but this is typically assumed to vary by domain. Instead, we propose that in addition to domain differences in objectivity, there are individual and situational differences in perceived objectivity for a given domain. For example, in Goodwin and Darley's (2008) study of moral behaviors, they found disagreement in the perceived objectivity of domains traditionally seen as matters of taste.

Discrepant beliefs about taste and quality have important implications for how individuals reason about the world and others' preferences. We argue that because consumers who believe a choice is a matter of quality see the difference as one that exists in the world independent of their own perspective, they will perceive greater consensus than those who view the choice as a matter of taste. Moreover, because consumers who believe a choice is a matter of taste recognize the role of the match between the option and the chooser, they will be more likely to reference themselves when explaining their choice than those who believe a choice is a matter of quality. Finally, because consumers believe that quality is an acceptable reason to pay more for a product whereas idiosyncratic factors are not (Bolton, Warlop, and Alba 2003), they are more likely to be willing to pay for their preferred option when it is believed to be a matter of quality rather than a matter of taste.

*Brand Evaluation.* In Studies 1 and 2 (each  $N=200$ ), participants made one brand choice from each of four categories (e.g., Coca-Cola vs. Pepsi). All participants explained their choices, reported whether each choice was a matter of quality or taste, estimated how many participants made the same choice they did, and reported willingness to pay for their preferred option over the alternative. Consumers disagreed about how to classify a given choice: across choices, the

minority representation was held by approximately 35% of participants. Believing a choice was a matter of taste (vs. quality) was associated with lower perceived consensus (by about 10 percentage points;  $ps < .0001$ ), greater use of first-person pronouns when explaining their choices (by about 35 percent;  $ps < .0001$ ), and lower likelihood of being willing to pay for one's preferred option (by about 30 percentage points;  $ps < .0001$ ).

What causes such differences in the beliefs about a given domain? Reasoning about the structure of preferences affects beliefs. Prompting consumers to explain why someone else chose a different option than they did should lead them to be more likely to recognize that others have different preferences and therefore believe the choice is a matter of taste. Study 3 ( $N=200$ ) was similar to 1 and 2 except that rather than explaining their own choices, half of the sample explained why another participant chose the same option, and the other half explained why another participant chose a different option. Explaining another's discrepant choice increased the likelihood of rating the choice as a matter of taste by about 13 percentage points ( $p < .05$ ).

*Implications for Transitivity.* One way to examine how consumers' beliefs relate to their reasoning is to examine how they react after observing others' choices. First, viewing an intransitive set of others' choices (Alex chose X over Y, Ben chose Y over Z, but Christine chose Z over X) should lead to a greater likelihood of believing the domain is a matter of taste compared to viewing a transitive set of others' choices (Alex chose X over Y, Ben chose Y over Z, and Christine chose X over Z), because the second is compatible with a single rank-ordering according to quality whereas the first is not. Indeed, in Study 4 ( $N=100$ ), participants who saw interpersonally intransitive sets were more likely than those who saw transitive sets to report that the product domain (search engines) was a matter of taste rather than quality ( $p < .05$ ).

Second, believing a set is a matter of quality (vs. taste) should lead to a greater likelihood of making transitive out-of-sample inferences (e.g., given Alex and Ben's choices, inferring that Christine will choose X over Z) because quality differences are transitive whereas interpersonal taste differences are not. In Study 5 ( $N=400$ ), consumers were shown a set of overlapping choice sets from different people. Those who believed the product domain was a matter of quality were more likely to make transitive out-of-sample inferences than those who believed the domain was a matter of taste ( $p < .01$ ).

Across studies, contrary to prior research, we find that consumers show little consensus about how to classify an attribute: the minority opinion of taste vs. quality represented one third of participants. These relationships have important implications for bidding behavior, disclosure by sellers, beliefs about price fairness, and beliefs about others' choices.

### Judging Good Taste: True Preference or Pretense?

#### EXTENDED ABSTRACT

Good taste is central to social life. Consumers' need to demonstrate good taste is strongly associated with cultural capital within social groups (Bourdieu 1984). While the costs of acquiring tastes help ensure that they are reliable signals of distinctions between groups (Berger and Heath 2007), they cannot apply to within-group judgments. Within groups, given that quality standards are shared and there are known benefits to demonstrating good taste, how can individuals tell authentic preferences from mere pretentiousness?

We propose that *authentic good taste* is a single-peaked function of the quality of chosen options across repeated choices. Relative to choosing uniformly high-quality options, including some

low-quality options may help people signal authenticity to themselves and others. Hence, judgments of *true* good taste, and the corresponding social benefits, may call for a mixture of choice options that suggests an ability to discern quality independently. Supportive evidence comes from four experiments.

Study 1 demonstrates that the presence of bad tastes increases perceptions of authenticity. Undergraduate participants imagined moving into a new dorm and evaluating their new hallmates' answers to an informal "Getting to Know You" survey including lists of their favorite tastes. Participants viewed the 6 favorite magazines of four hallmates (either all male or all female) and indicated their perceptions of these new neighbors. Magazines were chosen to represent either good (e.g., *The New Yorker*) or bad taste (e.g., *Entertainment Weekly*), as confirmed using participants' ratings on follow-up measures ( $t(241)=27.39$ ,  $p < .001$ ). The proportion of good tastes was manipulated among the four hallmates' selections: 0 good magazines and 6 bad magazines, 2 good and 4 bad, 4 good and 2 bad, and 6 good and 0 bad (with presentation order counterbalanced). Gender had no effect and was collapsed.

As expected, perceptions of individuals' good taste increased linearly with the proportion of good magazines ( $F(1,239)=258.84$ ,  $p < .001$ ). However, perceived authenticity decreased linearly with more good tastes ( $F(1,239)=127.56$ ,  $p < .001$ ). Importantly, undergraduates' desire to socialize with hallmates (i.e., befriend and seek recommendations) varied quadratically with their proportion of high-quality reading choices ( $F(1,239)=99.77$ ,  $p < .001$ ), peaking for those selecting some low-quality options. In other words, participants indicated the greatest desire to befriend and solicit reading recommendations from individuals who selected 4 good tastes but also 2 bad tastes, and these individuals were significantly preferred to those with the "best" taste ( $M=4.75$  vs.  $4.38$ ,  $p < .001$ ). Results held controlling for perceived preference similarity, suggesting participants' judgments were not simply about matching preferences.

Do these effects depend on the particular social meanings of these tastes or subjective perceptions of quality? Study 2 sought to address these possibilities and further rule out potential effects of preference similarity. An online adult sample of self-described wine novices imagined attending a wine tasting event to meet new people. Attendees tried 20 different wines and selected 8 favorites. Participants viewed the wine selections of five different individuals at the event, which were manipulated to contain different proportions of good quality versus lower quality wine (as defined by Wine Advocate numerical ratings and categories): 0 good wines and 8 bad wines, 2 good and 6 bad, 4 good and 4 bad, 6 good and 2 bad, and 8 good and 0 bad (with presentation order counterbalanced).

Again, results revealed significant linear trends for both good taste ( $F(1,90)=135.15$ ,  $p < .001$ ), and authenticity ( $F(1,90)=105.37$ ,  $p < .001$ ), such that perceived good taste increased and perceived authenticity decreased with a greater proportion of good tastes. As in Study 1, participants' desire to befriend individuals and seek their recommendations exhibited a significant quadratic trend ( $F(1,90)=13.24$ ,  $p < .001$ ), with those selecting the most good tastes actually rated the worst on these social outcomes. A significant quadratic trend also emerged on perceptions of individuals' ability in a blind taste test, a measure of independent discernment ( $F(1,90)=17.17$ ,  $p < .001$ ). Judgments of true good taste peaked for those choosing some lower-quality wines, confirming that those selecting the greatest proportion of good tastes were not judged to have true good taste.

Study 3 tested our mechanism with a misattribution paradigm, using the presence of a free gift to manipulate the signal value of wine choices. Providing a gift to explain low-quality wine choices

eliminated differences in predicted blind taste performance ( $p=.821$ ), but social outcomes still favored individuals choosing some low-quality wines across conditions ( $F(1,178)=40.24$ ,  $p<.001$  overall), underscoring the social importance of perceived authenticity.

While Studies 1, 2, and 3 demonstrate how the presence of bad tastes drives inferences of others' authenticity, Study 4 expanded our investigation to self-signals of authenticity. In particular, we manipulated concerns about good taste versus authenticity and measured the quality of the tastes expressed by participants. An online sample of self-described movie buffs reflected on their taste in movies. They wrote a paragraph discussing whether their taste is truly good, whether their taste is truly authentic, or simply describing their taste (as a control). Next, participants listed 3 movies that they would personally recommend to a friend. The main dependent variable was the quality of these movies according to Rotten Tomatoes, a website that aggregates critical reviews and combines them into one numerical rating.

Invoking authenticity concerns led participants to recommend movies with lower quality ratings ( $M=78.51$ ) compared to the good taste ( $M=84.01$ ,  $p=.018$ ) and control conditions ( $M=83.94$ ,  $p=.033$ ). Analyzing recommendations categorically for the presence of bad movies (<75 rating) yielded similar results: compared to both the good taste (39%) and control (43%) conditions, a significantly greater proportion of authenticity condition recommendations included bad movies (64%,  $\chi^2(1)=6.13$ ,  $p=.013$ ). Interestingly, these participants also judged themselves as significantly more able to truly judge the quality of a given movie ( $M=6.11$ ) relative to the good taste ( $M=5.58$ ,  $p=.016$ ) and control ( $M=5.47$ ,  $p=.003$ ) conditions. Hence, participants' increased selection of bad tastes may have worked as a self-signal of authenticity and actually increased self-perceptions of true good taste.

Our findings demonstrate that signals of good taste are subject to authenticity constraints. Occasional low-quality choices help consumers signal authenticity to themselves and others. True good taste may require trading some beauty for truth.

## The Impact of Artistic Ownership on Aesthetic Judgment and Preference

### EXTENDED ABSTRACT

This research introduces the concept of "artistic ownership," the extent to which artists both conceive of and execute their own work, to the literature on cultural goods. We document how artistic ownership impacts critical acclaim but not consumer preferences for such goods.

Experts and consumers appear to have different assessment goals, and may thus utilize different information to form evaluations. A fundamental goal of the critic is seen as establishing organized standards by which artistic value can be assessed. We argue that critics charged with providing aesthetic judgments purposefully integrate artistic ownership into their evaluations. In contrast, consumers' decisions for most cultural goods (investments exempted) depend on aesthetic preferences, or simply what they like, and thus need not be defensible. Our work nonetheless shows that ordinary consumers, as well as critics, will include information about artistic ownership when charged to make an aesthetic judgment, but not when expressing their aesthetic preferences. This research helps explain why cultural goods can be judged as superior based on criteria that have no discernible effect on consumer's subjective consumption experience.

Music is an especially suitable domain in which to study the impact of artistic ownership, as writing credits for a song (a good

measure of artistic ownership) are published by reliable sources and are often known publicly. At one extreme, a song can be the product of professional lyricists and composers who subsequently turn it over to someone else to perform. This was the case with Rihanna's 2007 breakout hit "Umbrella," which was originally written for, but rejected by, Britney Spears. At the other extreme, a song can be written, composed, and performed by the same person, as is the case with "Love Story," Taylor Swift's best-selling single. In study 1A, we utilized two different real-world data sets to examine how the extent to which a song's performer was involved in the writing process impacts on both critical acclaim (reflecting aesthetic judgments) and market performance (reflecting aesthetic preferences). We first looked at all 1,029 hit singles that reached number one in the Billboard Hot 100 singles charts between 1958, when the ranking was first introduced, and 2012. We then looked at all 690 songs that made it onto Billboard's Top 40, regardless of position, from 2009 through 2012. We find songs performed by singers who write their own material are more likely to receive critical acclaim but are no more likely to achieve platinum status, an indicator of exceptional popularity and what consumers actually buy.

Consistent with these findings, artistic ownership is considered important in many creative industries. Comedians who write their own jokes are respected while those who rely on others to produce their material are frequently the object of professional contempt. Reader's Digest reports the #1 thing television chefs don't tell audiences is they don't create their own recipes. And fashion critics admire designers who can draw, cut and stitch (e.g. Yves Saint Laurent) while frequently dismissing those who cannot (e.g. Ralph Lauren). In Hollywood today, the term *auteur* is often used to distinguish directors who write their own screenplays. Accordingly, in study 1B, we replicate our findings in another domain, and document how film critics are more likely than filmgoers to venerate movies by directors who write their own scripts.

In study 2, we move to the lab to investigate whether observed differences between critics' and consumers' evaluations might be due to critics possessing different and perhaps more refined tastes as compared to most consumers. Thus, we manipulate whether the performer of a song is described as its sole author or whether authorship of the song is attributed to a third-party lyricist and composer. Aesthetic judgment is assessed by asking respondents which songs they deem worthy of historic recognition and would choose to put into a time capsule, while aesthetic preference is measured by liking. We find that by explicitly asking consumers to make an aesthetic judgment (i.e., basing their evaluation on the historical and cultural importance of a work) leads them to disproportionately favor songs for which the performer shows greater artistic ownership. In contrast, when the same consumers report their preferences (i.e., what they like or what they would buy), artistic ownership has no discernible effect. The goal of the task, rather than differences in taste, appears to determine whether artistic ownership is considered in the evaluative process.

Study 3 explores competing explanations for critics' positive predisposition to works with greater artistic ownership. Perceptions regarding the talent of a work's creator as well as the effort they exerted in its creation are known to play a role in the evaluation of a cultural good but have been shown to have opposing effects (Cho and Schwartz 2008). Talented artists are presumed to exert less effort and vice versa. Study 3 tests the potential mediating role of both perceptions of talent and effort on aesthetic judgment and aesthetic preference. We find perceptions of the artist's talent mediate the impact of artistic ownership on judgments, while perceptions of the artist's effort do not.

Taken together, this work introduces artistic ownership as a novel characteristic of cultural goods and documents both its influence on aesthetic judgments and its relative lack of influence on aesthetic preferences. Aesthetic judgments – the role of critics – are supposed to be dispassionate. Consequently, these types of evaluations may compel the individual to rely on standards that seem more objective. Artistic ownership is one such standard. We show that increasing artistic ownership increases perceptions of the amount of overall artistic talent that has gone into creating a cultural good, an ostensibly compelling reason to support its artistic quality. But it is not a great rationale for a positive subjective response. One can appreciate the artistic quality of a painting, a song, an entrée, or a film without really liking it. These findings help explain why critical judgments and consumer preferences often diverge.

### Selling Out: Producer Motives in Markets for Art

#### EXTENDED ABSTRACT

Markets are founded on the premise that consumers choose products that best meet their needs. Hence, it makes sense for producers to signal a willingness to adjust their products to match consumer preferences. But consider a musical artist who conducts market research to create a song that satisfies consumer needs. Would this song be judged favorably?

Though recent work examines the role of artist identity in judgments of artistic quality (Bar-Hillel et al. 2012; Newman and Bloom 2012), and some theorists describe a disjunction between the demands of audiences and the demands of expert art critics (e.g., Hirschman 1983), this question remains largely unaddressed. Despite the prominence of art within human culture and the pervasive presence of commerce in our market society, little work has examined the psychological determinants of perceived artistic quality within markets.

We investigate consumer judgments of *selling out*, or perceptions that producers have compromised their integrity to pursue external incentives. To provide the first examination of this phenomenon, we examine the influence of perceived producer motives on consumer product evaluations. Four studies identify a key difference between markets for commercial products and artistic products. Consumers reward commercial producers who change their products to suit consumer preferences, but penalize artistic producers who do just the same. People prefer artists who satisfy their own preferences and ignore others' preferences, even those of expert critics whose preferences typically define high quality art. Artists who adjust their products to fit others' preferences are seen as selling out, destroying consumer perceptions of product quality and reducing purchase likelihood. Importantly, our results show that such artistic integrity violations affect product quality only in markets for art, and suggest that consumers apply different standards of producer integrity in commercial markets.

Study 1 demonstrates that judgments of actual experienced song quality depend on perceived producer motives. After listening to a song, participants were less willing to download it when the artist was described as motivated by consumer preferences rather than their own preferences (4.43 vs. 5.63,  $t(92)=3.21$ ,  $p=.002$ ). This motive reduced perceived artistic integrity (4.43 vs. 5.63,  $t(92)=9.11$ ,  $p<.001$ ) and was labeled as selling out (51% vs. 4%,  $\chi^2(1) = 26.58$ ,  $p<.001$ ). Perceptions of artistic integrity mediated the effect of producer motives on consumer perceptions of product quality.

Using the same scenario, Study 2 shows that these results hold even when artists seek to satisfy expert critics whose preferences define high-quality art. We compared artists who adjusted their prod-

ucts to better fit either their own changing preferences, consumer preferences, or critical preferences, relative to a no-product-change control condition. Motives significantly affected perceived quality ( $F(3,167)=4.60$ ,  $p=.004$ ). While changes driven by artists' own preferences had no effect on product evaluations relative to maintaining their style (5.51 vs. 5.86,  $p>.288$ ), changes motivated by consumer preferences (4.74 vs. 5.86,  $p=.001$ ) or critical preferences (5.05 vs. 5.86,  $p=.011$ ) decreased perceived quality and were widely seen as selling out (75% vs. 60% vs. 13%,  $\chi^2(1)=50.31$ ,  $p<.001$ ). Perceived artistic integrity again mediated the effects of producer motives on perceived product quality.

Study 3 identifies an important distinction between artistic and commercial markets. Relative to a producer focusing only on their own preferences, considering customer preferences decreased perceived quality ( $t(59)=-3.01$ ,  $p=.004$ ) and perceived integrity ( $t(59)=-7.12$ ,  $p=.004$ ) within four artistic domains (novel-writing, painting, songwriting, filmmaking). In contrast, openly focusing on customer preferences increased perceived product quality ( $t(59)=11.31$ ,  $p<.001$ ) and integrity ( $t(59)=5.67$ ,  $p<.001$ ) across four commercial domains (software programming, home contracting, event planning, brand management). These results illustrate that producer integrity is defined differently within artistic versus commercial markets.

Study 4 replicates these results within the same product domain: a photographer who takes photographs intended to be used as art versus commercial products. Participants' product evaluations showed an interaction between producer motives and product usage ( $F(1,156)=21.01$ ,  $p<.001$ ). Relative to the producer satisfying his own preferences, product changes made to suit customer preferences reduced perceptions of artistic photograph quality (6.15 vs. 4.91,  $p<.001$ ), but improved perceptions of commercial photograph quality (5.17 vs. 6.01,  $p=.010$ ). Measures of artistic integrity mediated these effects on perceived product quality when photographs were meant for artistic usage, but did not affect the perceived quality of photographs meant for commercial usage. These results further confirm our theorized distinction.

Though art and commerce are both central to human society, we illustrate a fundamental difference in what individuals expect of producers within these domains. People penalize artistic producers who change their products to fit consumer tastes but reward commercial producers who do the same. Ironically, consumers most prefer artists who seem to ignore consumer preferences.

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# The Complex Role of Brand Meanings in Shaping Consumers' Responses to Brands

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## **Paper #1: The Asymmetric Effect of Portfolio- and Image-Based Abstractness for Building and Protecting Brand Equity**

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## **Paper #2: When "My" Brand Extends to Incongruent Categories: Effect of Lack of Fidelity on Consumers Attitudes**

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Nilufer Z. Aydinoglu, Koc University, Turkey

Zeynep Gürhan-Canli, Koc University, Turkey

## **Paper #3: Self-Expansion as a Way of Overcoming the Harmful Effects of Luxury-CSR Incongruity**

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## **Paper #4: Democratic Brands: A Framework and Empirical Test**

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### **SESSION OVERVIEW**

Creating distinctive, favorable brand meanings is at the heart of building brand equity—often defined as the differential effect that knowledge about brand meanings has on consumers' responses to the marketing of the brand (Keller, 1993). In the hyper-competitive markets of the 21st century, brands need to go beyond functionality to deliver emotional and symbolic benefits via the embodiment of abstract brand meanings or concepts (Monga & John, 2010). Although there seems to be consensus on the notion that creating abstract brand meanings benefits brand performance, what factors are likely to facilitate (or impair) the translation of brand meaning creation into more favorable brand evaluations? The papers in this session unite under a common theme of identifying brand- and individual-level factors that moderate the extent to which the creation of abstract brand meanings is more or less favorably received by consumers.

Stoner and colleagues distinguish between abstract brand concepts created by diversifying the product portfolio in order to appeal to high-level needs of consumers, versus those created by establishing human-like motivational and emotional meanings that resonate with consumers' self-defining values. They demonstrate that although both strategies drive favorable consumer attitudes, the latter strategy has a more favorable impact on brand evaluations, and shields the brand better from scandals.

Sayin and colleagues investigate how the level of consumer attachment impacts responses to extensions by brands with strong personalities. Findings from four studies show that, among highly attached consumers, brands with strong personalities experience greater dilution when extending to categories that are incongruent with their abstract brand meanings. These effects are driven by consumers' feelings of betrayal by the brand. Furthermore, the effects are stronger among consumers with higher (vs. lower) self-enhancement needs.

Park and colleagues study ways to reduce the negative effect of promoting prosocial images (through CSR activities) for luxury brands. They show that although consumers with high (vs. low)

self-enhancement motivation, who desire to achieve social status or wealth, view luxury brands using CSR appeals negatively, these negative effects can be attenuated via self-expansion (self-referencing, observing celebrities, or perspective taking), which induces the feeling that self-enhancement motives (associated with the luxury brand) and self-transcendence motives (triggered by CSR appeals) can be simultaneously pursued.

Finally, Paharia and Swaminathan investigate consumers' preferences for *democratic brands* (those that welcome consumer input) and *undemocratic brands* (those who maintain control) as a function of their perceptions of warmth and competence as well as consumers' social-dominance orientation (SDO). They demonstrate that greater preference for democratic brands is mediated by perceptions of warmth. However, for people high in SDO, or in situations where hierarchy is relevant, undemocratic brands are valued more, and this effect is mediated by perceptions of competence.

In keeping with the theme of the conference ("Back to Fun"), the papers in this special session uncover some of the factors that contribute to consumers' enjoyment of the abstract meanings in brands. The findings in this session should appeal specifically to scholars interested in branding, new products, and negative publicity, and more generally to those interested in the psychological processes underlying product evaluations.

## **The Asymmetric Effect of Portfolio- and Image-Based Abstractness for Building and Protecting Brand Equity**

### **EXTENDED ABSTRACT**

Research shows that abstract brand concepts not only elicit more favorable consumer responses (Monga and John 2010), but also affect whether judgment revision occurs following a challenge to held beliefs (Pham and Muthukrishnan 2002). However, abstractness can come from two different brand strategies. A brand could diversify its product portfolio and push upward in defining itself in terms of a high-level product denomination (referred hereafter as *portfolio abstractness*) that is better positioned to satisfy high-level consumer needs (e.g., a railroad brand is not in the railroad business but in the transportation business, Levitt 1960). Or a brand could establish abstract brand concepts on the basis of human-like motivational and emotional meanings (referred hereafter as *image abstractness*) that resonate with consumers' self-defining values (e.g., by imbuing brands with human values such as openness or self-enhancement, Torelli et al. 2012).

Surprisingly, research has yet to examine which approach is more favorable for boosting consumer evaluations and better at shielding from brand dilution in the face of a brand scandal. We draw on Action Identification Theory to demonstrate that abstract brand concepts can be identified at different levels (Vallacher and Wegner 1987) and argue that brands high in image abstractness are identified at a higher level than brands high in portfolio abstractness. Because higher levels of identification are more easily represented in terms of high-level, self-relevant values (Vallacher and Wegner 1989), we propose and find an asymmetric effect in that image abstractness boosts customer evaluations at any level of portfolio abstractness, while portfolio abstractness only helps brand concepts low in image abstractness.

If both strategies are successful at generating favorable consumer attitudes, does either have an edge in shielding the brand from dilution in the face of a brand scandal due to a new product failure? Counter to intuitions, we propose that increasing image (vs. portfolio) abstractness is a more effective strategy. Based on modern portfolio theory, one could speculate that increasing portfolio abstractness under a common thread should reduce the risk in any given product failure (Lubatkin and Chatterjee 1994). In contrast, we argue that when consumers are confronted with information about a new product failure, they are less likely to revise initially favorable brand judgments when the brands are high (vs. low) in image abstractness than when they are high (vs. low) in portfolio abstractness. This is driven by the lower level of commensurability between the more “concrete” new product failure information and the higher level identification of a brand that is high in image abstractness (vs. a brand that is high in portfolio abstractness), which in turn renders the negative information less diagnostic (Pham and Muthukrishnan, 2002).

In a pilot study we tested the theory that brands could be identified at different levels. Using a within subjects design, participants were presented with four real brands that varied on their level of image and portfolio abstractness. Results showed that brands higher in image abstractness were identified at a higher level than the brands high in portfolio abstractness, as well as the brands low in both types of abstractness (see table in Appendix for means and statistics).

In study 1, participants rated Interbrand’s Top 100 Global Brands on image and portfolio abstractness as well as reported their attitude toward the brand. Fitting these ratings to a linear model yielded significant coefficients for portfolio abstractness and image abstractness, suggesting a positive effect of both types of abstractness on brand evaluations. Additionally, the coefficient for the portfolio  $\times$  image abstractness interaction was also significant. Compared to a baseline condition a brand strategy focused on heightening image abstractness had a more favorable impact on brand evaluation ( $F(23, 1222) = 21.50, p < .001, \eta^2 = .29$ ) than a brand strategy focused on heightening portfolio abstractness ( $F(24, 1222) = 2.94, p < .001, \eta^2 = .06$ ). See appendix for coefficients and means.

Study 2 used a 2 (portfolio abstractness: low/high)  $\times$  2 (image abstractness: low/high) between-subjects design using real technology brands. Participants reviewed information about one of the brands and then indicated their attitudes and opinions towards that brand. After a filler task, they were presented with negative information about a new product, and reported their attitudes and opinions again. Results not only displayed the same positive and asymmetric effect of portfolio and image abstractness on initial brand evaluations as found in study 1, but there was also a significant time of measure  $\times$  portfolio abstractness  $\times$  image abstractness interaction,  $F(1, 190) = 4.57, p < .05, \eta^2 = .02$  on brand attitude showing that this asymmetric effect carries over to post-exposure attitude. The favorable effect of portfolio abstractness at low levels of image abstractness completely dissipated after exposure to negative publicity about a new product failure. In contrast, image abstractness had a more favorable impact on brand evaluations both for brands low ( $F(1, 190) = 39.11, p < .001, \eta^2 = .17$ ) and high in portfolio abstractness ( $F(1, 190) = 23.84, p < .001, \eta^2 = .11$ ). See appendix for means.

Study 3 followed the same procedure in Study 2 but using a hypothetical automobile brand in a 2 (portfolio abstractness: low/high)  $\times$  2 (image abstractness: low/high) between-subjects design. In addition, this study investigated the mediating role of diagnosticity of the negative product information (measured via negativity of thoughts, Ahluwalia 2002). Results mirrored those of

Study 2. Mediation analyses further suggested a significant shielding effect of image abstractness on posterior brand attitudes through negativity of thoughts.

### When “My” Brand Extends to Incongruent Categories: Effect of Lack of Fidelity on Consumers Attitudes

#### EXTENDED ABSTRACT

Consumers choose to establish strong relationships with brands that they can use to create, express and differentiate their actual or aspired identities (Fournier, 1998). The literature suggests that highly attached consumers of a brand will engage in relationship sustaining behaviors, and hardly revise their attitudes toward these brands. Accordingly, highly attached consumers are targeted by brands as they are more forgiving in case of a negative event. We propose, on the other hand, that brands with strong meanings and dedicated customers may be more vulnerable if customers perceive them as exploiting their relationship.

Consumers use the meanings in brands to communicate their identities to others (Griskevicius et al., 2007). They create emotional and cognitive bonds (i.e., attachment) with brands and can even see them as extensions of the self (Park et al., 2009). Their cognitive bond leads them to allocate more social resources to defend their brands (Johnson & Rusbult, 1989) and even forego self-interest to sustain their relationship (Thomson, MacInnis, & Park, 2005). Additionally, their emotional bond (i.e., their prominent and positive feelings about a brand) inhibits recall of other feelings (Alba & Chattopadhyay, 1986). For example, Fedorikhin et al. (2008) demonstrate that highly attached consumers of a brand are willing to purchase and pay more for its extensions, even when there is only moderate fit between brand and extension. Their attachment to the brand attenuates the negative effect of the moderate fit.

We believe that consumers’ relationships with brands rely on the assumption that brands will continue to convey the same meaning and that this meaning will be transferred to consumers’ identities. They will choose “their” brand according to its meaning, symbolic value, and ability to express the right meaning about themselves to others. If a brand behaves incongruently with its meaning (e.g. brand extension incongruent to the meaning), meaning is diluted and cannot be transferred to consumers. When an individual has a great deal of self-concept wrapped up in a relationship, any potential problem with that relationship can cause negative feelings (Davis, Shaver, & Vernon, 2003). We propose that highly attached consumers will find a brand behavior that dilutes brand meaning as a breach to their relationship and will feel betrayed.

The more consumers feel attached, the more they feel betrayed, and the more negatively they react to the brand (H1), through the mediating effect of felt betrayal (H2). Additionally, consumers with high self-enhancement need will have greater tendency to use brands to establish more favorable self-identities. Their level of self enhancement need will strengthen consumers’ negative reaction (H3), when meanings of such brands are diluted after incongruent extension decision.

In a series of five studies we test these effects. Study 1 demonstrates the effect of brand extension type (congruent vs. incongruent) and attachment level (high vs. low) on feelings of betrayal toward a fictitious beverage brand that extends into an incongruent product category. Results show that among highly attached participants feelings of betrayal are greater when the brand extends to an incongruent (vs. congruent) product category. These effects are absent among consumers low in brand attachment (see table in the Appendix for means and statistics). Study 2 investigates the

effect of attachment level on feelings of betrayal and attitude change toward the parent brand (Mini Cooper) upon the introduction of an incongruent extension (station wagon-from pretests). An analysis of the indirect effect of attachment on attitude change toward the brand through feelings of betrayal, using PROCESS computational macro for SPSS (Hayes, 2012), shows significance for the indirect path (effect size =  $-.0777$ , CI:  $-.1754, -.0223$ ). Thus, greater negative attitude change occurs as feelings of betrayal increase.

Using both fictitious and real brands, Studies 1 and 2 demonstrate that highly attached consumers react more negatively when brands extend to incongruent categories. In Study 3, we use the high-attachment brands reported by participants and investigate the moderating role of self-enhancement need. Participants report their self-enhancement needs and are asked to identify brands to which they are attached. After this, they are presented with brand extensions that are either congruent or incongruent using scenarios similar to those in the previous studies, and evaluate the brand. An analysis using the PROCESS computational macro (Hayes, 2012; model 8) reveals that the conditional indirect effect of brand extension type on brand attitude change is significant and in the expected direction, with effect sizes increasing with higher self-enhancement need. In Study 4, we examine the effect of attachment level and brand extension type (both manipulated) on willingness to purchase (WTP) for a fictitious clothing brand. An ANOVA shows significant main effect of brand extension type on WTP. Simple contrasts suggest that brand extension type has significant negative effect on WTP only when attachment toward the brand is high. This result suggests that highly attached consumers are more likely to revisit their purchase decision compared to consumers less attached to the brand. Additionally, inferential tests for the effect of brand extension type on WTP for different levels of self-enhancement need within the high brand attachment condition reveal that self-enhancement need strengthens the negative effect of brand extension on WTP.

Study 5 further shows that the past effects are driven not by incongruency per se but by incongruency with the reason for brand attachment. The design included an incongruent brand extension that dilutes (or not) consumers' reason of attachment to the brand, and measured change in brand attitude. Results demonstrate that highly attached consumers react more negatively toward the brand when the brand extension dilutes (vs. not) the reason of attachment. Additionally, an analysis using the PROCESS computational macro (Hayes, 2012; model 8) reveals a significant indirect effect of incongruent extension on attitude change through perceived felt betrayal (for high attachment consumers), and effect sizes are increasing with higher self-enhancement need.

Our results demonstrate that having highly attached consumers is not always beneficiary for brands. If brands move away from their existing meaning, highly attached consumers may feel betrayed and react more negatively.

### **Self-Expansion as a Way of Overcoming the Harmful Effects of Luxury-CSR Incongruity**

#### **EXTENDED ABSTRACT**

Recent research has shown that positioning a luxury brand on CSR can dilute its favorable brand image, particularly among self-enhancement oriented consumers—who are the luxury brand's primary target market (Torelli, Monga and Kaikati 2012). They view such prosocial images as incompatible to their own motivations, thereby reducing brand evaluations. This phenomenon is a major obstacle for luxury brands engaging in CSR, and prior research offers little guidance on how to overcome such negative effects.

In our paper, we propose that self-expansion, which is a cognitive activity intended to grow and expand perspectives and identities (Aron, Norman and Aron 1998), can reduce the harmful effects of using CSR appeals for a luxury brand. Prior research has shown that self-expansion reduces incompatibilities between the self and others (Aron et al. 1991). In the beginning of a relationship, couples face challenges due to differences between the self and the partner. Thus, people, who desire to reduce this gap, incorporate aspects of their partner into the self, and such self-expanding activities lead to better relationship satisfaction (Graham 2008). Therefore, we propose that self-expanding opportunities will reduce the gap between consumers pursuing self-enhancement and a luxury brand engaging in CSR, thus mitigating the harmful effects of CSR appeals.

In study 1, we introduce a way to expand the self—*self-referencing*, which creates new linkages with aspects of the self (Burnkrant and Unnava 1995). Participants read a CSR ad about a luxury brand, Cavalli. In the ad, consumers are told that the profits of Cavalli sunglasses will be used to provide glasses for people who cannot afford them (e.g., “You can bring the gift of sight to a young boy...”). In the self-expansion (no expansion) condition, the copy used (did not use) self-relevant words, such as “you” to create linkages of self-transcendence to aspects of the self (Burnkrant and Unnava 1995). The experimental procedure is the following. After receiving the self-enhancement motivation manipulation (Maio et al. 2009), participants read the CSR ad. Then, they were asked to write their thoughts about the ad and evaluated the Cavalli sunglasses. As expected, self-expansion through self-referencing mitigated the harmful effects of using the CSR appeal. Participants in the high self-enhancement motivation condition showed more favorable attitudes toward Cavalli sunglasses in the self-expansion (vs. no self-expansion) condition ( $M = 4.77$  vs.  $M = 4.19$ ). Participants in the low self-enhancement motivation condition did not show such a difference ( $M = 4.55$  vs.  $M = 4.83$ ). Further, the results from the mediation analysis showed that the positive effect of self-expansion on attitude toward Cavalli sunglasses was mediated by the number of positive thoughts participants generated about the CSR ad.

In study 2, we extend the findings of study 1 in three ways. First, we measured self-enhancement motivation (Schwartz 1992). Second, we used a fictitious brand “Bellavista” to rule out confounds associated with pre-existing brand attitude. Finally, we introduce another approach to expand the self—*observing celebrities*. Prior research shows that people incorporate aspects of others into the self, particularly when they feel psychologically close to them (Goldstein and Cialdini 2007). We used familiar celebrities well known to pursue self-enhancement and prosocial activities simultaneously, Brad Pitt and Angelina Jolie. Participants in the self-expansion condition read a story listing the socially responsible actions of these very successful actors. Participants in the no self-expansion condition read a neutral story. The experimental procedure was the following. After completing the self-enhancement motivation measure, participants read the story of Pitt and Jolie. Then, they read a CSR ad about Bellavista. We used the no self-referencing CSR ad in study 1, but changed the brand name. Participants were then asked to evaluate the Bellavista sunglasses, and reported how important self-transcendence values were at that moment. Consistent with study 1, participants with high self-enhancement motivation showed more favorable attitudes toward Bellavista sunglasses in the self-expansion (vs. no self-expansion) condition ( $M = 4.63$  vs.  $M = 4.15$ ). Participants with low self-enhancement motivation did not show such a difference ( $M = 4.54$  vs.  $M = 4.75$ ). Further, the results from the mediation analysis showed that the positive effect of self-



expansion on attitude toward Bellavista sunglasses was mediated by enhanced importance of self-transcendence.

In study 3, we measured pre-existing brand preference, and tested it as a moderating variable. We thus used a well-established luxury brand, Rolex. Moreover, we introduce the third approach to expand the self—*perspective taking*. People can incorporate aspects of a stranger into the self if they take the perspective of the person (Davis et al. 1996). Thus, participants were asked to read a short description about person A, who is a successful business consultant, and engages in volunteering to serve the poor of New York. Participants in the self-expansion condition were asked to write an essay about a typical day of that person while imagining as if they were that individual. Participants in the no self-expansion condition were asked to write objectively without reflecting on their own life. The experimental procedure was the same as in study 2, except that we measured pre-existing brand preference at the beginning. The results were consistent with studies 1 and 2, particularly among consumers with low pre-existing brand preference. Those with high self-enhancement motivation showed more favorable attitudes toward Rolex watches in the self-expansion (vs. no self-expansion) condition ( $M = 6.33$  vs.  $M = 5.34$ ). However, such a positive effect of self-expansion was not found among consumers with high pre-existing brand preference. They showed positive attitudes toward Rolex watches, regardless of the self-expansion condition (overall mean = 6.7) because high brand loyalty buffered the harmful effects of the CSR appeal. Finally, the results from the mediation analysis showed that the positive effect of self-expansion on attitude toward Rolex watches was mediated by enhanced importance of self-transcendence.

Our findings offer different approaches to attenuate the negative effects of using CSR appeals for luxury brands, particularly when targeting consumers who pursue self-enhancement goals (who are the core customers of luxury brands). Companies can successfully use CSR appeals for luxury brands by providing self-expansion opportunities (self-referencing, observing celebrities, or perspective-taking), which helps incorporate self-transcendence into the self.

### Democratic Brands: A Framework and Empirical Test

#### EXTENDED ABSTRACT

What do Wikipedia, Linux, and Firefox have in common? These ‘open-source’ brands are almost entirely manufactured, consumed, and distributed by consumers. For instance, Wikipedia is an *online encyclopedia* written collectively by anonymous Internet volunteers who write without pay. Other more traditional brands are also dabbling in “democracy”, allowing consumers to have greater power in product design, “hacking” their own products, and offering feedback to the brand through social networking sites. While some brands have been open to democracy, other brands, such as Microsoft and Apple, are notorious for being undemocratic, where they ruthlessly defend their brands and intellectual property against any consumer interaction. Despite the increasing importance of brands that either allow or disallow greater consumer participation, there is surprisingly little work on the topic. A recent exception is a paper by Fournier and Avery (2011), who articulate the notion of “open-source brands” and highlight the need for additional research on this topic. Related, recent work has explored the role of co-creation on consumers’ perceptions of products (e.g., Herd and Moreau 2010; Liu and Gal 2011; Moreau 2011; Fuchs et al. 2013).

In this research we investigate various moderating and mediating factors that lead to preferences for either democratic (inviting input from consumers) or undemocratic (completely controlled) brands. More specifically, we consider whether efforts to level the playing

field between consumers and brands impacts (1) overall preference for a brand, (2) perceptions of the brand’s warmth and competence (Fiske et al. 2002), (3) whether warmth and competence mediates brand preferences, and (4) the moderating role of social dominance orientation (SDO) (Sidanius and Pratto, 1999), an individual’s preference for hierarchy within a social system. Democratic brands, organized with less hierarchy (where consumers and companies are equals), should appeal more to those who are low in SDO, whereas undemocratic brands, organized with more hierarchy (where the company controls the product), should appeal more to those who are high in SDO.

Across a series of five studies we tested the mediating role of warmth and competence for democratic and undemocratic brands, and the moderating role of SDO. In a pilot study, we first consider whether a number of well-known technology brands vary on whether they are perceived as democratic or undemocratic. We found that out of nine brands tested, Wikipedia was found to be the most democratic brand, whereas Microsoft was found to be the least democratic brand. Furthermore, Wikipedia was found to be significantly warmer than Microsoft however, the two brands did not vary on their level of perceived competence. Finally, being democratic mediated perceptions of warmth. In study 1, we extend the effect found in the pilot study with two hypothetical brands. In a between subjects design participants either read about a democratic brand, or an undemocratic brand. In the democratic condition participants read “Imagine that company A is a technology company. The company delivers an extremely high-quality product. To ensure the greatest quality, the company [has an open platform where it welcomes changes and new developments to its software from its community.]” In the undemocratic condition, the text in brackets was replaced by: “maintains complete control over the product throughout the development process.” Participants preferred the democratic brand to the undemocratic brand. Furthermore, participants found the democratic brand to be higher in warmth than the undemocratic brand however, the two brands did not vary in competence. Finally, being warm mediated purchase intention (see table in the Appendix for means and statistics).

In study 2, our aim was to consider the moderating role of SDO. In this study, we used Wikipedia and Microsoft, which were the most and the least democratic brands found in our pilot study. In a between subjects design, participants indicated how often they used either brand. In addition participants indicated their level of SDO, an individual difference measuring their preference for hierarchy within a social system. While participants indicated that they used Wikipedia and Microsoft equally, we found a significant interaction with SDO. As SDO went higher, so did the use of Microsoft, while use of Wikipedia went lower.

In study 3, our aim was to replicate the effects of study 2 using hypothetical brands to control for confounds. We also considered a new product category, cheese. Between subjects, participants either read about a brand described as being democratic or undemocratic using similar narratives from study 1. Participants indicated a significantly higher purchase intention for the democratic cheese brand than the undemocratic cheese brand. Furthermore, we again found a significant interaction with SDO whereas preference for the undemocratic brand increased as SDO was higher, and preference for the democratic brand decreased.

In study 4, we replicated the moderating effects of SDO found in studies 2 and 3. In addition, though competence did not vary across the democratic and undemocratic brands, we did find a significant interaction in which those high in SDO found the undemocratic brand to be more competent. In a moderated mediation analysis, we

found that competence ratings mediated purchase intention for those who were higher in SDO.

Finally, in study 5, rather than consider SDO as an individual difference, we varied whether hierarchy was more salient in the situation (buying cheese for one's boss) vs. less salient (buying cheese for oneself). We found a significant interaction in which participants were significantly more likely to choose the undemocratic brand when hierarchy was more salient than when it was not. However, we found no significant difference between conditions for the democratic brand.

Given increasing levels of interactivity between the consumer and the firm enabled by the internet, understanding how consumers relate to brands that are either democratic or undemocratic is increasingly important. We make four contributions to the literature: (1) we conceptualize and test the concept of democratic vs. undemocratic brands, (2) we show that preference for democratic brands is mediated through greater perceptions of warmth, (3) we show that for people who value hierarchies (high in SDO), or in situations where hierarchy is relevant, democratic brands are valued less, and (4) we show that for those high in SDO, competence mediates preference for the undemocratic brands.

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# I'm Just Curious: Exploring the Drivers and Consequences of Curiosity

Chairs: Rebecca Rabino, Virginia Tech, USA

Elise Chandon Ince, University of South Carolina, USA

Debora V. Thompson, Georgetown University, USA

## **Paper #1: What Satisfies A Curious Mind? Curiosity Prompts Novel Reward Seeking**

Chen Wang, Drexel University, USA

Rui (Juliet) Zhu, Cheung Kong Graduate School of Business, China

## **Paper #2: Does Curiosity Kill the Cat? Incidental Curiosity Can Have Negative Consequences**

Elif Isikman, University of Southern California, USA

Gülden Ülkümen, University of Southern California, USA

Deborah J. MacInnis, University of Southern California, USA

Lisa A. Cavanaugh, University of Southern California, USA

## **Paper #3: Leaving Something for the Imagination: The Effect of Visual Concealment on Product Preference**

Julio Sevilla, University of Georgia, USA

Robert J. Meyer, University of Pennsylvania, USA

Shenghui Zhao, University of Miami, USA

## **Paper #4: Guess Where I'm From: Ambiguous Accents, Curiosity and Product Evaluations**

Elise Chandon Ince, University of South Carolina, USA

Debora V. Thompson, Georgetown University, USA

Rebecca Rabino, Virginia Tech, USA

### **SESSION OVERVIEW**

Consumers are curious creatures, and marketers are keen to use curiosity to whet consumer appetites—a fact evidenced by movie teaser trailers, ‘find-out-how’ headlines, and mystery ads. Despite the prevalence of curiosity-evoking stimuli in daily life, little is known about either the causes or the consequences of curiosity (Loewenstein 1994; Menon and Soman 2002). This session takes steps to address both these concerns, demonstrating that, across a variety of contexts, curiosity has the power to impact consumer evaluations, preferences, and behavior.

The first two papers highlight the varied consequences of curiosity on consumer behavior. The first paper, by Wang and Zhu, examines the impact of elicited curiosity on subsequent unrelated consumer choice. They demonstrate that curiosity, once evoked, serves to motivate novel reward seeking in a later choice. The second paper, by Isikman, Ülkümen, MacInnis, and Cavanaugh, instead examines the effect of curiosity on concurrent consumer evaluations. They find that curiosity can be a fickle friend, with the power to act as a distractive force that can increase or reduce enjoyment of a simultaneous consumption experience. Taken together, these papers demonstrate that the impact of consumer curiosity is wide-ranging, affecting both simultaneous and sequential consumer behavior.

While the first two papers highlight the importance of examining consumer curiosity, the second two papers explore how marketers can effectively elicit curiosity in order to leverage these effects. These papers address the paucity of research examining the situational determinants of consumer curiosity (Menon and Soman 2002). Sevilla, Meyer, and Zhao demonstrate that visual concealment arouses curiosity, resulting in improved consumer preferences. In the final paper, Ince, Thompson, and Rabino show that, holding the amount of information provided to consumers constant, curiosity can be elicited by a feature inherent to the business context itself: a

speaker’s accent. They find that ambiguous accents increase consumers’ interest in trying new products and services.

Interestingly, these two final papers both explore the moderating role of dispositional curiosity. These investigations yielded contrasting results; the effect of visual concealment was highest for those who are naturally curious (measured by the need for cognitive closure scale), while accent-elicited curiosity was lowest for the naturally curious (measured by the curiosity exploration inventory scale). These contradicting findings support the contention that curiosity is a multidimensional construct, comprised of both a motivated drive to close informational gaps as well as interest in exploring novel and surprising stimuli (Litman 2005). We believe that this is a rich topic for discussion and fertile ground for future research.

Overall, the four papers in this session shed light on the drivers and consequences of curiosity, while revealing promising avenues for future research. We expect that this research will be of interest to researchers in areas as diverse as motivation, information processing, aesthetics, and linguistics, elucidating a construct largely overlooked in the consumer behavior literature and at ACR conferences in particular.

## **What Satisfies A Curious Mind? Curiosity Prompts Novel Reward Seeking**

### **EXTENDED ABSTRACT**

Curiosity is defined as “a form of cognitively induced deprivation that arises from the perception of a gap in knowledge or understanding” (Loewenstein 1994). Despite its ubiquity, curiosity has received surprisingly little attention in consumer behavior research (Menon and Soman 2002). Limited research on state curiosity mostly studies its impact on people’s search for domain-specific information that closes the knowledge gap (van Dijk and Zeelenberg 2007). However, as curiosity is also an appetitive state that possesses driving forces (Blumenberg 1983; Loewenstein 1994), it is possible that curiosity could motivate reward-seeking behaviors other than information seeking.

Existing behavioral and neuroscience research on reward-seeking behaviors found that intangible cognitive and social rewards and tangible physical rewards are processed similarly in the brain. Further, this shared brain network leads to a spillover reward-seeking effect (Berridge and Kringelbach 2008; Lieberman and Eisenberger 2009). That is, deprivation in one domain motivates individuals to seek rewards in unrelated domains (Berger and Shiv 2011; Briers et al. 2006). Although these findings are intriguing, previous studies have focused on deprivation and satiation in the lower physical domain. We know little about the spillover effect in the higher cognitive or social domains.

This research investigates the impact of curiosity, a cognitive deprivation, on consumers’ subsequent reward-seeking behaviors. We find that curiosity motivates people to seek rewards, particularly novel rewards, in other unrelated domains, such as physical domains (e.g., food) and social domains (e.g., social friendship, charitable donation). This effect occurs as a result of a general appetitive drive and an open mindset, both activated by curiosity. We further identify a boundary condition; when people are curious about threatening information, the spillover reward-seeking tendency is mitigated.

Study 1 tested that curiosity prompts novel reward seeking in an unrelated domain. We used a one-factor design (curious vs. incurious vs. control) and food rewards. Passengers waiting at a subway station were asked to guess what an unbranded advertisement was about. To manipulate curiosity, explanations of the advertisement were either provided (incurious condition) or not provided (curious condition). Those in the control condition were not given this task. Next, all participants were asked to choose between a familiar snack and a novel snack, which was the dependent measure. As predicted, curious participants were more likely to choose the novel food over the familiar food, compared to either incurious participants or participants in the control condition. No difference occurred between the latter two conditions.

Study 2 demonstrated that curiosity elicits an open mindset, which subsequently leads to a novel choice. We used a 2 curiosity (curious vs. incurious) x 3 word type (open-minded vs. neutral vs. non-word) mixed design. Participants first watched a two-part video. To manipulate curiosity, those in the curious condition watched only the first part without knowing the story ending, whereas those in the incurious condition watched both parts. Next, we measured participants' semantic activation of open-mindedness through reaction times in a lexical decision task. Participants were asked to identify letter strings, including open-mind related words, neutral words, and non-words, as a word or a non-word. They then chose between a novel snack and a familiar snack, which was the dependent measure. As expected, curious participants were more likely to choose the novel food over the familiar food, compared to incurious participants. Further, we found a significant two-way interaction such that curious participants responded to the open-minded words faster than incurious participants, whereas no such difference occurred for the neutral words or the non-words. More importantly, the semantic activation of open-mindedness mediated the effect of curiosity on the food choice.

Study 3 aimed to demonstrate the general appetitive mechanism. If curiosity indeed possesses a general appetitive drive, when this appetitive drive is satiated by a reward beforehand, the subsequent spillover reward-seeking tendency should diminish. This study also extended the reward to the social domain (i.e., friendship). We used a 3 satiation (none vs. information vs. food) x 2 reward (familiar vs. novel) between-subjects design. Satiation was manipulated using the same two-part video, except that those in the food satiation condition watched only the first part and were then given a chocolate bar (Berger and Shiv 2011). Next, we measured participants' interest in seeking friendship either at their own university (familiar condition) or at another local university (novel condition). As expected, we found a significant two-way interaction such that those with no satiation (i.e., curious participants) were more interested in seeking novel than familiar friendship, whereas those with information satiation (i.e., incurious participants) and those with food satiation showed equal interest in novel and familiar friendship.

Study 4 identified a boundary condition for the effect. When people are curious about potentially threatening information, they might refrain from approaching behavior and engage in an avoidance orientation (Sweeny et al. 2010), which subsequently leads to a reduced reward-seeking tendency. This study also adopted another social reward, namely, charitable donation. We used a 3 information (threatening vs. non-threatening vs. control) x 2 charity (familiar vs. novel) mixed design. Participants were asked to complete a health survey, which was framed either as estimating heart disease risk (threatening condition) or as providing a personalized plan to reduce heart disease risk (non-threatening condition). To induce curiosity, participants were told that the survey results could not be

provided right away. Participants in the control condition were not given this task. Next, all participants were asked to indicate their willingness to donate to a familiar charity and a novel charity. As anticipated, we found a main effect such that those curious about non-threatening (threatening) information were more (less) likely to donate than those in the control condition. Further, we found a significant two-way interaction such that those in the non-threatening condition were more likely to donate to the novel than the familiar charity, whereas those in the threatening or control condition showed comparable willingness to donate to both charities.

This research contributes to both the curiosity and the reward-seeking literature by investigating *whether*, *how*, and *why* curiosity, a cognitive deprivation, motivates spillover reward seeking in the social or physical domains.

## Does Curiosity Kill the Cat? Incidental Curiosity Can Have Negative Consequences

### EXTENDED ABSTRACT

Marketers aim to maximize enjoyment of a consumption experience since enjoyment predicts favorable outcomes like repeat purchase and positive word of mouth (e.g., Rust and Oliver 2000). Yet, consumers are often exposed to things that arouse their curiosity during consumption experiences, such as a ringing cell phone, an email notification, or a pop-up on a website. Despite the prevalence of such curiosity-evoking events, we know little about how they might impact enjoyment of a coincident consumption experience.

Prior consumer research on curiosity has focused on curiosity evoked by events that are integral to a focal experience. We examine how curiosity-evoking events that are unrelated to, yet coincident with, a focal consumption experience impact consumption enjoyment. We define curiosity as a state of interest caused by knowledge deprivation (Loewenstein 1994) and desire to resolve uncertainty.

There are multiple potential routes through which curiosity aroused by an incidental task might influence enjoyment. First, the state of interest evoked by curiosity may be inherently pleasurable, and may carry over to the consumption experience and increase its enjoyment. Alternatively, the knowledge deprivation and uncertainty involved in curiosity may be experienced as unpleasant, which could carry over to the experience and reduce its enjoyment.

However, we predict that curiosity impacts enjoyment because it motivates an impulsive search for resolution, directing attention towards the curiosity-evoking event, and sustaining it until the curiosity is resolved. When the source of curiosity is incidental (versus integral) to the consumption experience, this search for resolution becomes distracting, directing attention away from the experience and inhibiting consumers from absorbing the experiential aspects of consumption. Accordingly, we expect curiosity evoked by coincident events to *decrease* enjoyment of positive consumption experiences, but to *increase* enjoyment of negative consumption experiences.

Three experiments provide evidence consistent with these predictions, employing different manipulations of curiosity and using self-reported, indirectly assessed and behavioral measures of attention. We demonstrate that the effect of curiosity is robust across stimulating, relaxing, and cognitively engaging experiences.

In study 1, forty-six participants were recruited ostensibly to product-test a video game. They were randomly assigned to one of the two conditions (high or low curiosity). In the high curiosity condition, the experimenter covertly called the participants on their cell phones during the game. The call evoked curiosity because they were unable to check their phones as they had been instructed to leave their phones on a table which was located close by, but out of reach. In

the low curiosity condition, the experimenter remotely activated an iPod, which played a short excerpt from a song. The location of the devices, duration and the timing of the sounds were matched across conditions. We unobtrusively video-recorded the participants, and coded for the number of times they looked towards their phones or the iPod as a behavioral measure of attention diversion. Participants reported enjoying the video game less in the high curiosity compared to the low curiosity condition ( $M_{high} = 6.81$  vs.  $M_{low} = 7.62$ ,  $F(1, 44) = 4.19$ ,  $p < .05$ ). Importantly, a mediation analysis showed that curiosity caused by the incidental event reduced enjoyment because it diverted attention away from the positive consumption experience.

If curiosity reduces consumption enjoyment because it draws attention away from the focal experience, then we would expect this effect to manifest when curiosity is sustained for an extended amount of time, but to disappear when it is resolved promptly. We test this prediction in Study 2. 78 university students were randomly assigned to one of two between-subjects conditions: curiosity-sustained vs. curiosity-resolved. The consumption experience was reading a commencement speech. Midway through the reading, participants were instructed to pull out a gift box from a bag adjacent to their computer. They were told to keep the gift box in front of them but to not open it until the end of the study. In the curiosity-sustained condition, the gift box was opaque, which did not allow the participants to see its contents. In the curiosity resolved condition, the gift box was transparent, which allowed the participants to see that it contained a pen. After the reading task, participants indicated their reading enjoyment, and responded to questions about rumination and attentional conflict. Results showed that sustained (versus resolved) curiosity reduced consumption enjoyment ( $M_{sustained} = 7.34$  vs.  $M_{resolved} = 7.97$ ,  $F(1, 76) = 4.09$ ,  $p < .05$ ). Moreover, the negative effect of sustained curiosity on enjoyment was mediated by rumination and attentional conflict.

Study 3 aims to test the impact of curiosity-evoking events on enjoyment of negative experiences. 105 participants took part in this study with a 2 valence (positive vs. negative) X 2 curiosity (sustained vs. resolved) between-subjects design. The consumption experience involved watching a YouTube video of a song. In the positive valence condition, we used the professionally recorded video clip of the song. In the negative valence condition, we used a non-professional recording of a live performance of the same song, performed by the same artist, which had bad sound and picture quality. The same gift manipulation in Study 2 was used to manipulate curiosity. After viewing the clip, participants indicated their enjoyment of it. Results showed that compared to resolved curiosity, sustained curiosity reduces enjoyment of a positive experience ( $M_{sustained} = 5.46$  vs.  $M_{resolved} = 6.82$ ,  $F(1, 53) = 6.37$ ,  $p < .05$ ), but increases enjoyment of a negative experience ( $M_{sustained} = 5.81$  vs.  $M_{resolved} = 4.51$ ,  $F(1, 48) = 5.00$ ,  $p < .05$ ).

Unlike past research, we focus on how curiosity from a coincident event influences enjoyment of a main consumption experience. We show that curiosity evoked by an incidental event can either increase or decrease enjoyment, depending on the valence of the consumption experience. This research adds to our theoretical understanding of attention's role behind curiosity. Our findings contribute to the literature by revealing a more complete picture of the link between curiosity-evoking events and consumption enjoyment. Practically, our findings suggest that it is possible to strategically promote or prevent curiosity during consumption to enhance consumers' enjoyment.

## Leaving Something for the Imagination: The Effect of Visual Concealment on Product Preference

### EXTENDED ABSTRACT

Marketers resort to different tactics in order to attract consumer interest. One of the most popular is the "peak-a-boo" ploy, which consists of deliberately withholding from view some of the key aspects or attributes of a product. The idea underneath this practice is that consumer curiosity would be sparked when faced with an undetermined novel stimulus, something which would increase interest and search of information about the product (Menon and Soman 2002). Consistent with past literature in marketing, this search and acquisition of new information will have positive results, as consumers suffer from a phenomenon called "uncertainty aversion", which consists on heavily discounting products for which only limited information is available. This effect causes known, average options to be preferred over those with missing attribute values (e.g., Meyer 1981; Huber and McCann 1982; Johnson and Levin 1985; Jaccard and Wood 1988; Simmons and Lynch 1991; Sanbonmatsu et al., 1992).

In this research, we demonstrate that, in the case of aesthetic stimuli, the mere unavailability or concealment of key aspects or fragments may lead to higher preference. This effect will hold in cases where the attractiveness of the revealed and the concealed fragments is kept constant and where the search for new information is unavailable. We propose that this occurs because visual concealment can trigger two interrelated psychological forces that drive the effectiveness of a product fragment: a curiosity effect (see Loewenstein 1994) that draws consumers towards objects that are incompletely portrayed, and an inference effect that conditions the level of curiosity on projections about the likely value of the completed whole based on observed fragments. This indicates that consumer assessments of partially-concealed product images often—but not always—act as an inverted-U shaped function of the percentage of the object that has been revealed. Moreover, we demonstrate that the relationship between the size of a product fragment and consumer preference for the whole product is moderated by the valence of the whole stimulus, such that the inverted-U shaped relationship exists only when the whole product is positively as opposed to negatively evaluated.

We found support for our hypotheses across four laboratory experiments using different product stimuli and procedures. Experiment 1 tested the hypothesized inverted U-shape relationship between the degree of visual concealment and preference for a whole by using aesthetically driven marketing stimuli such as futuristic car images. This study showed that participants had a higher preference towards a moderate size visual revelation as opposed to a large one, which demonstrates that "more is not always better". Experiment 2 demonstrated the generalizability of the results by replicating the findings using computer generated ideally attractive male and female human faces. Given that the first study employed a within-subjects design, Experiment 2 used a between-subjects setup to rule out alternative explanations for the results of the previous experiment such as boredom, satiation and demand effects. Moreover, this study further demonstrated the effect of curiosity in preference and choice by using varied dependent measures and ruled out an alternative explanation associated with differential attractiveness between the revealed and the concealed fragments, as, in this case, each piece was representative of a prototypical, attractive human face. This demonstrates that the level of concealment participants were exposed to in this study only affected the quantity of the visual information provided and not its attractiveness. Furthermore, this study provided media-

tion evidence in favor of evoked curiosity as the determinant of the observed enhanced preference. Experiment 3 employed attractive and unattractive human faces in a between-subject setting to demonstrate that the hypothesized inverted U-shape relationship between fragment size and preference will not exist in the case of unattractive stimuli. Finally, Experiment 4 duplicated the design employed in Experiment 1 to demonstrate that the effect is moderated by Need for Cognitive Closure (NFCC). Specifically, this study showed that participants who scored lower in this construct, and who tend to be less curious, were less sensitive to the effect, due to their lower tendency to experience curiosity.

A paradoxical consequence of our findings is that the products or visual images that benefit the most from concealment are those that have the least to hide; the more attractive the completed whole, the more it may pay to leave something for the consumer's imagination. Moreover, lab results suggest the existence of an unexpected empirical regularity in the "ideal" level of revelation of an image: across a variety of stimulus domains, we find that curiosity in seeing more of objects is maximized when about one half to two-thirds of the object has been revealed—a percent large enough for the bulk of the object to be identified, yet small enough for uncertainty to still exist about the appearance of the completed image. This research informs marketers about the sensitive role that fragment size may play in consumer preference for aesthetic products in cases where these are partially revealed as part of a marketing campaign.

### **Guess Where I'm From: Ambiguous Accents, Curiosity and Product Evaluations**

#### **EXTENDED ABSTRACT**

Though curiosity has been identified as an intense but transient motivational force, limited research has addressed the power of curiosity to engage consumers (Loewenstein 1994). In marketing contexts, previous research has demonstrated that curiosity results in stronger brand associations, greater learning of product information, and better product evaluations (Menon and Soman 2002). Despite these compelling examples, curiosity research is sparse. Little is known about the situational drivers of curiosity (Loewenstein 1994). We examine a potential new driver of curiosity: accented speech. Increasingly ubiquitous with the rise of globalization (Gluszek and Dovidio 2010), ambiguous accented speech (i.e., of indeterminate origin) may trigger consumers' curiosity about the speaker, influencing product and service evaluations.

A large body of research has examined the impact of specific foreign or regional accents (Mai and Hoffman 2014). However, ambiguous accents, or accents providing insufficient cues of geographical background and defying adequate categorization (Budner 1962), remain unexplored. Upon hearing accents, consumers spontaneously seek to classify the speakers into ethnic, national, or religious groups (Mai and Hoffman 2014). However, despite this attempt at categorization, consumers are often unable to identify foreign accents (Lindemann 2003). We argue that ambiguous accents trigger curiosity, which extends to associated products and services, thereby increasing their perceived valuation.

In three studies, we examine the impact of ambiguous accents (direct and incidental) on consumer curiosity and product evaluations. We find that ambiguous accents significantly increase consumers' interest in a target activity, agent, and product. Because curiosity is both situationally and dispositionally driven (Loewenstein 1994), we explore how individual differences such as ambiguity intolerance, ethnocentrism, and trait curiosity moderate the curiosity effects generated by ambiguous accents.

In study 1, we test the effect of an ambiguous accent on likelihood to attend a target event - a volcano exhibit - and examine the mediating role of curiosity. We also seek to rule out a disfluency account, which would predict that ambiguous accents are more unfamiliar and difficult to understand, increasing perceptions of the speaker's uniqueness and competence (Pocheptsova, Labroo, and Dhar 2010; Thompson and Ince 2013). Participants (N=111) were randomly assigned to either an accent or no accent condition. The speaker was either an American woman or a Brazilian woman; a pretest confirmed that the Brazilian accent was ambiguous (65% of the participants could not identify the accent; when asked where the speaker was from, the mean variance was three times higher in the accent vs. no accent condition). Participants were told that they would listen to a one-minute audio clip describing a new volcano exhibit and that the speaker was the exhibit's curator. Participants then reported their likelihood to attend the exhibit and their perceptions of both the speaker and the exhibit. As predicted, there was a significant main effect of accent on attendance likelihood. Those in the accent condition were more likely to attend the exhibit, and were more curious about both the speaker and the exhibit. Importantly, a sequential mediation analysis revealed that accent curiosity significantly mediated the effect of accent on exhibit curiosity, which in turn influenced the likelihood to attend the event. Accent familiarity as well as perceptions of speaker uniqueness and knowledge did not mediate the effect of accent on exhibit interest.

In study 2, we examine the effect of ambiguous accents on consumers' evaluations of a service provider. We also replicate our results with different accents and male voices and explore ambiguity intolerance as a moderator. We predict that the curiosity effect derived from an ambiguous accent will be mitigated for individuals who are highly intolerant of ambiguity. Participants (N = 113) completed a one manipulated between-subjects factor (accent vs no accent). Participants were instructed that they had been tasked with finding someone to fix a broken lamp (a family heirloom) and that they would listen to an informational audio clip about lamp restoration services from a professional lamp restorer's website. After listening to the audio clip, participants reported their willingness to pay for the service, then completed curiosity measures and a tolerance of ambiguity scale (Budner 1962). As predicted, there was a significant accent by ambiguity intolerance interaction, such that accented speech increased consumer willingness to pay, but only for those tolerant of ambiguity. A moderated mediation was also significant.

In study 3, we test the effect of ambiguous accent on willingness to try a novel product in an unrelated product choice. Recent research suggests that incidental exposure to curiosity increases likelihood of choosing a novel over a familiar reward (Wang and Zhu 2014). We replicate our results with another female accent and explore two additional boundary conditions: ethnocentrism and trait curiosity. Participants (N = 89) completed a 2 (accent vs. no accent) x 2 (novel flavor replicates: blueberry balsamic vs. ginger lavender) between subjects design. Participants were told to imagine they were at a party listening to other partygoers speak. They listened to a 30 second audio clip of a conversation in which a woman recommends a website site, Angie's List, to a friend and were asked questions about the conversation. In an ostensibly separate study, participants were told that a creamery was conducting taste tests for two flavors: vanilla and the novel flavor. Participants indicated their preference for one of the two flavors, how much they liked the novel, how likely they were to try it and how much they would enjoy it. They completed curiosity measures followed by the ethnocentrism (Shimp and Sharma 1987) and trait curiosity scales (Kashdan et al. 2009). After collapsing over the flavor replicates, we found that the effect of cu-

riosity elicited by ambiguous accents is attenuated for both individuals who view their in-group (e.g. American) as superior as well as for naturally curious consumers who are chronically predisposed to select novel products. A moderated mediation of curiosity on interest in the novel flavor was also significant.

Taken together, these results provide evidence for a new driver of consumer curiosity which can be effectively used to increase consumers' interest in seeking new products and services.

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# It's Not Me, It's Them: How Social Factors Influence Motivations and Consumption for Genuine and Counterfeit Luxury Goods

Chairs: Jennifer L. Stoner, University of Minnesota, USA

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## **Paper #1: You're Not Fooling Anyone: How Social Feedback Affects Moral Disengagement and the Purchase of Counterfeit Luxury Products**

Yajin Wang, University of Minnesota, USA

Jennifer L. Stoner, University of Minnesota, USA

Deborah R. John, University of Minnesota, USA

## **Paper #2: Discrepancy Between Social Status and Implicit Self-Esteem Prompts Preference for Counterfeit Luxury**

Miao Hu, University of Hawaii, USA

Angela Y. Lee, Northwestern University, USA

## **Paper #3: Cultural Influence on Conspicuous Consumption and Pro-Social Behavior in Response to Social Exclusion and the Role of Communication Norms**

Jaehoon Lee, Southern Illinois University, USA

L. J. Shrum, HEC Paris, France

Youjae Yi, Seoul National University, Korea

## **Paper #4: Louis Vuitton and Your Waistline: Using Luxury Goods Depletes Self-Regulatory Resources and Impairs Self-Control**

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### **SESSION OVERVIEW**

Luxury consumption is an increasingly important aspect of consumer behavior, with luxury goods showing the strongest growth among 100 categories of consumer spending (Sparshott 2014). Prior research on the topic has been primarily focused on understanding consumer motivations for purchasing luxury goods, both authentic and counterfeit. This session presents a set of papers that explore the influence of the social context on the desire and consumption of genuine and counterfeit luxury goods. We explore two questions: 1) How can others influence the usage of luxury and counterfeit luxury goods? 2) How does the actual consumption experience of using a luxury or counterfeit luxury good affect a consumer's psychological state and subsequent behavior?

The first two papers examine the purchase of counterfeit luxury products. The paper by *Wang, Stoner, and John* examines the use of counterfeit luxury goods. These authors propose that interest in counterfeit luxury products is perpetuated by the process of moral disengagement, where unethical behavior such as purchasing illegal counterfeit products is rationalized. They examine the role that social feedback plays in moral disengagement and find that when counterfeit users receive a compliment from other people, they are more likely to morally disengage and desire additional counterfeits in the future. However, the opposite occurs when others question the source of the counterfeit goods. The second paper by *Hu and Lee* shows that perceptions of relative status can impact counterfeit purchases. They propose that perceptions of low or high status in relation to others interact with implicit self-esteem to lead to the desire to purchase counterfeit luxury products. They find that counterfeit luxury consumption can be driven by a discrepancy between perceived social status and implicit self-esteem.

The final two papers examine the conspicuous consumption of luxury goods. *Lee, Shrum and Yi* show that social exclusion effects

on conspicuous consumption versus pro-social (non-conspicuous) behavior are culture-dependent. They propose and find that responses to explicit and implicit exclusion differ cross-culturally because of cultural differences in communication norms. Exclusion that is communicated in a norm-congruent manner produces pro-social behavior, whereas exclusion that is communicated in a norm-incongruent manner produces conspicuous consumption. The final paper by *Wang and John* also looks at consumption of authentic luxury products. They propose and find that using luxury products in public makes consumers feel self-conscious and needing to monitor their behavior carefully in front of others. This mindfulness depletes one's self-regulatory resources and impairs self-control on subsequent tasks. Thus, the papers in this session focus attention on the influence of social factors and context on luxury consumption. This focus is unlikely to emerge in any other format than a special session, since individual luxury consumption papers appear sporadically on the conference program in sessions not devoted to the topic. Given the variety of settings and questions, this session is likely to appeal to a broad set of conference attendees interested in luxury and conspicuous consumption, branding, culture, individual differences, and ethics.

## **You're Not Fooling Anyone: How Social Feedback Affects Moral Disengagement and the Purchase of Counterfeit Luxury Products**

### **EXTENDED ABSTRACT**

Counterfeit products have become a major problem for luxury brands, with counterfeits accounting for nearly 10% of worldwide trade (Townsend 2013). Prior research has examined consumer motivations for purchasing counterfeits, such as the desire for status and self-enhancement. However, only one study has examined actual use of counterfeit products and the effects of using these products on beliefs and behaviors (Gino, Norton, and Ariely 2010). In this paper, we study the actual use of counterfeit luxury products, and examine how the social feedback that counterfeit users receive affect their moral beliefs about purchasing and owning counterfeits, as well as their future interest in luxury counterfeit products. We propose that certain types of social feedback encourage counterfeit users to rationalize their behavior (a process called moral disengagement), while other types of social feedback have the opposite effect. Further, we use these insights to develop communication strategies that are effective in reducing the desire for luxury counterfeit products. In four studies, we find that social feedback alters the degree of moral disengagement that takes place when consumers wear counterfeit luxury products. Receiving compliments from others increases moral disengagement, which leads to greater interest in purchasing luxury counterfeit items in the future. In contrast, questions about the source of the luxury counterfeit has the opposite effect. We use these findings in a final study, where we show that demand for counterfeit luxury products can be decreased by anti-counterfeiting ads that focus on a social sanction—other people can easily identify counterfeits.

*Study 1.* In this study, we examine how social feedback while wearing a counterfeit luxury product influences the likelihood that the counterfeit user will rationalize their behavior (moral disengagement). Female participants were given a Tiffany bracelet to wear

while filling out a survey of general questions unconnected with the study. They were told the bracelet was counterfeit, even though it was a real Tiffany bracelet. After filling out the survey, participants were asked to imagine themselves wearing the counterfeit Tiffany's bracelet to a shopping mall, where they are approached by a salesperson who comments on the bracelet. For one group of participants, the salesperson is complimentary ("I really like your Tiffany bracelet. It looks so cute on you!"); for the other group of participants, the salesperson is complimentary, but questions the source of the bracelet ("I really like your Tiffany bracelet. Is it real?"). Participants then completed a 3-item measure of moral disengagement (e.g. "It is okay to buy a counterfeit product especially when the authentic product is high priced.") Results showed women in the compliment condition had a higher level of moral disengagement than those in the question condition ( $M_s = 4.84$  vs.  $3.37$ ;  $F(1, 37) = 13.26$ ,  $p < .001$ ).

**Study 2.** The procedure was similar to that in study 1, except that participants imagined the social interaction occurred with another shopper. After receiving the compliment or question, participants recorded the thoughts they had about the interaction with the shopper before completing the measure of moral disengagement. Replicating the results of study 1, those in the compliment condition had a significantly higher level of moral disengagement ( $M = 4.58$ ) than in the question condition ( $M = 3.71$ ,  $F(1, 38) = 4.09$ ,  $p < .05$ ). Thoughts about the interaction with the other shopper were coded for intensity of negative external thoughts, negative internal thoughts, and external positive thoughts. Only the intensity of negative externally directed thoughts (e.g., "I don't want to get caught lying.") were found to mediate the relationship between social feedback and moral disengagement.

**Study 3.** In this study, we incorporate actual social feedback into our experimental procedure. Participants were randomly assigned to one of three conditions: compliment, question, or no feedback (control). Each participant was brought to a private interviewing room and was asked to wear a Burberry scarf (which was labeled as a counterfeit) and complete filler tasks. After 15 minutes, a female confederate entered the room pretending to look for a lost cell phone. She made a quick comment about the Burberry scarf in the compliment and question conditions consistent with Study 1, or made no comment at all (control). After this brief interruption, participants completed a survey that included the moral disengagement measure. Finally, participants were taken to another private room which had different "counterfeit" luxury products displayed. Participants evaluated them and indicated their interest in purchasing these products in the future (1-9 scale). Results showed that participants who received a compliment when wearing a fake luxury scarf were more likely to engage in subsequent dishonest behavior involving counterfeits. Compared to participants in the question condition, participants receiving a compliment were more interested in purchasing counterfeit products in the future ( $M = 7.19$  vs.  $4.10$ ,  $p < .001$ ). Counterfeit purchase intention was also higher for participants receiving a compliment versus those in the control condition ( $M = 7.19$  vs.  $5.89$ ,  $p < .05$ ). The effect of social feedback on purchase intention was mediated by moral disengagement.

**Study 4.** Using insights obtained by our prior studies, we examined the effectiveness of different ads aimed at reducing desire for luxury counterfeit products. Novice users (participants who had previously purchased 1 to 5 counterfeit products) viewed either (1) an anti-counterfeiting advertisement highlighting self-sanction "When it's fake, you know it's fake," (2) an anti-counterfeiting ad highlighting social sanction "When it's fake, we ALL know it's fake" or (3) a control advertisement for candy. After answering some basic questions about the ad, participants answered questions about inten-

tions to purchase counterfeits in the future. Results revealed that participants in the social sanction condition had a significantly lower counterfeit product purchase intention than did participants in the self-sanction condition ( $M_s = 3.92$  vs.  $4.98$ ,  $t(2,42) = -1.86$ ,  $p < .05$ ) or participants in the control condition ( $M_s = 3.92$  vs.  $5.02$ ,  $t(2,42) = 1.94$ ,  $p < .05$ ). Additionally, there was no difference in purchase intention between the self-sanction condition and the control condition ( $t(2,42) = -.08$ ,  $p > .46$ ).

## Discrepancy Between Social Status and Implicit Self-Esteem Prompts Preference for Counterfeit Luxury

### EXTENDED ABSTRACT

Consumers purchase counterfeit products to convey positive signals to themselves and to others (Gino, Norton, and Ariely 2010; Wilcox, Kim, and Sen 2009). Particularly in the luxury goods market, consumers knowingly purchase counterfeit products as a social signaling mechanism with low financial costs (Nia and Zaichkowsky 2000; Penz and Stottinger 2005). In this project, we explore psychological factors that underlie consumers' preference for counterfeit luxury goods.

Past studies have identified perceived social status as a predictor of counterfeit consumption. In particular, correlational evidence suggests that people who prefer counterfeit luxury are self-identified as lower in social status compared with people who prefer authentic luxury (Bloch, Bush, and Campbell 1993). Poor consumers in developing countries are also more likely to use counterfeits as a status-signaling device (Van Kempen 2003). In the current research, we examined the effect of implicit self-esteem as a potential moderator of the effect of perceived social status on counterfeit consumption.

Implicit self-esteem is thought to play an important role in predicting status-signaling behaviors as it has been shown to affect materialism, conspicuous consumption, and compulsive buying (Hanley and Wilhelm 1992; Park and John 2011; Sivanathan and Pettit 2010). In the current project, we offer a novel proposition that perceived social status and implicit self-esteem jointly influence the preference of counterfeit luxury goods. Specifically, we hypothesize that counterfeit luxury consumption can be driven by a discrepancy between perceived social status and implicit self-esteem. Recent research lends suggestive evidence for this hypothesis. In particular, Park and John (2011) has shown that a discrepancy between implicit and explicit self-esteem leads to high levels of materialism through a desire to self-enhance. Also, people with low self-esteem were found to prefer status-signaling brands when they were socially included (which creates a discrepancy between self-esteem and social acceptance) but not when socially excluded (Dommer, Swaminathan, and Ahluwalia 2013).

We hypothesize that a discrepancy between social status and self-esteem leads to heightened psychological discomfort and a need for self-enhancement to alleviate that psychological discomfort. Compared with consuming authentic luxuries, counterfeit luxury consumption can be viewed as an effective self-enhancement strategy via status signaling, but without the burden of high financial costs. Thus, we predict that people experiencing a discrepancy between social status and implicit self-esteem will have more favorable attitudes towards counterfeit luxury products. Two studies tested this core hypothesis.

*Experiment 1: Louis Vuitton Study.* The design of the study is a 2 (perceived social status: high vs. low)  $\times$  2 (implicit self-esteem: high vs. low) between-subject design. Eighty-five undergraduate students were recruited to participate in this lab experiment. Only

female participants were recruited due to anticipated gender differences on familiarity with Louis Vuitton handbags.

Participants' level of implicit self-esteem was measured through a 9-point single-item asking "How much do you like your name in total?". The measure was adopted from Gebauer et al. (2008) and higher preference for one's own name has been validated as a proxy for higher implicit self-esteem. Participants' level of perceived social status was manipulated via a manipulation adopted from Piff et al. (2010). In the high social-status condition, participants were asked to compare themselves to people from the bottom of the social ladder. In contrast, in the low-social status condition, participants compared themselves to people from the top of the social ladder. Participants were then asked to imagine themselves in a shopping scenario in which they tried out a Louis Vuitton handbag but learned about an opportunity to purchase a counterfeit bag that looked and felt identical to the authentic one. Participants answered questions on their attitude and preference for the counterfeit Louis Vuitton handbag.

Results showed a significant two-way interaction on attitude towards the counterfeit LV bag ( $b = -.29$ ,  $t(85) = 2.71$ ,  $p = .008$ ). Spotlight analysis revealed that among participants with low implicit self-esteem ( $-2SD$ ), those who were high in perceived social-status had more favorable attitudes toward the counterfeit LV bag compared with participants who were low in perceived social status ( $b = -.64$ ,  $t(85) = 2.67$ ,  $p = .009$ ). In contrast, among participants with high implicit self-esteem ( $+2SD$ ), it was those low in perceived social status who had more favorable attitudes toward the counterfeit bag compared with participants high in perceived social status ( $b = .52$ ,  $t(85) = 2.18$ ,  $p = .03$ ). Similar patterns were also observed for an additional DV asking participants how often they would use the counterfeit bag had they bought it ( $b = -.27$ ,  $t(85) = 2.48$ ,  $p = .02$ ). The results of the current study support our core hypothesis that a discrepancy in people's implicit self-esteem and perceived social status leads to a preference for counterfeit luxury goods.

*Experiment 2: Rolex Study.* Ninety-nine participants recruited via MTurk participated in this online study. Similar to experiment 1, the design of the current study is a 2 (perceived social status: high vs. low)  $\times$  2 (implicit self-esteem: high vs. low) between-subject design. Rolex watches were used as the central stimulus brand, and only male participants were recruited. The procedures of the current study were similar to experiment 1.

Results show a significant two-way interaction on attitude towards a counterfeit Rolex watch similar to the pattern shown in experiment 1 ( $b = -.29$ ,  $t(99) = 2.90$ ,  $p = .005$ ). Among participants with low implicit self-esteem ( $-2SD$ ), high social status led to more favorable attitude towards a counterfeit Rolex watch ( $b = .49$ ,  $t(99) = 2.25$ ,  $p = .03$ ). The contrast reversed for those with high implicit self-esteem ( $+2SD$ ) ( $b = 1.75$ ,  $t(99) = 2.76$ ,  $p = .007$ ).

*Conclusion and Contributions.* The current findings shed light on the psychological factors that dictate the consumption of counterfeit products and have important implications for managing luxury brands and products in the marketplace.

### Cultural Influence on Conspicuous Consumption and Pro-Social Behavior in Response to Social Exclusion and the Role of Communication Norms

#### EXTENDED ABSTRACT

Recent research suggests that differences in how social exclusion is communicated have large effects on responses because implicit and explicit social exclusion threaten different needs (Lee and Shrum 2012). Implicit exclusion (e.g., being ignored) threatens efficacy needs (e.g., power), which results in attention-getting responses

such as conspicuous consumption, whereas explicit exclusion (e.g., being rejected) threatens relational needs (e.g., self-esteem), which results in pro-social responses such as helping (non-conspicuous behavior).

Although the previous research provides insights into the mechanisms underlying exclusion effects, at least two questions remain unanswered: 1) whether responses to social exclusion are universal or culture-specific, and 2) why implicit and explicit communication of social exclusion threatens different needs. In the present research, we address both questions. Specifically, we propose that responses to explicit and implicit types of exclusion differ cross-culturally, and that these differences are related to the ways in which social exclusion is communicated. To support these propositions, we build on Hall's (1976) conceptualization of high- versus low-context communication cultures. In low-context cultures (e.g., the U.S., some European countries), the normative way of communication occurs through explicit statements, and is relatively context-free. In high-context cultures (e.g., Korea, Japan, China), the normative way of communication occurs through implicit, nonverbal cues such as facial expressions and silence, and people often draw true meaning from the social context.

In three experiments, we test the general proposition that reactions to social exclusion depend on whether social exclusion is communicated in a norm-congruent or norm-incongruent manner. We contrast Korean and American cultures, which differ in their communication norms, and show that Koreans and Americans react to explicit and implicit types of social exclusion in essentially opposite ways. Further, we document three interrelated processes that underlie these effects: 1) implicit and explicit types of social exclusion threaten different needs for Koreans and Americans, 2) threats to different needs produce different compensatory responses, and 3) the culturally opposing responses to the two types of social exclusion arise from cultural differences in communication norms. This general set of relations is presented in Figure 1.

In all experiments, participants wrote about experiences of either being ignored or rejected (Molden et al. 2009) and indicated their preferences for conspicuous logos and for willingness to help (operationalizations were varied). Means and standard deviations are summarized in Table 1. Experiment 1, using a Korean sample, examined the effect of being rejected versus ignored on conspicuous consumption and helping. We included a control condition in which participants described their college campus. Recall that in Lee and Shrum (2012), being ignored increased conspicuous consumption, whereas being rejected increased helping. However, for Korean participants, the results were the opposite. Being ignored increased helping relative to the rejected ( $F(1, 59) = 6.22$ ,  $p < .05$ ) and control ( $F(1, 58) = 4.99$ ,  $p < .05$ ) conditions, whereas being rejected increased conspicuous consumption relative to the ignored ( $F(1, 59) = 4.50$ ,  $p < .04$ ) and control ( $F(1, 57) = 7.75$ ,  $p < .01$ ) conditions.

Experiment 2, using a Korean sample, examined the underlying process that reactions to exclusion depend on which needs are threatened in Korea. We manipulated the process by boosting either self-esteem or power (moderation-of-process; Spencer, Zanna, and Fong 2005). The design was a 2 (rejected vs. ignored)  $\times$  3 (self-esteem boost vs. power boost vs. no boost) between-subjects factorial. The interaction was significant for helping ( $F(2, 215) = 4.54$ ,  $p < .05$ ) and for conspicuous consumption ( $F(2, 215) = 5.69$ ,  $p < .01$ ). For helping, the self-esteem boost reduced the effects of being ignored, relative to the no-boost ( $F(1, 215) = 5.78$ ,  $p < .05$ ) and power boost ( $F(1, 215) = 10.19$ ,  $p < .01$ ) conditions. Thus, being ignored threatened self-esteem but not power. For conspicuous consumption, the power boost reduced the effects of being rejected, relative to the

no-boost ( $F(1, 215) = 17.08, p < .001$ ) and self-esteem boost ( $F(1, 215) = 14.18, p < .001$ ) conditions. Thus, being rejected threatened power, but not self-esteem.

Experiment 3, using both Korean and American samples, tested our prediction that the culturally opposite responses were mediated by communication norms. The design was a 2 (Koreans vs. Americans)  $\times$  2 (rejected vs. ignored) between-subjects factorial. The interaction was significant for helping ( $F(1, 128) = 11.23, p < .01$ ) and for conspicuous consumption ( $F(1, 128) = 9.43, p < .01$ ). Ignored Koreans increased helping relative to rejected Koreans ( $F(1, 74) = 4.77, p < .05$ ), but rejected Koreans increased conspicuous consumption relative to ignored Koreans ( $F(1, 74) = 4.88, p < .05$ ). The results were opposite for Americans. Ignored Americans increased conspicuous consumption relative to rejected Americans ( $F(1, 54) = 5.15, p < .05$ ), but rejected Americans increased helping relative to ignored Americans ( $F(1, 54) = 5.67, p < .05$ ). This interaction was mediated by communication norms (95% CI = .0053 to .4394 for conspicuous consumption; 95% CI = .0057 to .6823 for helping).

In conclusion, our research demonstrates that compensatory responses (conspicuous consumption and helping behavior) to explicit and implicit types of exclusion were opposite between high- and low-context cultures and that these effects depended on which needs were threatened and were explained by cultural differences in communication norms.

### Louis Vuitton and Your Waistline: Using Luxury Goods Depletes Self-Regulatory Resources and Impairs Self-Control

#### EXTENDED ABSTRACT

Whereas past research in luxury and conspicuous consumption has looked at motivations for desiring luxury goods, this paper looks at the actual experience of using luxury goods and examines the negative psychological costs of luxury consumption. We propose that using a luxury item in public makes consumers feel more self-conscious, and more mindful of needing to watch their behaviors in public. We further propose that being at such mindset requires self-regulatory resources to manage, depletes one's self-regulatory resources, and therefore impairs consumers' ability to exert self-control in subsequent situations (e.g., resisting candy). We test these hypotheses in four experiments.

Experiment 1 tests the basic theory. Eighty-four female students were randomly assigned to use a luxury handbag (Louis Vuitton, retail price: \$730) or a non-luxury handbag (retail price: \$75). After using the handbag in public for 15 minutes, participants returned to the lab and completed a survey, with a small bowl of M&Ms candy provided nearby as a complimentary snack. The survey asked participants to recall their experiences using the assigned handbag, including questions about whether they felt they were in the spotlight during the experience: "When you walked around with the handbag, to what extent did you feel you: (1) attracted attention from others, (2) were being noticed by others, (3) needed to be more careful in front of others, and (4) felt self-conscious about carrying the handbag" (1=not at all, 7=very much)." The four items were averaged to form a Spotlight Index ( $\alpha = .68$ ). After completing the survey, participants were dismissed and the weight of the M&M's they consumed was measured (in grams). As expected, participants in the luxury condition consumed significantly more M&M's than participants in the control condition ( $M_s = 26.19$  vs.  $15.21, t(82) = 2.11, p = .02$ ). Similarly, participants in the luxury condition also had stronger feelings of being in a spotlight ( $M_s = 4.19$  vs.  $3.42, t(82) = 1.99, p = .025$ ). Finally, we found that the effect of luxury product use on M&M's consump-

tion was mediated by the Spotlight Index (95% bias-corrected, CI = [.0007, .0956]).

Study 2 provides further process evidence by comparing food consumption contexts that require self-control (unhealthy food) versus those that do not (healthy food). We predicted that the luxury depletion effects should only occur for unhealthy food. Study 2 had a 2 (Product Type: Luxury vs. Control) by 2 (Food Type: Healthy vs. Unhealthy) between-subjects design and used a procedure similar to study 1. Our analysis showed a significant interaction effect ( $F(1, 84) = 3.88, p = .05$ ). Specifically, participants in the Luxury condition ate significantly more unhealthy food than participants in the control condition ( $M_s = 40.45$  vs.  $28.31, t(84) = 1.78, p = .035$ ). However, there was no difference for healthy food consumption cross conditions ( $p = .31$ ). Furthermore, the interaction effect was mediated by the Spotlight Index (95% bias-corrected, CI = [-8.52, -.45]). Study 2 also ruled out mood and power/status as alternative explanations.

In study 3, we varied luxury consumption to be public or private. If feelings of being in a spotlight are responsible for the luxury depletion effect, we should observe the effect for the public, but not the private, consumption context. To add to our process evidence, we add a third condition where we directly manipulate the spotlight mindset. For this condition, prior to participants use luxury handbags privately, we prime them with a message about how others are always watching them and how they need to be careful about their behavior in public, which is consistent with how luxury users feel when using these goods in public. Thus, we expect that participants using the luxury handbag in private will exhibit the same spotlight feelings as participants using the luxury handbag in public. Eighty female students were randomly assigned to one of the three conditions: Luxury Public vs. Luxury Private vs. Luxury Private with Spotlight Mindset Prime. As predicted, participants in the Luxury Public condition and Luxury Private with Spotlight Mindset Prime conditions had similar spotlight feelings ( $M = 4.32$  vs.  $4.19, t(77) = .29, p = .77$ ), and both had significantly greater spotlight feelings than participants in the Luxury Private condition ( $M = 3.20, t_s > 2.10, p_s < .02$ ). Participants in the Luxury Public condition consumed significant more candy than participants in the Luxury Private condition ( $M_s = 24.11$  vs.  $14.68, SD = 15.97, t(77) = 1.90, p = .031$ ). Finally, participants in the Luxury Private with Spotlight Mindset Prime condition also ate significant more candy than participants in the Luxury Private condition ( $M_s = 28.70$  vs.  $14.68, t(77) = -2.42, p = .01$ ).

Our final experiment tests two moderators: levels of luxury and self-control trait. Although both are luxury brands, premium luxury brands (e.g., Prada) are more exclusive than affordable luxury brands (e.g., Coach). Thus, the social spotlight effect should be more pronounced in the case of premium luxury brands, and we predicted that unhealthy food consumption would be greater in this condition. Finally, we expected the effects to be stronger for people who have lower self-control. One hundred and seven female students were randomly assigned to wear either a premium luxury bag (Prada, retail price: \$1890) or an affordable luxury bag (Coach, retail price: \$295). As expected, for participants with stronger self-control, using the premium luxury handbag or the affordable luxury handbag did not affect how much candy they ate ( $M = 16.83$  vs.  $12.95, p = .55$ ). In contrast, participants with weaker self-control ate significantly more candy when they used the premium compared to the affordable luxury handbag ( $M = 29.66$  vs.  $13.54, t(103) = -3.11, p = .001$ ).

In summary, four experiments demonstrate that engaging in luxury consumption in public depletes one's self-regulatory resources and therefore leads to more unhealthy food intake subsequently. To our knowledge, our work is the first to explore the psychological states and behavioral consequences of using luxury goods and makes

a number of novel and important contributions to luxury consumption, self-regulation, and consumer well-being.

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# Options Outside the Frame in Forfeiture and Replacement Decisions

Chairs: Liad Weiss, University of Wisconsin-Madison, USA  
Stephen Spiller, UCLA, USA

## **Paper #1: Following-Through Opportunities: The Effects of Incidental versus Inherent Choices**

Liad Weiss, University of Wisconsin-Madison, USA  
Ran Kivetz, Columbia University, USA

## **Paper #2: “Be Careless with That!” Availability of Product Upgrades Increases Cavalier Behavior toward Possessions**

Silvia Bellezza, Harvard Business School, USA  
Joshua Ackerman, MIT Sloan School of Management, USA

## **Paper #3: How Outside Options Influence Choice of Substitutes**

Uzma Khan, Stanford University, USA

## **Paper #4: Indecisive Consumers and Opportunity Cost Consideration**

Marissa A. Sharif, UCLA, USA  
Stephen A. Spiller, UCLA, USA

### **SESSION OVERVIEW**

When making product decisions, consumers decide whether to buy, use, forfeit, or replace some *focal* option. These decisions may be influenced by options that lie outside the decision frame and about which no decision needs to be made. These outside options may be desired but unavailable, they may provide substitutes for options in the focal decision frame, or they may have previously been rejected. The present session explores the roles that such outside options play in forfeiture and replacement decisions.

Forfeiture and replacement decisions are an important subset of the choices consumers commonly make. Consumers must decide whether to forgo attending a desired concert in bad weather or give up a working phone to obtain an upgraded replacement. Previous research finds that how consumers process information about products is affected by whether that decision is an acquisition decision or a forfeiture or replacement decision (Dhar and Wertenbroch 2000). Such decisions are often driven by factors such as the chooser's commitment to a focal option and the ease in which the chooser can replace that option (Fitzsimons 2000). Accordingly, whether people consider outside options, the type of outside options people consider, and the similarity of outside options to focal options are likely to affect forfeiture and replacement decisions.

Four papers look at different factors that prompt consumers to consider outside options and explore implications for forfeiture and replacement decisions. Weiss and Kivetz show that availability of an attractive outside option that was part of an incidental (rather than inherent) choice can make people less likely to forfeit a focal attractive option by increasing the perceived loss. Bellezza and Ackerman show that availability of an upgraded version of a product consumers own decreases consumers' attachment to the product they own, and leads them to take greater risks with that product to justify its replacement. Khan examines out-of-stock situations, where consumers seek a substitute for a desired but unavailable option. Such substitution decisions increase consumer choice of, but decrease consumer satisfaction from, options that are more (vs. less) similar to the outside option. That pattern is driven by transference of both positive (desirability) and negative (failure to find) associations from the outside option to the similar focal one. Sharif and Spiller show that outside options are less likely to affect decisions about focal options for people high on lackadaisical indecisive tendencies (but neither perfectionist nor neurotic indecisive tendencies). This is because

lackadaisical individuals seek less information about outside options and are less sensitive to their values even when they are known.

Together, the four papers help to contribute to research on outside option and on forfeiture and replacement decisions and will be of interest to researchers interested in decision processes. As a group, they raise questions about the ways that options outside the decision frame influence consumer decisions: When will outside options spontaneously be considered as part of a focal decision? Are there lingering consequences when those outside options are made focal? How does consideration of outside options affect consumer welfare?

## **Following-Through Opportunities: The Effects of Incidental versus Inherent Choices**

### **EXTENDED ABSTRACT**

Consumers often plan to pursue desirable opportunities yet fail to follow-through. Such lack of follow-through has negative implications for consumers, who forego opportunities for consumption and progress, as well as for marketers, who miss sales opportunities. The current research suggests that consumers are more likely to pursue an opportunity when it is chosen from a choice set that is construed as *incidental* rather than *inherent*. Consumers perceive choices as *incidental* when they arise from feasibility constraints that are exogenous to the considered opportunity set, as when a consumer receives a movie *and* a concert ticket but has to choose one because the events happen to coincide. Such incidental choices give rise to increased perceptions of loss and opportunity cost, thereby enhancing follow-through. By contrast, consumers perceive a choice as *inherent* if the set of available opportunities is intrinsically constrained, as when consumers earn a marketing incentive that requires choosing between different rewards (e.g., a movie *or* a concert ticket).

We suggest that when consumers make incidental choices, there is no “built-in” requirement to tradeoff one option for another, and thus, consumers are more likely to engage in counterfactual thinking about utilizing all of the options. Consequently, consumers feel that by failing to act on their chosen opportunity, all opportunities that were originally offered, their chosen option but also outside options they did not choose, are lost. Although this view of loss is inflated because the consumer could have actually only enjoyed one of the offered opportunities, this enhanced perception of loss (or opportunity cost) motivates consumers to pursue their chosen opportunity.

Accordingly, four studies demonstrate that consumers are more likely to follow-through with an opportunity when it was selected from an incidental choice-set, compared to when it was selected from an *inherent* choice-set. Participants in Study 1a imagined receiving a birthday gift that required them to choose between two desirable options. In the *inherent* choice condition, two of their friends jointly gave them a single gift voucher that provides a choice between two options: a fancy dinner versus an evening cruise. In the *incidental* choice condition, two of their friends, who do not know each other, each gave them a separate gift voucher: one voucher from one friend was for a fancy dinner, whereas the second voucher from the second friend was for an evening cruise. Participants then learned that the two events (dinner and cruise) took place at the same time on the Thursday following participants' birthday. Participants then chose which event they plan to attend.

Subsequently, participants imagined that they were assigned to work on the same Thursday evening. Their boss offered to cover for them in return for 10 hours that they will devote to a tedious task in the subsequent weekend. Consistent with our prediction of greater follow-through with *incidental* compared to *inherent* choices, participants in the *incidental choice* condition were more likely to accept their boss' offer and following-through with their evening event ( $p < .05$ ).

In Study 1b, following the same procedure, after choosing between dinner and cruise, participants imagined looking at the voucher(s) pondering how things could have evolved differently, and then listed three thoughts. Independent judges blind to the hypothesis coded thoughts for whether they represented desires to attend both events. Consistent with our predictions that the effect of *incidental* versus *inherent* choice on opportunity follow-through is related to counterfactual thoughts of using multiple choice options, participants who made the *incidental* choice were more likely to express desire to pursue both opportunities ( $p < .1$ ).

In Study 2, following the same procedure, after choosing between dinner and cruise, participants' indicated WTP for using both options and responded to a maximizing/satisficing scale (Schwartz et al. 2002). Consistent with our prediction that *incidental* versus *inherent* choice will increase WTP for using all (mutually exclusive) options, but only among "maximizers" (seek the best outcome, i.e., utilizing all of the presented options) the interaction between choice-type and maximization was significant ( $p < .05$ ). A spotlight analysis revealed a positive effect of *incidental* choice on WTP among maximizers ( $p < .05$ ), but not among satisficers.

Study 3 explored a different type of feasibility constraint, budget, rather than time, limitation. Participants were informed that they have 7200 reward points. In the *inherent* choice condition, the credit card company offered participants to redeem 5000 points in return for either a massage or dinner. In the *incidental* choice condition, each reward offer was received through a separate communication from a different company, one offering the massage in return for 5000 points and the second offering the dinner also in return for 5000 points. After participants chose which reward to redeem, participants learned that their points were close to expire, and as a dependent variable, participants were asked for their WTP for an additional month in which they can use the points. Higher WTP indicates a stronger desire to follow-through with utilizing the selected reward. Subsequently, participants responded to the maximizing/satisficing scale. Consistent with our predictions, the interaction between choice-type and maximization tendency was significant ( $p < .05$ ). We found increased WTP in the *incidental* choice condition, in which the need to choose only one reward was driven by an external constraint (i.e., insufficient amount of points), than in the *inherent* choice condition, in which the need to choose was built-in to the offer among maximizers ( $p < .05$ ), but not among satisficers.

Consumers are less likely to imagine obtaining all of the options in a choice-set when these options are unattractive as a bundle, such as when there is less variety among options and they are perceived as "more of the same" (Sagi and Friedland 2007). In Study 4, Study 1a's design was repeated with variety among options (high: restaurant and cruise vs. low: two different restaurants) as a second factor. Because the high variety choice-set can better fit consumers' preference heterogeneity, all participants were informed they chose the same restaurant option. Consistent with the prediction that a low variety among options would attenuate the positive effect of *incidental* choice on follow-through, there was a statistically significant interaction between choice-type and variety ( $p < .05$ ). Follow-through

was higher following *incidental* choice when variety was high ( $p < .05$ ), but not when variety was low.

### **"Be Careless with That!" Availability of Product Upgrades Increases Cavalier Behavior toward Possessions**

#### **EXTENDED ABSTRACT**

Product owners are often faced with the opportunity to purchase an enhanced product (e.g., a new laptop or phone), even though the device they currently own is still fully functional. We propose that individuals become less careful with owned products and less concerned about losing or damaging those products, when in the presence of attractive, though not yet attained, outside options. This careless behavior stems from a desire to justify the attainment of upgrades. Because consumers keep track of the costs and benefits of their durable purchases over time (Gourville and Soman 1998; Heath and Fennema 1996; Prelec and Loewenstein 1998; Thaler 1980), "accidentally" damaging a product allows them to write-off the residual value *ante tempore* and buy a new product without recording a loss or appearing wasteful.

We test our hypotheses through five studies that employ different types of upgrading manipulations (e.g., the physical presence of a better product, writing tasks, product images), investigate a wide array of consumer products (e.g., mugs, cell-phones), and examine different measures of carelessness (e.g., actual behavior, behavioral intentions). We also consider the moderating role of individual level differences in the motivation to upgrade and boundary conditions linked to the nature of the product. In particular, we find that carelessness in the presence of upgrade options is stronger for those who are particularly interested in the upgrade and is more likely to occur for products that individuals typically own one of (i.e., the newer product substitutes the current one), than for products that individuals typically own several of simultaneously (i.e., the newer product is owned in addition to the current one).

Using two conditions between-subjects designs, the first three studies test different outcomes of the overall effect: behavioral measures (study 1a), behavioral intentions (study 1b), and product perceptions (study 1c). In study 1a, we manipulated the physical availability of a preferred substitute. Participants (N. 92) were gifted with a mug and were either exposed to a better mug (upgrade condition) or not (no-upgrade condition). All participants then played the game Jenga, with the owned mug placed atop a tower of blocks. Participants removed individual blocks for payment but also attempted to prevent the tower of blocks topped by the mug from toppling down. We find that participants in the upgrade condition dropped the mug during the game in 61% of the cases, in contrast to only 37% in the no-upgrade condition ( $p = .02$ ). Therefore, participants were more willing to endanger an owned product when presented with a preferred and attractive product option. In this study 1b, we recruited real laptop owners (N. 61) and examined the impact of imagining a newer laptop on willingness to take care of the currently owned device. As predicted, participants in the upgrade condition exhibited a lower willingness to take care of their current laptops than participants in the no-upgrade condition. In study 1c, we show that judgments about the extent to which a product "needs to be broken" prior to replacement are malleable. Cell phone owners (N. 60) imagined a new model of their phone about to be released (upgrade condition) or not (no-upgrade condition), and then assessed the amount of damage "needed" before replacement. We find that the replacement threshold was significantly lower for people who imagined an upgrade possibility than for those who did not. Thus, when the thought of a newer,

attractive option is prominent in participants' minds, they are willing to lower the damage threshold for an owned product.

Study 2 (N. 272) examines the moderating role of motivation to upgrade using a 2 (upgrade) x 2 (physical product condition) x 2 (iPhone ownership) between-subjects design. The study manipulated upgrade condition by asking participants to imagine that they owned an iPhone4 (old model condition) or an iPhone5 (new model condition). In addition, the study manipulated the physical state of the product by showing the image of an iPhone with an intact (undamaged condition) or cracked (damaged condition) screen. For the damaged conditions, a graphic designer created the images of the two iPhones with the same exact crack on the screens. We find that participants for whom the product is relevant (i.e., real iPhone owners) are more likely to rate the substitution of the damaged device as more necessary and to perceive an equally broken product as more damaged when the phone is an old model (iPhone4), rather than a new one (iPhone5). In contrast, the manipulation did not elicit significant differences for non-iPhone owners. Thus, study 2 demonstrates that people are motivated to create reasons for upgrading and they judge a similarly ruined product as more damaged when a more attractive option is available.

Using a 3 (upgrade) x 2 (product type) between-subjects design, study 3 (N. 356) demonstrates the mediating role of need for justification by manipulating the extent to which the upgrading is framed as necessary (i.e., low need for justification) or not necessary (i.e., high need for justification). Moreover, study 3 investigates boundary conditions linked to the substitutability of products. We find that the effect of upgrade availability is more likely to occur for products that individuals typically own one of – so called “single” products (i.e., the new product substitutes for the current one) – than for products that individuals typically own several of simultaneously – so called “cumulative” products (i.e., the new product is owned in addition to the current one). Participants thinking about product upgrades reported lower willingness to take care of their belongings when imagining “single” products (a wallet or suitcase) rather than “cumulative” products (coat or shoes).

In conclusion, our work provides novel insights into the phenomenon of consumer carelessness toward owned products and demonstrates that consumers exhibit cavalier behavior toward owned products when in the presence of attractive outside options.

## How Outside Options Influence Choice of Substitutes

### EXTENDED ABSTRACT

Consumers' choices and evaluations are not only affected by the alternatives present in a given choice set, but also by unavailable options (Farquhar et al. 1987; Fitzsimons 2000). A common instantiation of this problem arises in cases of product stockouts where consumers are unable to attain their desired target (Fitzsimons 2000). We refer to such desirable, out-of-stock items as *outside options*. An important question in such contexts is whether or not shoppers shift to substitute shopping and if so, which substitutes they are likely to purchase (Campo, Gijsbrechts, and Nisol 2003; Sloot, Verhoef, and Franses 2005; Breugelmans, Campo, and Gijsbrechts 2006). In the current research we undertake a complementary study of what substitutes consumers choose when their desired target is out-of-stock and how satisfied they are likely to be with their chosen option.

We demonstrate that presence of an outside option (i.e., when a desired item is out-of-stock) increases choice of substitutes that are most similar to the outside option even though it is the dissimilar substitutes that are better liked post-choice and drive greater satisfaction. We explain that consumers desire to acquire similar substitutes

due to their close association with the outside options. However, the negative feelings associated with the failed attempt to obtain the outside option also carryover more to the close substitutes consequently decreasing their liking. This notion is consistent with research showing dissociability of “wanting” and “liking” elements of value (e.g., Winkielman and Berridge 2003; Dai, Brendl, and Ariely 2010; Litt, Khan, and Shiv 2010). For example, Litt et al. (2010) showed that being thwarted from obtaining a desired outcome can increase wanting but decrease liking of that outcome. The current research extends these prior findings by examining demand and liking of substitutes rather than the outside option itself.

In Study 1, participants made a hypothetical choice between a Nikon (N) or a Canon (C) camera. Participants then imagined that a stockout prevented them from buying their chosen camera and chose a substitute camera from three available options: a Canon similar to the original Canon (C'), a Nikon similar to the original Nikon (N'), or an upgraded Canon similar to the original Canon but more expensive (C+). Consistent with our hypothesis that stockouts increase demand for the substitute most similar to the outside option, participants were more likely to choose the similar substitute regardless of whether they initially chose the Canon (62.32%) or the Nikon (70.18%),  $ps < .01$ . Next, participants read a mixed customer review of their substitute camera, and then reported their liking of their chosen substitute in light of this new information. Despite relative choice-shares favoring the similar option, choosing a similar (versus dissimilar) substitute led to less positive attitudes towards the substitute for all participants ( $M_{C \rightarrow C'} = 5.44$ ;  $M_{C \rightarrow N'} = 7.70$ ;  $p < .001$ ) ( $M_{N \rightarrow N'} = 6.05$ ;  $M_{N \rightarrow C'} = 7.42$ ;  $p < .01$ ). Interestingly, even choosing the ostensibly better upgraded substitute (C+) led to more positive attitudes only among those who had originally picked a Nikon (choosers for whom trading up is akin to trading out;  $M_{N \rightarrow N'} = 6.05$ ;  $M_{N \rightarrow C+} = 7.20$ ,  $p = .01$ ) but not those who originally chose a Canon ( $M_{C \rightarrow C'} = 5.44$ ;  $M_{C \rightarrow C+} = 5.62$ ; *ns*).

We explain that consumers' choice and evaluation of substitutes are guided by their emotional reactions to the stockout which makes similar items more attractive by association with the outside option but at the same time reduces liking for them. If disjunctions between demand and liking of substitutes are indeed due to consumers' emotional reactions to stockouts, then disjunctions between demand and liking should be greater for individuals who have stronger affective reactions. Study 2 investigates this hypothesis using real behavior. Participants completed a laborious task to earn e-points with which they could choose products (e.g., a DVD player or a GPS) that they would receive should they win a lottery. After choosing a product, all participants learned that their chosen product (P) was out of stock. Across four conditions, participants were offered a choice between two substitutes, which were either: (1) *Both Similar*: P' and P+, (2) *Both Dissimilar*: Q and Q+, (3) *Mixed-Similarity 1*: P' and Q+, or (4) *Mixed-Similarity 2*: Q and P+. After choosing a substitute, participants evaluated their liking of their chosen substitutes after experiencing a sample of the item (e.g., sample voice directions; a movie clip played from the DVD player). Participants next completed an affect intensity measure (Larsen and Diener 1987). Finally, participants were asked if they would like to keep their chosen substitute or exchange it for a gift card of equivalent value. Consistent with Study 1, participants in both the *Mixed-Similarity* conditions were more likely to choose a similar (vs. dissimilar) substitute (78.4% and 75.7%;  $ps < .01$ ). Despite relative choice-shares favoring the similar option, choosing a dissimilar substitute option led to greater liking in both the *Mixed-Similarity 1* condition ( $M_{P'} = 4.81$ ;  $M_{Q+} = 5.97$ ;  $p < .01$ ) and the *Mixed-Similarity 2* condition ( $M_Q = 6.15$ ;  $M_{P+} = 4.65$ ;  $p < .01$ ). Additional evidence suggesting that dissimilar substitutes are better liked than similar ones comes from participants' choices at the



end of the study – participants in the *Both Similar* condition were more likely to give away the substitute than participants in the *Both Dissimilar* condition (69.73% vs. 47.30%;  $p < .01$ ). Similarly, participants who chose the similar substitute in both *Mixed-Similarity* conditions (79.31%, 66.07%, respectively) were more likely to give away the substitute than participants who chose the dissimilar substitute (50.00%, 33.33%, respectively;  $ps < .05$ ). As predicted, individuals who chose dissimilar substitutes ( $M_{O+}=4.20$ ;  $M_{O-}=4.37$ ) had higher affect intensity than individuals who chose similar substitutes ( $M_{p+}=3.40$ ;  $M_{p-}=3.39$ ;  $ps < .01$ ). Inconsistent with a selection-bias account (which would suggest that individuals who like substitutes less also tend to select similar substitutes), liking of the chosen substitute was lower when choosing between two similar options in the *Both Similar* condition ( $M=4.92$ ) than two dissimilar options in the *Both Dissimilar* condition ( $M=5.71$ ),  $p < .01$ .

Together, these studies demonstrate that outside options resulting from stockouts can increase demand for the most similar substitutes, while decreasing liking of, and satisfaction from, those very same similar options. The findings contribute to the under-researched area of substitute selection and have important implications for demand forecasting, inventory management, customer retention, and customer satisfaction.

### Indecisive Consumers and Opportunity Cost Consideration

#### EXTENDED ABSTRACT

Prior research has revealed that consumers often neglect their opportunity costs (Frederick et al., 2009). However, when individuals do consider their opportunity costs, they are sensitive to the value of their outside options (Spiller 2011). Tightwads, those high in propensity to plan, and those facing immediate resource constraints are more likely than others to consider their opportunity costs (Frederick et al., 2009; Spiller, 2011). Another important, but heretofore neglected individual difference that may be reflected in opportunity cost consideration is indecisiveness. Are indecisive consumers more likely to consider their outside options ad nauseum, unable to decide among their alternatives, or do they consider them to a lesser extent in an attempt to reduce the difficulty of choosing and simplify the decision-making process? We show that a specific dimension of indecisiveness, lackadaisicalness, is associated with lesser opportunity cost consideration and lower sensitivity to the value of outside options even when those outside options are made explicit and salient in the decision frame. We find that other dimensions of indecisiveness are unrelated with these behaviors.

Prior research has identified three types of indecisive individuals using the Decision Behaviors Inventory (DBI): 1) *Neurotic*, characterized by difficulty choosing when presented with a variety of different options; 2) *Perfectionistic*, characterized by excessive information-seeking before choosing; and 3) *Lackadaisical*, characterized by a lack of concern with advanced preparation (Barkley-Levenson and Fox 2014). Although these indecisive individuals have been shown to take longer to make decisions, less is known about how or why these individuals make particular choices. This research aims to further this knowledge by exploring how one important component of decision-making relates to indecisiveness.

Study 1 examines the extent that individuals exhibiting different types of indecisiveness consider opportunity costs. In a “Daily Shopping Task,” 100 participants were asked to make a series of 16 choices to buy or not buy \$5 gift cards over a series of four “weeks” (one opportunity to buy a \$5 gift card per “day” at a cost of 2 cents, with 4 days per week, all in one sitting). Participants had the opportunity to view the gift cards being offered in the next three days before making their choice by clicking on black boxes representing these gift cards. Because participants had a limited weekly budget (2 cents), the gift cards available in the future were potential opportunity costs. The number of times participants looked ahead at future gift cards was our measure of opportunity cost consideration. After completing the task, participants completed the DBI. Looking ahead at future options was negatively associated with lackadaisical indecisiveness ( $p < .05$ ), but neither neurotic nor perfectionist indecisiveness.

Study 2 examined how sensitive indecisive individuals are to the value of their outside options when they are highly salient. 100 participants completed a similar procedure as Study 1. However, participants were randomly assigned to a condition in which the next three gift cards were always displayed (Known) or never displayed (Unknown). Participants in the Known condition were more sensitive to the value of their upcoming options than were participants in the Unknown condition ( $p < .05$ ). In other words, participants in the Known condition were less likely to buy the current option if their future options were very attractive (operationalized by aggregate choice share) than if they were unattractive, whereas those in the Unknown condition were not. More importantly, this interacted with lackadaisical indecisiveness ( $p < .05$ ), but neither neurotic nor perfectionist indecisiveness. In the Known condition (but not the Unknown condition), sensitivity to the value of salient upcoming options decreased as lackadaisical indecisiveness increased.

Study 3 aimed to replicate the findings of Study 2 using a different paradigm and rule out the counter-explanation that lackadaisical indecisiveness is merely picking up a correlated construct. 300 participants read a scenario about a sale on their favorite DVD and decided whether to buy it or not (Frederick et al., 2009). Participants were randomly assigned to one of three conditions, in which the decision was framed as an “opportunity” (e.g., do you want to buy this DVD or not?), a “choice” (e.g., after considering what else you would buy with this money, do you want to buy this DVD or the other option you considered?), or a “mixed” condition (e.g., after considering what else you would buy with this money, do you want to buy this DVD or not?) (Jones et al., 1998). Participants generated an alternative use for their money (outside option) before their decision in the “choice” and “mixed” condition and after their decision in the “opportunity” condition. Participants reported their attitude towards the outside option and the DVD (each on three semantic-differential scales: good/bad, favorable/unfavorable, and satisfactory/unsatisfactory) and completed the DBI, Elaboration on Potential Outcome Scale (Nenkov, Inman, and Hulland 2008), and Maximization Inventory (Turner et al. 2012). We found a lackadaisical x outside option evaluation interaction on purchase behavior ( $p < .01$ ). Low lackadaisical individuals were sensitive to the evaluation of the alternative, such that their likelihood of buying the DVD decreased as their evaluation of the outside option increased, whereas high lackadaisical individuals were insensitive to the evaluation of the alternative. This pattern was unique to lackadaisical indecisiveness and was found with neither perfectionist nor neurotic indecisiveness. This effect held even when the EPO and Maximizing Inventory subscale were included in the model and was not significantly affected by how the decision was framed (opportunity, choice, or mixed).

Study 4 replicated these findings with the addition of the Propensity to Plan scale (short-term for time and money) (Lynch et al., 2010). We found the same interaction and corresponding simple effects from Study 3 ( $p < .06$ ). Additionally, this effect still holds when the Propensity to Plan scales are included in the model.

This research contributes both to the literature on opportunity cost consideration and indecisiveness by 1) revealing systematic individual differences in opportunity cost consideration and in sensitivity to the value of outside options, and also by 2) furthering our understanding of the decision-making processes of lackadaisical indecisive individuals.

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# Scarcity, Poverty, and their Implications for Consumers' Cognitions, Judgment and Behavior

Chairs: Caroline Roux, Concordia University, Canada  
Kelly Goldsmith, Northwestern University, USA

## Paper #1: Thinking About Scarcity

Anuj K. Shah, University of Chicago, USA  
Eldar Shafir, Princeton University, USA  
Sendhil Mullainathan, Harvard University, USA

## Paper #2: When Those Who Have the Least Spend the Most: Understanding the Relationship Between Resource Scarcity, Socioeconomic Status and Materialism

Caroline Roux, Concordia University, Canada  
Kelly Goldsmith, Northwestern University, USA  
Sean Blair, Northwestern University, USA  
Jung Kyun Kim, Northwestern University, USA

## Paper #3: Spending on Girls in Economic Recessions

Kristina Durante, University of Texas, San Antonio, USA  
Vladas Griskevicius, University of Minnesota, USA  
Joseph Redden, University of Minnesota, USA  
Andrew Edward White, Arizona State University, USA

## Paper #4: The Effectiveness of Reciprocity Appeals in Economic Booms and Busts

Andrew Edward White, Arizona State University, USA  
Andrea C. Morales, Arizona State University, USA  
Douglas T. Kenrick, Arizona State University, USA

## SESSION OVERVIEW

Resource scarcity is a pervasive facet of human life. Despite increasing interest in this research topic, many open questions remain regarding the consequences of scarcity on consumers' cognitions and behavior. For example, how are consumers' cognitive processes shaped by the experience of resource scarcity? Moreover, the influence scarcity exerts on materialistic tendencies and reciprocal relationships still remain vastly unexplored. This session addresses this gap by providing new insights into how different cues of scarcity—both naturally occurring and experimentally primed— influence consumers' cognitions and behaviors.

The first paper, by **Shah, Shafir and Mullainathan**, investigates how living in a chronic state of scarcity (e.g., poverty) impacts the content of consumers' cognitions. The authors suggest that when faced with chronic resource scarcity, the resource that is scarce (e.g., money) becomes the main focus of people's cognitions. In support of this, the authors demonstrate that lower-income consumers are more likely to falsely recall hearing the word "money," have more difficulty suppressing thoughts related to costs, and are faster to identify stimuli that have been associated with money than higher-income consumers.

Having demonstrated that scarcity shapes consumers' cognitions, interesting questions arise regarding how these thoughts affect their judgment and behavior, such as their materialistic tendencies. The second paper, by **Roux, Goldsmith, Blair and Kim**, addresses this by examining whether consumers from lower socioeconomic (SES) backgrounds are more prone to materialism. Two experiments reveal that lower-SES consumers express more materialistic tendencies only when confronted with reminders of resource scarcity. The authors provide two additional experiments demonstrating evidence of the underlying psychological mechanism.

Resource scarcity-related cognitions may also have consequential implications for how consumers choose to behave in reciprocal relationships with others, which the final two papers address. In the third paper, **White, Morales and Kenrick** propose that, under resource-scarce conditions (e.g., economic recession), consumers increasingly engage in and rely upon reciprocal relationships, because such relationships confer adaptive advantages (e.g., decrease variability in resource acquisition). They provide support for this prediction in four experiments in addition to revealing important boundary conditions (e.g., the trustworthiness of the reciprocal partner).

Finally, the fourth paper, by **Durante, Griskevicius, Redden and White**, draws from evolutionary biology to study the reciprocal nature of parent-child relationships. The authors suggest that because male children have a higher likelihood of reproductive failure (i.e., producing zero offspring) than female children, parents will direct their financial resources differentially toward female children (and away from male children) when financial resources are scarce, in an effort to gain the best reproductive return on parental investment. Five experiments provide support for the predicted effect in addition to revealing theoretically relevant moderators (e.g., if the child has reached reproductive age).

Taken together, this session offers a coherent set of innovative perspectives that enhance the breath of our knowledge in the growing area of research on the implications of resource scarcity on judgment and decision making. We expect this session to appeal to a broad audience, including researchers interested in resource scarcity, poverty, cognitive processing, materialism, reciprocity, and evolutionary psychology.

## Thinking About Scarcity

### EXTENDED ABSTRACT

Recent research has revealed how conditions of scarcity—being short on money, time, or other resources—can directly influence cognition and behavior. Notably, this work has found that scarcity often reduces mental bandwidth (Mani, Mullainathan, Shafir, and Zhao, 2013; Spears, 2011), increases stress (Chemin, De Last, and Haushofer, 2013), constrains attention, and hurts decision making (Shah, Mullainathan, and Shafir, 2012). Meanwhile, other research has considered the ways that the scarcity mindset improves decision making (Shah, Shafir, Mullainathan, 2014; Spiller, 2011). That is, existing work focuses on how scarcity increases or decreases our cognitive capacities. But relatively little work has been done to study the broader texture of everyday thinking under conditions of scarcity. How does scarcity qualitatively alter the landscape of cognition?

In this line of research, we suggest that thoughts about a scarce resource tint even the most mundane activities. As a result, the scarce resource becomes top-of-mind. Scarcity reshapes how we organize concepts, it makes certain thoughts difficult to suppress, and it naturally grabs our attention. We explore these hypotheses with quasi-experimental designs where we examine how income variation (i.e., monetary scarcity and abundance) interacts with other factors to reshape cognition.

In Study 1a ( $N=125$ ), we find that scarcity can make apparently unrelated items seem much more related simply because they all

place a demand on a limited budget. For example, things such as “groceries,” “utilities,” “phones,” and “bills” may not seem like they share strong semantic connections. But we expected that lower-income individuals would see a common link between these concepts: They all require money.

To test this, we adapted a classic paradigm that assesses the semantic relatedness of concepts (Roediger and McDermott, 1995). In this paradigm, participants are shown a list of words (e.g., uncle, woman, doctor, beard) which are strongly related to a target word (e.g., man). The target word, however, is not included in the list of studied words. Participants are then asked to recall as many of the words as they can. A strikingly high number of people usually recall hearing the word “man” even though they had not. This happens because the studied words are all semantically related to the target, making it highly accessible.

In our study, participants studied a control word list (such as words related to “man”) and scarcity-related word list (such as the list described above for “money”). For the first list, we found that lower-income and higher-income individuals had equal false recall rates for the target word (“man”: 18% vs. 16%). However, in the second list, lower-income individuals were significantly more likely to recall hearing the target word (“money”: 15% vs. 2%). In Study 1b, we replicate these results on a larger sample ( $N = 478$ ). These results suggest that scarcity adds a tinge to even the most mundane thoughts or objects. Items that place a demand on a budget will start to feel more related when that budget is limited.

Because scarcity tints so many experiences, it might be difficult to suppress recurring thoughts of limited resources. That is, scarcity might capture the mind even as it tries to wander elsewhere. In Study 2 ( $N = 437$ ), we adapted Wegner et al.’s (1987) “white bear” study. We asked participants to let their mind wander freely for three minutes. Some participants were asked to avoid thinking about how much they drive each month. Other participants were asked to avoid thinking about how much their monthly driving *costs* them. We recorded the number of times that participants’ thoughts strayed to the topics that they were supposed to be suppressing. We found that lower-income individuals had a more difficult time suppressing thoughts about the *cost* of driving, whereas higher-income individuals did not.

If scarcity is top-of-mind and difficult to suppress, then it seems natural that we will automatically orient our attention to the limited resource. In Study 3 ( $N = 94$ ), we tested this hypothesis using a dot-probe task. Each trial of the task began with two words presented on either side of a fixation cross. On each trial, one of the words was money-related (e.g., “cash”) and the other word was not money-related, but was matched for length and pronounceability (e.g., “cane”; Shapiro & Burchell, 2012). The words then disappeared and a dot appeared where one of the words had been. Participants had to quickly indicate which side of the screen the dot appeared. We found that lower-income individuals were faster to identify the dot when it appeared on the same side as the money-related word, suggesting that monetary scarcity naturally orients attention toward money-related concepts.

Together, these results begin to paint a broader picture of how scarcity affects cognition. Instead of focusing on how scarcity affects cognitive capacity, these studies delve into the ways that scarcity changes the content of cognition.

## When Those Who Have the Least Spend the Most: Understanding the Relationship Between Resource Scarcity, Socioeconomic Status and Materialism

### EXTENDED ABSTRACT

*“Maybe someday I’ll be able to afford an iPhone like the person in front of me at the grocery store. The one paying with FOOD STAMPS!”*

This remark was widely circulated on social media, generating long strings of indignant reactions regarding the inappropriateness of low-income consumers engaging in conspicuous consumption (Whitmer 2012). It illustrates the extent to which consumers can become upset, or even enraged, when they observe people who live in poverty spending their limited financial resources on unnecessary luxuries (Schechter 2011). However, to date, little academic research has directly examined if or when individuals of lower socioeconomic status (SES) might be prone to materialism.

In the current research, we argue that materialism among lower-SES consumers may represent an attempt to cope with resource scarcity. This proposition is based on the idea that by limiting one’s ability to interact effectively with the environment, resource scarcity undermines consumers’ perception of control. Building on past work showing that materialism helps consumers cope with uncertainty and self-doubt (Chang and Arkin 2002), we predict that consumers will likewise use materialism to cope with low perceived control stemming from resource scarcity. However, because lower-SES (vs. higher-SES) consumers already have limited means available, reminders of scarcity are likely to threaten perceived control to an even greater extent for these individuals. Consequently, we predict that the tendency for scarcity to engender materialism will be stronger for lower-SES (vs. higher-SES) consumers. Indeed, the idea that SES will moderate consumer response to scarcity is consistent with recent findings in the domain of evolutionary psychology, which has shown that SES moderates other scarcity responses such as impulsivity, self-control, and risk taking (Griskevicius et al. 2013). In sum, our theorizing suggests that materialism may not be a chronic tendency of lower-SES consumers. Rather, it may be a coping mechanism employed only when reminders of scarcity threaten their perception of control.

The goal of the first two studies is to demonstrate our proposed interaction between scarcity, SES and materialism. In study 1 ( $N=138$ ), following Roux, Goldsmith and Bonezzi (2014), scarcity was primed by asking participants to list things they could not do without certain resources (e.g., water). Participants in the control condition were asked to list things that they could do with the same resources. Next, all participants completed the Envy sub-scale of Belk’s (1985) Materialism Scale. Finally, all participants completed a six-item subjective SES measure (Griskevicius et al. 2013), which is also used in all subsequent studies, along with other demographic questions. In line with our prediction, we found a significant interaction between the scarcity prime and SES ( $p=.05$ ). Lower-SES participants became more materialistic, expressing greater envy of other people’s material possessions, when exposed to reminders of scarcity (vs. control;  $p=.02$ ). Reminders of resource scarcity had no effect on higher-SES participants ( $p>.6$ ). Further, no main effects emerged.

In study 2 ( $N=105$ ) we examined another indicator of materialism, by testing how reminders of resource scarcity and SES affect one’s belief that happiness can be achieved through material possessions. Participants in the scarcity-prime condition were asked

to recall times when they felt resources were scarce, whereas those assigned to the control condition were asked to list activities they did in the past week (Roux et al. 2014). Next, all participants completed the Happiness sub-scale of Richins' (2004) Material Values Scale. We again found a significant interaction between the scarcity prime and SES ( $p=.01$ ). Specifically, lower-SES participants were more likely to indicate that happiness can be attained through material possessions after being exposed to reminders of scarcity (vs. control;  $p=.01$ ), whereas reminders of resource scarcity had no effect on people from high-SES backgrounds ( $p>.3$ ).

Having demonstrated support for our prediction that lower-SES consumers' materialistic tendencies are moderated by their exposure to reminders of resource scarcity, we next conducted a series of studies to provide a deeper understanding of the psychological processes underlying these effects. Study 3 ( $N=71$ ) examined if the effect of SES on one's desire for control was moderated by whether or not reminders of resource scarcity were present. Participants first completed the scarcity manipulation used in study 1. Next, all participants completed a measure assessing their desire for control (Cutright 2012). In line with our predictions, results revealed a significant interaction between the scarcity prime and SES ( $p=.04$ ). Lower-SES participants expressed a greater desire for control when exposed to reminders of scarcity (vs. control;  $p=.04$ ), whereas reminders of scarcity had no effect on higher-SES participants ( $p>.4$ ).

The final study used a different operationalization of perception of control, in order to provide convergence on our theory. Prior work has shown that being in a promotion focus tends to foster an illusion of control, or an overestimation of one's control over an outcome (Langens 2007). Study 4 ( $N=115$ ) thus tested whether the effect of SES on one's regulatory orientation was moderated by whether or not reminders of resource scarcity were present. Participants first completed the scarcity manipulation task used in study 2. Next, participants' regulatory orientation was assessed using the Regulatory Focus Questionnaire (Higgins et al. 2001). Results revealed a significant interaction between the scarcity prime and SES ( $p=.02$ ). Lower-SES individuals became more promotion-focused when exposed to reminders of scarcity (vs. control;  $p=.03$ ), whereas reminders of scarcity had no such effect on higher-SES individuals ( $p>.2$ ). These findings were replicated in an additional study conducted on participants drawn from a different pool.

In summary, although media reports may lead one to presume lower-SES individuals chronically desire materialistic luxuries beyond their means, our research suggests that lower-SES consumers may only become more materialistic when faced with reminders of resource scarcity. Further, our findings suggest that this shift in materialism may occur because lower-SES consumers experience an increased desire to regain control and take action in the face of a scarcity threat. Although further research is necessary to fully understand the boundaries of these effects, this research provides an important first step towards understanding the relationship between poverty, scarcity and materialism, and suggests important public policy implications.

## Spending on Girls in Economic Recessions

### EXTENDED ABSTRACT

Imagine you have two children – one boy and one girl. Which child would you favor? Deciding which child to favor is undoubtedly difficult. Yet favoring a child of one gender over the other is common practice in many cultures and across many species. We draw on theory in evolutionary biology to test the prediction that poor

economic conditions should lead people to bias investment toward a daughter vs. a son.

We build on the idea that spending on children can be viewed as an investment (Becker 1991), but instead consider investment from an evolutionary perspective. A central prediction from an evolutionary model is that investment patterns in offspring should differ depending on the offspring's *reproductive value*, which is the child's ability to convert parental resources into reproductive success by having children of their own (Daly and Wilson 1988).

Theory in evolutionary biology suggests that parents should invest more in one gender over the other depending on whether resource availability is currently good or bad (Trivers and Willard 1973). The logic for this idea stems from mammalian sex differences in reproduction. Males and females are expected to produce the same number of offspring on average, but males and females have different reproductive *variances*. Females have lower variance than males (Clutton-Brock and Albon 1982; Leimar 1996). The maximum number of children a female can produce is smaller but most females produce a moderate number of offspring. By contrast, the maximum number of children that a male can produce is larger and primarily limited by the number of mates he can attract. A consequence of the sex difference in reproductive variance is that male children have been more likely than female children to produce zero offspring over evolutionary history.

Based on this logic, we propose that poor economic conditions should alter which gender provides the best reproductive return on parental investment. Poor economic conditions decrease the average number of offspring produced for both males and females. However, the sex difference in reproductive variance means that poor economic conditions will have a catastrophic consequence for many male offspring. But, most female offspring will continue to produce at least one child. Thus, we predict that poor economic conditions will lead people to prioritize spending on girls rather than boys. We tested this hypothesis in five studies.

A correlational study examined how fluctuations in U.S. GDP over the last three decades were related to retail spending on boys' versus girls' apparel. Findings revealed that GDP had a strong negative correlation with relative spending on girls versus boys ( $p < .001$ ).

Experiment 1 manipulated cues to economic condition. Participants first viewed a slideshow depicting an economic upswing or an economic recession. Participants then imagined they had two children (a boy and a girl) and answered questions about how they would divide their assets between their son or daughter in a will. Consistent with predictions, economic recessions led people to bequeath more assets to daughters than to sons ( $p<.01$ ).

Experiment 2 sought to replicate E1 using a different manipulation of economic condition: news articles. E2 also examined preferences for spending money on several types of child expenditures. The study also sought to rule out alternative explanations based on general affect rather than economic conditions. Replicating E1, participants bequeathed more to a girl in the economic recession condition compared to the economic upswing condition, a negative affect control condition, and a neutral control condition ( $ps < .05$ ). Participants also indicated they would spend more money on a girl in the economic recession condition compared to the economic upswing condition, a negative affect control condition, and a neutral control condition ( $ps < .08$ ).

The previous studies demonstrated that poor economic conditions lead people to allocate more resources to girls. We have proposed that this effect emerges because of changes in the relative reproductive value of each gender. Poor economic conditions should

make females a safer reproductive investment than males because many males will not reproduce in difficult times. We would expect that the effects of economic conditions would grow stronger as children near reproductive age. Thus, we examined how poor conditions influenced bequeathing assets to a girl versus a boy as a function of the age of both children (6 months old vs. 15 years old).

Experiment 3 had a 2 (Economic Condition; between-subject) X 2 (Children's Age; within-subject) design. Participants viewed the slideshows from E1 and indicated how they would divide assets in a will. Consistent with our prediction, participants bequeathed more assets to a girl in the economic recession condition when the children were 15 years old ( $p < .03$ ). Participants were more likely to bequeath assets to a 15 year old girl (rather than boy) than to an infant girl (rather than boy;  $p < .02$ ).

Experiment 4 aimed to examine the psychological mechanism. Because investing in girls is akin to investing in the sure thing or odds-on favorite, investment in girls over boys represents choosing a safe reproductive outcome rather than gambling on a riskier long shot. This suggests that risk aversion may underlie our effects. Thus, we hypothesized that the predicted effect should be stronger for individuals who are more risk averse. E4 used the same manipulation as in E2 and participants indicated how they would divide their assets in a will. To assess risk aversion, participants made a series of choices between receiving a certain monetary reward or a 50% chance of getting a larger monetary reward. Participants allocated more resources to girls in the economic recession condition ( $p < .01$ ). Importantly, there was an interaction between economic condition and individual differences in risk aversion ( $p < .01$ ). At +1 SD in risk aversion, recessions led people to bequeath more assets to girls compared to the upswing condition ( $p < .01$ ). There was no effect of economic condition on bequeathing assets to a girl at -1 SD ( $p > .34$ ).

We found that as economic conditions worsened, people chose to invest in daughters over sons. This research contributes to the literature by revealing how, why, and when resource scarcity influences spending on girls versus boys.

## The Effectiveness of Reciprocity Appeals in Economic Booms and Busts

### EXTENDED ABSTRACT

Reciprocity, the rule that obliges us to repay others for what we have received from them, has been observed in every human society and is one of the strongest and most pervasive social forces (Gouldner 1960; Cialdini, 1993). Why is reciprocity so prevalent, and so powerful? According to anthropological field studies of food sharing, reciprocity likely arose to help people survive in resource scarce conditions. When resources are limited, an individual or family may be unable to obtain enough resources to survive; forming reciprocal exchange relationships can be an effective means of reducing the risk of running out of food. Indeed, researchers adopting an evolutionary perspective have proposed that reciprocity norms confer several adaptive advantages in resource-scarce environments: they serve to reduce or manage variability in resource acquisition, provide stability within social systems, reinforce altruistic acts, and discourage exploitation in relationships (Gouldner 1960; Wilson and Sober 1994). Building on this research, we posit that under resource-scarce conditions, people increasingly engage in and rely upon reciprocal relationships. In a series of lab and field studies, we test the link between resource scarcity and reciprocity, and explore the processes that mediate and moderate it.

Study 1 examined the relationship between chronic concerns about resource scarcity (socioeconomic status; SES) and reciprocity.

Those in the reciprocity condition received a small monetary reward and were then asked to volunteer to fill out extra survey questions. Those in the no reciprocity condition were asked to fill out the extra questions before receiving the reward. The outcome—number of extra survey questions completed—was the measure of reciprocity. Results showed a main effect of reciprocity and a reciprocity X SES interaction,  $p < .001$ . Low SES participants responded more strongly to the reciprocity appeal (Mno reciprocity = 5.5 vs. Mreciprocity = 9.7) than high SES participants (Mno reciprocity = 5.7 vs. Mreciprocity = 7.3).

Study 2 experimentally manipulated concerns about resource scarcity and utilized a field setting where students did not know they were part of a study. Eight thousand undergraduates were emailed a request to complete a voluntary survey about their university's admission process in a 2 (resource scarcity vs. control) X 2 (reciprocity vs. no reciprocity) between-subjects design. The reciprocity message emphasized the university's previous efforts to improve the application process, whereas the control message did not. The resource scarcity manipulation simply added a half sentence referencing "today's tough economic times" that was not included in the control. Each email ended with a survey link and the number of people completing the survey was the behavioral measure of compliance. Results indicated a main effect of reciprocity and a marginally significant resource scarcity X reciprocity interaction ( $p = .09$ ). Students in the resource scarcity condition responded more strongly to the reciprocity appeal (reciprocity = 594 vs. no reciprocity = 447,  $p < .001$ ) than those in the control condition (reciprocity = 531 vs. no reciprocity = 450,  $p < .003$ ).

Study 3 tested gratitude as a potential mediator of the relationship between resource scarcity and reciprocity. Participants read a story that manipulated resource scarcity and then read a reciprocity scenario. In the reciprocity condition, participants read about being enrolled in a special valued customer program at their local department store. In the no reciprocity condition, participants read about going to their local department store. Participants also indicated how grateful and appreciative they felt. The dependent variable measured participants' willingness to buy an expensive product from the store. Analyses showed a resource scarcity X reciprocity interaction for both gratitude and willingness to buy the expensive product,  $ps < .001$ . The effect of reciprocity was exacerbated in the resource scarcity condition: people receiving the reciprocity benefit felt even more grateful and were even more willing to buy the expensive product. Further, gratitude mediated the relationship between resource scarcity and reciprocation, CI (.004, .41),  $\beta = .12$ , SE = .10.

Studies 4 established a boundary condition for the observed relationship between resource scarcity and reciprocation. From a functional perspective, reciprocity is beneficial to the extent that it helps establish or maintain a trusting, exchange relationship. If trust does not exist, however, attempting to enter into a reciprocal relationship may actually be dangerous—an untrustworthy relationship partner could take advantage of you, and this would be especially costly during periods of resource scarcity. Given this possibility, we hypothesize that those concerned with resource scarcity should be particularly wary of cues suggesting untrustworthiness. Study 4 tested this prediction using a 2 (resource scarcity vs. control) X 2 (reciprocity vs. no reciprocity) X 2 (persuasion knowledge active vs. not) between-subjects design. Study 4 used the same manipulation of resource scarcity as Study 3. Afterwards half of the participants read a persuasion knowledge induction describing manipulative marketing tactics (Morales 2005). All participants then read a consumer scenario in which they received an invitation

to a sales event. Half the participants read that the invitation came with a free gift (reciprocity condition). The DV was a composite of participants' reported likelihood of going to the sales event and likelihood of buying something at the sales event ( $r = .73$ ). Results revealed a significant three-way resource scarcity X reciprocity X persuasion knowledge interaction,  $p = .005$ . When persuasion knowledge was not activated, results replicated previous studies. However, when persuasion knowledge was activated, a different pattern of results emerged. While there was an effect of reciprocity in the control condition,  $p < .001$ , in the resource scarcity condition, the effect of reciprocity was significantly reduced,  $p = .031$ . In fact, for those in the combined resource scarcity and persuasion knowledge conditions, there was no difference between the reciprocity and no reciprocity conditions ( $p = .38$ )—indicating an instance when reciprocity is ineffective.

Overall, these findings demonstrate when and for whom reciprocity appeals are most effective. Moreover, they highlight the usefulness of considering reciprocity from a functional evolutionary perspective and show support for a behavior strategy we characterize as strategic interdependence.

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# New Directions in Hedonic Adaptation for Consumer Well-Being

Chair: Kelly Kiyeeon Lee, Washington University in St. Louis, USA

## **Paper #1: Love it Longer: Sentimental Value Slows Hedonic Adaptation**

Yang Yang, Carnegie Mellon University, USA

Jeff Galak, Carnegie Mellon University, USA

## **Paper #2: Jimmy Choo vs. Nike: Experienced Adaptation for Hedonic vs. Utilitarian Products**

Kelly Kiyeeon Lee, Washington University in St. Louis, USA

Cynthia E. Cryder, Washington University in St. Louis, USA

Stephen M. Nowlis, Washington University in St. Louis, USA

## **Paper #3: Favorites Fall Faster: Greater Liking leads to Greater Satiation**

Alexander DePaoli, Stanford University, USA

Uzma Khan, Stanford University, USA

## **Paper #4: When it Could Have Been Worse, it Gets Better? The Effect of Uncertainty on Hedonic Adaptation**

Yang Yang, Carnegie Mellon University, USA

Yangjie Gu, Tilburg University, Netherlands

Jeff Galak, Carnegie Mellon University, USA

### **SESSION OVERVIEW**

Consumers adapt to hedonic experiences, making positive experiences less enjoyable over time (Frederick and Loewenstein 1999). This adaptation occurs in a variety of contexts such as winning the lottery (Brickman, Coates, and Janoff-Bulman 1978), eating one's favorite ice cream (Kahneman and Snell 1990), listening to a well-liked song repeatedly (Galak, Kruger, and Loewenstein 2013), and receiving a salary raise (Frey and Stutzer 2002). Despite the prevalence of hedonic adaptation, consumers are poor at predicting how various hedonic experiences will make them happy over time (Kahneman 1999; Kahneman and Snell 1990), which can lead consumers to choose products that make them less happy over products that make them happier. This symposium focuses on investigating what product purchases or experiences can improve consumer happiness or well-being in the face of adaptation.

The first paper by *Yang and Galak* proposes sentimental value as a new component of the happiness that consumers derive from products in addition to feature-related utility. It shows that consumers adapt more slowly to products that have high sentimental value because the sentiment acts as a buffer against the decrement in feature-related utility on hedonic adaptation. These results point out that increasing the sentimental value of products can prolong consumer happiness.

The second paper by *Lee, Cryder, and Nowlis* demonstrates that consumers adapt less to utilitarian than hedonic products. This reduced adaptation to utilitarian products (vs. hedonic products) leads consumers to be more satisfied in the long run with their utilitarian spending. These findings suggest that simply emphasizing utilitarian or functional benefits of products may reduce hedonic adaptation and make consumers happier with their purchases.

The third paper by *DePaoli and Khan* shows that consumers adapt slower to products that they initially like less than products that they initially like more. Further, the paper demonstrates a boundary condition for this effect. Because liking is an affective response to products, when features or products are framed as practical, the effect no longer exists. These results imply that choosing products or experiences that are liked (but not choosing the very favorite) could lengthen consumer enjoyment.

The fourth paper by *Yang, Gu, and Galak* demonstrates that when consumers are unsure whether the sequence of consumption experiences will be uniformly positive or not, they tend to adapt to the sequence of experiences more slowly than when they are aware that the sequence will be uniformly positive. This effect applies only to happiness with acquisition, not happiness with consumption. These findings suggest that making consumers' upcoming experiences unpredictable can slow hedonic adaptation to the experiences.

Taken together, four papers in this special session demonstrate the recent advances in hedonic adaptation, while also offering new perspectives on improving consumer well-being. As such, we expect this special session to appeal a wide audience who is interested in hedonic adaptation and/or consumer well-being.

## **Love it Longer: Sentimental Value Slows Hedonic Adaptation**

### **EXTENDED ABSTRACT**

One of the ultimate goals that consumers pursue is to maximize their happiness (Russell 2012). Although any improvement in acquisition and consumption may increase the level of happiness, the increased happiness may not persist. One reason for this is hedonic adaptation, defined as a decrease in hedonic response to a stimulus over time (Frederick and Loewenstein 1999; Helson 1964).

An important question posed to consumer researchers is – how can we slow unwanted hedonic adaptation? Recent research has greatly advanced our understanding of hedonic adaptation by examining how product or experience features influence hedonic adaptation (Bar-Anan, Wilson, and Gilbert 2009; Carter and Gilovich 2010, 2012; Galak, Kruger, and Loewenstein 2013; Kurtz, Wilson, and Gilbert 2007; Nelson and Meyvis 2008; Nicolao, Irwin, and Goodman 2009; Redden 2008; Temple et al. 2008; Van Boven and Gilovich 2003; Wilson et al. 2005).

All of this work, however, makes the assumption that the sole inputs to hedonic adaptation are the product features. We suggest, instead, that the happiness a consumer derives from a product is a function of at least two components: feature-related utility and sentimental value. We define sentimental value as the value derived from the associations with a person or an entity or from the associations with an event or time in one's life. For example, a product can have sentimental value because it was received as a gift from a person one loves, or because it is a token that represents a particular life event (e.g., a souvenir from a vacation).

In four studies, we demonstrate that sentimental value slows hedonic adaptation and examine the process underlying the effect. Study 1 is an initial demonstration of the slowing effect of sentimental value on adaptation. Participants listed either all gifts they received or all purchases they made during a Christmas holiday season, and indicated happiness with each item across two time periods, shortly after acquisition and 45 days later. We found that gifts were more sentimentally valuable than their purchased counterparts, and consumers adapted to gifts more slowly than to purchases.

In Study 2, we controlled for the item in question and experimentally manipulated the sentimental value of items in the lab. Study 2 consisted of three parts spaced approximately 9 months apart. During the first part, in thanks for completing a short task, participants received a gift either from the experimenter (i.e., the low-sentimental value condition) or from their romantic partner (i.e.,



## Jimmy Choo vs. Nike: Experienced Adaptation for Hedonic vs. Utilitarian Products

### EXTENDED ABSTRACT

Humans are highly sensitive to changes in their environment, but over time, tend to adapt. Events such as romantic breakups can be experienced intensely at first, but diminish in influence more quickly than anticipated (Gilbert et al. 1998). At a perceptual level, initial changes in brightness or temperature are quite noticeable, yet can become a new normal as adaptive processes kick in. Such adaptation has been theorized to be advantageous from the perspective that if negative events persist, they are likely unchangeable and therefore are unworthy of additional attention or effort. Similarly, if positive events persist, they are unlikely to disappear and thus energy may be better directed towards new opportunities (Frederick and Loewenstein 1999). The pervasive tendency for humans to become less affected by changing circumstances has led scholars to conclude that adaptation to “new products and changing circumstances is a ubiquitous feature of human psychology” (Wang, Novemsky, and Dhar 2009).

In this paper, we investigate whether adaptation is indeed a ubiquitous feature of unvarying circumstances or whether such adaptation is relegated to particular contexts. Specifically, in the domain of consumer experience, we test whether consumers adapt uniformly to hedonic and utilitarian products. According to Sheldon and Lyubomirsky (2012), happiness coming from positive changes abates with time due to the transitory nature of intense emotions. We therefore suggest that because hedonic products are more emotionally infused, they are likely to prompt intense emotional reactions such as excitement at the time of purchase. However, this powerful emotional response is unlikely to last. Utilitarian products, in contrast, are less likely to be purchased for affective reasons, and instead have justifications that are more enduring. We propose, therefore, that because consumers have greater emotional reactions when purchasing hedonic products, consumers will exhibit a steeper rate of adaptation to hedonic relative to utilitarian products.

In Study 1, participants were asked to indicate their attitudes toward an MP3 player (hedonic product) or a printer (utilitarian product) that they bought, rating their attitudes both *prior to the purchase* (pre-attitude) and *at the time of completing the survey* (post-attitude). Participants showed a greater decline in attitudes over time with MP3 players ( $M_{\text{pre-attitude}} = 5.87$  vs.  $M_{\text{post-attitude}} = 4.46$ ;  $F(1, 67) = 46.81$ ,  $p < .001$ ) than with printers ( $M_{\text{pre-attitude}} = 5.12$  vs.  $M_{\text{post-attitude}} = 4.34$ ;  $F(1, 71) = 16.98$ ,  $p < .001$ ). Consistent with our prediction, consumers exhibited greater adaptation to hedonic than to utilitarian products.

In Study 2, we examined consumers' lay beliefs about adaptation to hedonic versus utilitarian products. Participants were asked to *predict* their attitudes toward a particular product both *prior to their purchase* (pre-attitude) and *6 months after their purchase* (post-attitude). For hedonic products, MP3 players (males) and fun dress shoes (females) were used whereas for utilitarian products, printers (males) and practical shoes (females) were used. Results showed that participants predicted the same rate of decrease in attitudes from pre-purchase to post-purchase for both hedonic and utilitarian products ( $F < 1$ ,  $p = .36$ ). This finding suggests that consumers do not predict differential adaptation rates for hedonic and utilitarian products.

The purpose of Study 3 was to investigate how hedonic adaptation influences consumers' regret from their purchases. Participants were asked to indicate their pre-attitudes and post-attitudes toward both a hedonic and a utilitarian product. In this study, we used a new operationalization of hedonic versus utilitarian items by manipulating price levels within the same product category: expensive shoes

the high-sentimental value condition). Specifically, participants in the low-sentimental value condition were told: “Thank you for your participation. You also get a reward.” Each male participant was then given a calendar toy and each female participant was given a man-made grass toy. In contrast, participants in the high-sentimental value condition were told: “Thank you for your participation. You also get an opportunity to choose between two gifts.” The gifts were placed inside opaque boxes labeled “for myself” and “for my partner” and participants could not see inside the boxes. To ensure that participants in both conditions received the same item, male participants in the high-sentimental value condition always had the calendar toy in the box labeled “for myself” and the grass toy in the box labeled “for my partner,” and female participants had the opposite. In this way, when both participants chose to have their partners receive the gift, men would always receive the calendar toy and women would always receive the grass toy, just like participants in the low-sentimental value condition. Next, if both participants chose to give the gift to their partner, the experimenter asked them to both, simultaneously, walk to the middle of the room to exchange gifts. Twenty-six out of 28 couples who were in the high-sentimental value condition, chose to give the gift to their partner. Finally, participants indicated their happiness with the gift across three time periods, shortly after acquisition, 3 months after acquisition, and 9 months after acquisition. Results showed that gifts received from participants' partners had a higher sentimental value than gifts received from the experimenter. Participants adapted to gifts received from their partners more slowly than to gifts received from the experimenter. Also, participants demanded a higher selling price for the gifts from their partners than for the rewards from the experimenter.

Study 3 examined whether objects with high sentimental value spontaneously brought to mind more associations related to a person or entity or associations to an event or time than objects with little sentimental value, and test to what extent these associations determined sentimental value and the rate of hedonic adaptation. Participants were asked to recall a good they received in the previous year which has either lots or little sentimental value to them, listed all the thoughts they had when thinking of the object, and indicated their happiness with the item at the moment they got it and now. Participants' thoughts were then coded into two categories: thoughts related to the item itself (e.g., appearance, function, specifications, price, and how they feel about the item itself), and thoughts related to associations (e.g., memories induced by the product, and how they feel about those memories). We found that participants in the high-sentimental value condition listed significantly more association-related thoughts, which then contribute to the formation of sentimental value and slow the process of hedonic adaptation.

Why does sentimental value slow hedonic adaptation? We propose that happiness with a product is a weighted sum of at least two components: feature-related utility and sentimental value. Sentimental value slows hedonic adaptation as a result of two processes. Firstly, sentimental value moderates the effect of feature-related value on happiness, such that, the higher sentimental value an object has, the lesser influence the feature-related utility exerts on happiness. Secondly, whereas feature-related value decreases with time, sentimental value does not. Study 4 tested these proposed processes simultaneously and lent support to them.

To conclude, whereas previous research focused on how product features influence hedonic adaptation, we introduce the idea of sentimental value, demonstrate that sentimental value slows hedonic adaptation, and examine the underlying process.

in the hedonic condition and inexpensive shoes in the utilitarian condition. Our manipulation check confirmed that expensive shoes are considered significantly and substantially more hedonic than inexpensive shoes ( $t(119) = 3.08, p < .01$ ) and inexpensive shoes are considered significantly more utilitarian than expensive shoes ( $t(118) = -2.07, p < .05$ ). After indicating their pre-attitudes and post-attitudes, participants rated their purchase on financial wisdom scales: “To what extent would you say this purchase was money well-spent?” and “To what extent do you think the money spent on this purchase would have been better spent on something else—some other type of purchase that would have made you happier?” (Van Boven and Gilovich 2003). Consistent with the findings in Study 1, participants showed a greater decline in attitudes ( $M_{\text{difference}} = 1.49$ ) for expensive rather than inexpensive shoes ( $M_{\text{difference}} = 0.56; t(113) = 3.01, p < .01$ ). Importantly, the greater adaptation to expensive shoes (vs. inexpensive shoes) was associated with greater regret for their spending. Participants indicated that inexpensive shoes purchases ( $M = 7.49$ ) represent money better spent compared with expensive shoes purchases ( $M = 6.69; t(120) = -2.29, p < .05$ ). Participants were also more inclined to say that the money spent on expensive shoes ( $M = 3.93$ ) could have been better spent elsewhere compared to the money spent on inexpensive shoes ( $M = 2.87; t(120) = 2.54, p < .05$ ).

Finally, study 4 tested whether emotional excitement can mediate the effect of product type (hedonic vs. utilitarian) on attitudes. Participants were asked to indicate their pre-attitudes and post-attitudes toward either an expensive handbag (hedonic product) or an inexpensive handbag (utilitarian product) that they currently own. They were also asked to indicate their pre-excitement and post-excitement toward the handbag. Additionally, they completed the same financial wisdom scales as in Study 3. Participants showed a greater decline in attitudes over time with expensive handbags ( $M_{\text{pre-attitude}} = 5.76$  vs.  $M_{\text{post-attitude}} = 4.33; F(1, 41) = 35.94, p < .001$ ) than with inexpensive handbags ( $M_{\text{pre-attitude}} = 5.30$  vs.  $M_{\text{post-attitude}} = 4.60; F(1, 38) = 12.11, p < .01$ ), replicating our findings in previous studies. Importantly, we found that participants’ excitement mediated the observed effect. Lastly, we also replicated our findings for consumer regret: once again, participants reported greater regret for expensive handbag purchases compared to inexpensive handbag purchases.

Contrary to consumers’ lay beliefs that they adapt uniformly to hedonic and utilitarian products, we find that consumers adapt more to hedonic than to utilitarian products. Furthermore, we find negative consequences of hedonic purchases due to consumers’ heightened regret for hedonic compared to utilitarian purchases.

### **Favorites Fall Faster: Greater Liking leads to Greater Satiation**

#### **EXTENDED ABSTRACT**

Satiation is the process by which we get tired of good things (Coombs and Avrunin 1977; Redden 2008) or by which the intensity of our experience decreases with time (Frederick and Loewenstein 1999). Naturally, no one wants good things to go bad, so determining how this process works is of great interest.

In the current research, we investigate the role of initial product liking (i.e., how much a consumer likes a product at the beginning of a consumption experience), and its impact on satiation. We hypothesize that a higher level of initial liking will lead to a faster rate of satiation. In other words, if good things satiate, better things may satiate faster. Furthermore, because this effect is a function of “liking,” which we conceptualize as an affective response to a product, we predict it is limited to hedonic (i.e. affect-rich) products (e.g., Khan, Wertenbroch, and Dhar 2004).

In four studies, we find evidence that for initially well liked products, participants satiate at a much faster rate than for initially less liked (although not disliked) products. This effect is observed when the differences in initial liking are due either to consumer preferences or to experimental manipulation.

In Study 1, participants were presented with one of two Monet paintings pretested such that our population significantly preferred one over the other ( $p < .0001$ ). Consistent with existing procedures (e.g., Redden 2008; Galak, Redden, and Kruger 2009), participants viewed either the More-Liked or the Less-Liked painting, and rated their liking of the image (on an unmarked 100-point scale) over 10 periods. The results indicate that participants did indeed prefer the More-Liked image ( $M = 71.6, SD = 20.9$ ) over the Less-Liked image ( $M = 42.4, SD = 27.4; p < .0001$ ). More interestingly, participants viewing the More-Liked image satiated at a faster rate (i.e., their slope was steeper) than did participants viewing the Less-Liked image ( $B = -3.74, p < .01$ ). Furthermore, participants across both conditions who initially liked their image more satiated more quickly ( $B = -0.24, p < .001$ ), suggesting that individual preferences are also predictive of rate.

Study 2 demonstrates that this effect also occurs when initial preferences for a product are experimentally manipulated. Past research suggests that having a choice influences affective outcome evaluations (e.g., Iyengar and Lepper 2000; Botti and McGill 2011), so we manipulated initial liking using choice. All participants viewed the same image, but they were either told they could choose the stimulus they would view, or that it would be randomly assigned to them. This choice manipulation produced a significant difference in initial liking ( $M_{\text{choice}} = 27.42, SD = 46.56$  vs.  $M_{\text{no-choice}} = 46.64, SD = 31.91; p < .03$ ). In turn, high initial liking again predicted a faster rate of satiation ( $B = -0.04, p < .01$ ). Note that the choice manipulation did not directly predict the rate of satiation ( $B = .16, ns$ ), but had an impact by influencing the level of initial liking, which in turn predicted the rate. In other words, the results were an effect of higher initial liking, not an effect of “choice.”

Studies 3 and 4 sought to demonstrate that the process of greater liking leading to faster satiation involves hedonic responses to products. Because this process hinges on “liking,” which is an affective evaluation of the product, we predicted that we would only observe the effect for hedonic rather than utilitarian products (Khan et al. 2004; Alba and Williams 2013).

In Study 3, participants listened to a ringtone, and were asked to rate either their enjoyment (hedonic evaluation) or the effectiveness (utilitarian evaluation) of the ringtone over 10 periods. Participants demonstrated significantly more satiation when rating on the hedonic scale ( $B = -1.90, p < .001$ ). Hedonic ratings fell significantly from  $M = 57.90$  ( $sd = 24.75$ ) to  $M = 32.71$  ( $sd = 26.53; t(117) = 5.38, p < .001$ ), whereas utilitarian ratings only fell marginally from  $M = 66.26$  ( $sd = 22.52$ ) to  $M = 58.18$  ( $sd = 28.97; t(111) = 1.70, p = .09$ ). Initial ratings were not predictive of satiation for the utilitarian scale ( $B = -0.02, p = .21$ ), but were highly predictive of the rate of satiation on the hedonic scale, such that higher ratings predicted steeper slopes as hypothesized ( $B = -0.08, p < .0001$ ).

Study 3 demonstrated that the effect of initial rating on satiation rate occurs when considering the hedonic but not the utilitarian aspects of a product. Study 4 sought to build on this by manipulating whether participants merely thought of a ringtone as a more hedonic or a more utilitarian product (though priming), and then asking them to simply “rate the ringtone.” With this more subtle manipulation, we again found no effect on satiation rate of initial scores for the utilitarian participants ( $B = -0.01, p = .20$ ), but a significant effect for the hedonic participants ( $B = -0.03, p < .05$ ). We conclude that higher

initial liking of the ringtone predicts faster satiation only for products considered to be hedonic.

Besides being theoretically important to the satiation literature, our findings offer substantive insights. The effect suggests that offering hedonic consumption experiences that are too well liked may cause faster disengagement, or even disadoption, as consumers become satiated. Likewise, for consumers looking to maximize the prolonged enjoyment of their own hedonic consumption, it might be advisable to opt for goods or experiences that they like, but that are perhaps not their very favorite. Future directions for this research are focused on determining the mechanism underlying the phenomenon.

### When it Could Have Been Worse, it Gets Better? The Effect of Uncertainty on Hedonic Adaptation

#### EXTENDED ABSTRACT

Consumption often involves positive experiences. Unfortunately, positive experiences are not always guaranteed, and experiences that were expected to be enjoyable turn sour. For example, a reliable car may fail to start one morning, a bottle of favorite wine may turn, and a chef may overcook a dish.

Consumers who are assured that they will always have positive experiences should be better off than consumers who are uncertain whether their current positive experiences will persist. That is, the negativity associated with not knowing whether an experience will be positive or negative is aversive and, thus, presumably, lowers enjoyment. Indeed, consumers spend time and money to find ways to avoid unreliable products, such as buying financially unreasonable insurance policies (Chen et al. 2009).

Contrary to this notion, we instead propose that consumers who are uncertain whether their positive experiences will persist can actually be better off, because uncertainty about the valence of individual experiences in a sequence of experiences affects the rate of hedonic adaptation. Specifically, we propose that consumers' overall happiness with an experience fades more slowly when they are unsure of whether the sequence of upcoming consumption experiences will be uniformly positive. Said otherwise, holding the actual valence of all components in a sequence of experience positive, when consumers are unaware of whether each of these components will be positive or negative, they tend to adapt to the sequence slower than when they are aware that the sequence is going to be uniformly positive.

We propose that the reason for this distinction is because happiness with an experience is comprised of at least two components: happiness with acquisition (i.e., the extent one is happy with getting to experience a stimulus), and happiness with consumption (i.e., the extent one enjoys the stimulus itself).

Happiness with acquisition is a relative construct (Hsee et al. 2009) and thus heavily depends on the alternatives that one might have acquired. When positive experiences are not guaranteed, consumers compare their current positive experiences with alternative negative experiences (i.e., counterfactuals) and, presumably, experience happiness associated with avoiding a negative alternative. In contrast, when positive experiences are guaranteed, although consumers might generate counterfactuals at the beginning, the counterfactuals become less salient overtime. Therefore, consumers are initially happy with acquiring the positive experiences, but their happiness with acquisition will fade very quickly over time. Contrarily, happiness with consumption is more inherently evaluable and less susceptible to the alternatives one might have acquired (Hsee et al. 2009; Morewedge et al. 2010; Novemsky and Ratner 2003). Therefore, consumers may derive the

same level of happiness from consumption, but this happiness fades regardless of the uncertainty of future positive experiences.

We test how these two components combine to form total happiness for a product. We predict that when consumption valence over a sequence of experiences is uncertain, consumers devote more attention to the happiness with acquiring the positive experiences (e.g. "I'm so lucky! I might have gotten a worse experience."), than they do to happiness with consumption. Thus their overall happiness mainly depends on their happiness with acquisition. In contrast, when the valence of experiences within a sequence is known to be uniformly positive, more attention is paid to the happiness with consumption, which, unfortunately for consumers, fades with repetition. We test these propositions across four studies.

Study 1 served as an initial demonstration of our predictions. Participants were told that we had two photographs: a relaxing beach photo (positive experience) and a disturbing eye surgery photo (negative experience), and that they would view 10 photographs. Those in the *Certain* condition were told that they would view the beach photo 10 times in a row. Those in the *Uncertain* condition were told that they would view the beach photo at the first time and then from the second time, there would be a chance that they would view the disturbing eye surgery photo. All participants were actually shown only the beach photo 10 times, though those in the *Uncertain* condition believed that they could be shown the eye surgery photo any time after the first iteration. After each iteration, participants indicated their overall momentary level of happiness. Consistent with our hypothesis, though all participants enjoyed the photos less with each iteration, this decrease was smaller for participants in the *Uncertain* condition.

Studies 2 and 3 demonstrate that uncertainty influences the happiness with acquisition but not the happiness with consumption. Study 2 was identical to Study 1 except that participants indicated their happiness with acquiring the target photo (positive photo in all cases), happiness with the photo itself, and overall happiness (a 2 (*Certainty*) x 3 (*Measure*) full factorial between-subjects design). Consistent with our hypothesis, happiness with consumption decreased regardless of the certainty condition, but happiness with acquisition and overall happiness decreased more slowly in the *Uncertain* condition. Study 3 replicated these findings with food stimuli (using pleasant M&M chocolate candy as the positive stimulus and unpalatable vinegar water as the negative stimulus).

Study 4 was identical to Study 2 except for two critical differences. First, the three types of happiness measures were administered within-subjects. All participants indicated their overall happiness first, and then happiness associated with being exposed to the target photo and happiness with consumption (the order of the last two questions were counterbalanced). Second, participants answered the happiness questions twice, once after the first time they viewed the picture, and once after the last time. Replicating our previous findings, overall happiness with acquisition decreased more slowly in the uncertainty condition than in the certainty condition, yet the decrease in happiness with consumption was not significantly different across conditions. More importantly, regression analyses revealed that when participants were certain about their future experience, happiness with acquisition and happiness with the experience jointly predicted overall happiness. In contrast, when people were uncertain about their future experience, happiness with acquisition predicted overall happiness, but happiness with consumption did not. Further mediation analysis indicated that the decrease in happiness with acquisition, but not happiness with consumption, mediated the effect of uncertainty on hedonic adaptation.

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# The Surprising Upsides of Negativity

Chairs: Kathleen D. Vohs, University of Minnesota, USA

Yajin Wang, University of Minnesota, USA

## Paper #1: The Surprising Effectiveness of the Hostile Mediator

Ting Zhang, Harvard Business School, USA

Francesca Gino, Harvard Business School, USA

Michael Norton, Harvard Business School, USA

## Paper #2: How Disgust Builds Social Bonds

Eugenia Wu, University of Pittsburgh, USA

Andrea Morales, Arizona State University, USA

Gavan Fitzsimons, Duke University, USA

Tanya L. Chartrand, Duke University, USA

## Paper #3: Negative Moods Spur Effortful Attainment: A Mood Improvement Strategy

Yajin Wang, University of Minnesota, USA

Kathleen Vohs, University of Minnesota, USA

## Paper #4: Growing Up Poor Improves Specific Mental Ability

Vladas Griskevicius, University of Minnesota, USA

Chiraag Mittal, University of Minnesota, USA

Jeffrey Simpson, University of Minnesota, USA

Sooyeon Sung, University of Minnesota, USA

Ethan Young, University of Minnesota, USA

### SESSION OVERVIEW

Is bad always stronger than good? While abundant evidence suggests that ugly social interactions, negative emotions, and disruptive childhood environments often have negative impact on consumers' behaviors and well-being, four papers in this session provide novel hypotheses and surprising empirical evidence that demonstrates the upsides of negativity. This session looks at both interpersonal and intrapersonal consequences of negativity, and directly fits the theme of getting back to the fun in research (a call that responds to the prior years' negativity and volatility) – hence, a push for more upsides to our collective negativity. We explore two questions: 1) how negative emotion impacts interpersonal relationships, and 2) how negative affect and environment influence consumer goal pursuit and intrapersonal performance.

The first two papers examine how negativity, especially negative emotions, influence consumers' behaviors in an interpersonal context. *Zhang, Gino and Norton* demonstrate the surprising effectiveness of hostile mediators in resolving conflict such as they may serve as a point of comparison and decrease the division between the two negotiating parties. Across six studies, they show that negotiators who interact with hostile mediators are more willing to reach an agreement compared to those who interact with either neutral or nice mediators. The second paper by *Wu, Morales, Fitzsimons, and Chartrand* show that although disgust is often a strong distancing reaction, shared feelings of disgust surprisingly create social connection between consumers. Four studies demonstrate that when consumers experience the feeling of disgust together, they report increased feelings of similarity and closeness with group members.

The final two papers investigate how negativity can influence consumer behaviors from the intrapersonal perspective. *Wang and Vohs* test the novel consequences of negative affect on goal pursuit. Through four experiments, they show that negative emotions can lead to effortful goal pursuit because consumers implicitly recognize that their efforts could product mood improvement. Finally, *Griskevicius et al.* challenge the axiom that growing up in a poor environment is necessarily all bad. Three experiments demonstrate that poverty in

childhood doesn't not impair all styles mental function – and in fact can enhance the ability to shift between tasks flexibly and efficiently.

In sum, this session demonstrates novel and counterintuitive findings showing that the negative aspect of the life, such as bad experiences with product, interacting with a mean person, bad mood, and even poverty-stricken childhood environments, can lead to surprisingly positive outcomes. This session will appeal to a broad set of scholars interested in emotions, interpersonal relationships, consumer goal pursuit and well-being.

## The Surprising Effectiveness of the Hostile Mediator

### EXTENDED ABSTRACT

When negative emotions build as negotiations approach an impasse, parties in dispute commonly turn to a mediator to encourage amicable behavior and facilitate agreements. Both common sense and conflict resolution guidebooks suggest mediators should treat such situations with a gentle approach in order to mitigate negative emotions. Indeed, establishing rapport is considered a “best practice” in facilitating conflict resolution (Beardsley et al. 2006; Susskind et al. 1999). We demonstrate that while such “killing them with kindness” strategies are intuitively appealing, they can be misguided.

Mediation of disagreements is an interesting case where the documented benefits of positive emotions (Kopelman, Rosette, and Thompson 2006) and costs of negative emotions (Lelieveld et al. 2012) may reverse. In mediated conflicts—in contrast to unmediated conflicts—the mediator's behavior serves as a point of reference for negotiators to make judgments about their counterpart's behavior. Based on research documenting contrast effects in social comparisons (Rafaeli and Sutton 1991), we suggest that added mediator hostility may decrease the division between the two negotiating parties by serving as a point of comparison. Negotiators might think, “My counterpart doesn't seem so bad compared to this mediator!” Across six studies, we show that negotiators who interact with hostile mediators are more willing to reach an agreement compared to those who interact with either neutral or nice mediators.

Study 1 shows that most people predict that hostile mediators would be less effective at helping negotiators resolve conflict than nice mediators, reflecting a lay belief in the wisdom of courtesy. Evidence from Studies 2 through 5, however, suggests that these predictions do not match actual outcomes. In Study 2, participants played the role of a disputant in a negotiation, and were exposed to an audio recording of either a mean, neutral, or nice mediator who summarized the main grievances of both negotiators. Compared to those who were exposed to either a neutral or nice mediator, negotiators exposed to a hostile mediator indicated they were more willing to reach an agreement and also expected their counterpart to be more willing to compromise. Additionally, ratings of the mediator's degree of hostility mediated the effect of the mediator's style on participants' willingness to reach settlement.

In Study 3, we explore the mechanism underlying our results, examining whether participants are more willing to negotiate with their counterparts because the counterpart appears more reasonable in contrast to the hostile mediator (contrast hypothesis) or because the hostile mediator serves as a common enemy against whom negotiators can unite (common enemy hypothesis). To distinguish between these two accounts, we manipulated the target of the me-

diator's comments. In some cases, the mediator was mean or nice to the negotiators themselves; in others, the mediator was mean or nice to an individual external to the negotiation. Adding hostility to the environment had a positive effect on negotiators' willingness to reach agreements regardless of the target, supporting the contrast hypothesis.

What are the types of contrast between the mediator and counterpart that explains our effect? Study 4a replicates findings from Study 2 and demonstrates that contrasts on the dimension of warmth—but not competence—drive our finding that hostile mediators increase willingness to reach agreement. Additionally, not all contrasts that portray the counterpart as warmer generate greater willingness to reach agreement. In Study 4b, we varied not only the hostility of the mediator, but also hostility of the counterpart. We found that relevance of the comparison matters: when counterparts are hostile, added mediator hostility decreases the extent to which counterparts appear more hostile relative to the mediator, thereby increasing willingness to resolve conflict. However, when counterparts are more reasonable, this contrast is not as meaningful in that counterparts have already demonstrated the capacity to negotiate without resorting to hostility.

Whereas findings in Studies 1-4 focus on mediator's *willingness* to reach agreement, Study 5 focuses on negotiators' *ability* to resolve conflict. Negotiating dyads were incentivized to maximize personal gain and were randomly assigned to interact with a mediator through an online platform. Mediators were participants trained to follow a script of either nice or hostile remarks directed toward both negotiators; mediators received payment based on the extent to which both counterparts rated them as either hostile or nice. To address the possibility that simply the desire to avoid interactions with the mediator explains our prior findings, negotiators in this experiment also interacted through a private chat after the mediation to discuss any unresolved issues before reaching a final conclusion. Our findings show that negotiators were more likely to reach agreement after interacting with a hostile mediator compared to a nice one. Hostile mediators did not appear to force negotiators to make agreements more quickly at the expense of sacrificing agreement quality, as agreements across the two conditions did not differ on the extent to which they were integrative. However, final agreements after interactions with the hostile mediator were less equitable. Taken together, the findings show that although hostile mediators help negotiators reach outcomes that are objectively better than their next best alternative, agreements reached after exposure to a hostile mediator may involve one negotiator making more concessions than the other.

As with parents who induce their children to cease bickering by causing them to unite against an even meaner figure – for example, a parent enforcing bedtimes – hostile mediators can also induce parties in dispute to increase rapport by setting a standard of incivility against which even the worst adversary seems civil.

## How Disgust Builds Social Bonds

### EXTENDED ABSTRACT

Though feelings of disgust have been linked to a specific physiological state (nausea), a distinct facial expression (closed nostrils, open mouth), and a typical feeling state (revulsion), it is perhaps disgust's strong and immediate distancing reaction that is its hallmark (Rozin, Haidt, and McCauley, 2008). Indeed, research has consistently shown that feelings of disgust cause individuals to engage in distancing behaviors such as discarding existing possessions (Lerner, Small and Loewenstein, 2004), decreasing search behavior and

lowering willingness to try new products (Argo, Morales and Dahl, 2006).

The fact that disgust leads individuals to distance themselves suggests that feelings of disgust should impede the formation of social bonds; social bonds typically result, after all, from feelings of closeness and attachment. Consistent with this line of reasoning, feelings of disgust have been linked to lowered evaluations of both disgust-eliciting and nearby objects (Lerner, Small and Loewenstein; Morales and Fitzsimons, 2007), suggesting that disgust may lead to lowered evaluations of others.

Research suggests, however, that emotions can lead to heightened feelings of social connection even when those emotions are negative. For instance, individuals preparing to experience a fear-provoking event prefer to wait in the company of others also about to experience the event (Schachter 1959), and individuals who experience the negative emotions of a natural disaster together express increased feelings of solidarity and group cohesion (Tyhurst 1951). These results suggest that positivity is not necessarily an essential ingredient in creating social bonds.

In the current research, we draw on research on disgust, emotion and social connection to suggest that although disgust typically leads to lowered evaluations of associated objects, it can also lead to increased feelings of social connection when feelings of disgust are shared. Specifically, we suggest that increased feelings of social bonding are most likely to occur when the feelings arise from a disgust-eliciting event that individuals experience together.

In study 1, groups of participants were randomly assigned to watch either a disgusting, scary, happy, sad or emotionally neutral film clip together. After watching the film clip, participants were asked to evaluate the clip and to indicate how socially connected they felt to other members of the group. Results revealed that relative to participants in other conditions, participants in the disgust condition had less favorable evaluations of both the film clip they watched and of the other participants in their lab session. However, relative to the control and sadness conditions, participants in the disgust condition (along with those in the fear and happiness conditions) reported increased feelings of similarity and closeness between group members, and increased feelings of being connected and bonded.

In study 2, participants were primed with disgust, fear, sadness, happiness or control (neutral) before indicating whether they would prefer to watch an upcoming film clip alone or with other participants. The emotional content of the film clip was matched to condition (e.g., disgust condition participants watched a disgusting clip, fear participants watched a scary clip). Participants then watched the film clip together as a group, evaluated it, and indicated how socially connected they felt to other group members. Consistent with study 1 results, participants in the disgust condition reported less favorable evaluations of both the film clip and other participants in their lab session but increased feelings of similarity and closeness, and of being connected and bonded. In contrast to those in the fear and happiness conditions, however, participants in the disgust condition expressed a higher preference for watching the film clip alone rather than with others. This suggests that although feelings of shared disgust can result in increased feelings of social connection, disgusted individuals do not seek out such connections.

In study 3, we focus on examining the conditions under which disgust leads to social connections. This study was a 2 (jellybean flavor) by 3 (consumption setting) between-subjects design. Participants took part in a jellybean taste test where they were randomly assigned to evaluate either a peach (neutral condition) or vomit-flavored jellybean (disgust condition) before completing measures of social connection. Participants were assigned to complete the taste

test in one of three settings: 1) all participants in the session were told together what jellybean flavor they would be tasting and then tasted the jellybean together 2) all session participants were told together what jellybean flavor they would be tasting but then tasted it separately and 3) each session participant was told individually what jellybean flavor he would be tasting and then tasted the jellybean alone. Results revealed that relative to the peach (neutral) condition, participants who tasted vomit jellybeans had lower evaluations of both the jellybean and the other session participants. Interestingly, tasting vomit jellybeans led to increased feelings of similarity and closeness only when the jellybeans were eaten together.

In study 4, we examine whether disgust has to be integral to the consumption in order to elicit the disgust bonding effect. This study was a 2 (prime) by 2 (jellybean flavor) by 2 (consumption setting) between-subjects design. Participants first viewed a series of ads that were designed to prime disgust or neutral emotion. They then tasted either a peach or vomit-flavored jellybean in either a group setting (where everyone tasted the same flavor) or alone. Results replicated those of study 3 in that participants who tasted vomit jellybeans had lower evaluations of both the jellybeans and other participants relative to those in the peach (neutral) condition. Also consistent with study 3, tasting vomit-flavored jellybeans led to increased feelings of similarity and closeness only when the jellybean flavor was announced and eaten together. There was no effect of the prime, suggesting that disgust leads to feelings of social connection only when consumers are actively sharing a disgusting experience.

Together, these studies suggest that although disgust's distancing tendencies keep individuals from wanting to connect with others, positive feelings of social connection may arise anyway when consumers are engaging in a disgust-eliciting experience together.

### Negative Moods Spur Goal Attainment: A Mood Improvement Strategy

#### EXTENDED ABSTRACT

Consumers engage in self-control behaviors to pursue multiple goals every day. How does different affect influence consumer's goal pursuit? The literature states that people seek to change a negative mood by preferring immediate gratification (e.g., overeating; impulse buying). A different literature shows that the top outcome of goal attainment is positive mood. The current research used the latter conclusion to challenge the former by predicting and finding that effortful goal attainment is a form of emotion regulation after negative affect. We proposed that consumers experiencing negative (vs. neutral) emotion exert more effort towards achieving goals because goal accomplishment can improve mood. Four experiments tested these hypotheses and found support.

Experiment 1 tested the prediction that participants who are in a negative (vs. neutral) affect state would exert more effort to achieve a goal. We tested both anger and sadness to test types of negative affect. Participants first read that performance on verbal tasks predicts academic and career success. After working on verbal puzzles for eight minutes, they were stopped and told that the experimenter needed to assess their work in order to prepare more puzzles. While the experimenter left ostensibly to assess their work and prepare ensuing puzzles, participants completed a task that served as the mood induction. Participants were randomly assigned to watch one of three film clips, known to induce anger, sadness, or a neutral state. After the film, participants were informed that they had finished 85% of the task and were handed the last puzzle, which would complete their task. The dependent variable was effort exerted during the last puzzle, operationalized as the speediness with which they com-

pleted the task. Consistent with predictions, participants in the anger ( $M=199.62$ ) and sadness conditions ( $M_s=200.36$ ) were faster than the neutral condition  $M=267.07$ ; both  $p_s<.01$ ). Anger and sadness conditions did not differ ( $t<1$ ).

Experiment 2's aim was to provide evidence for the proposed mechanism of emotion regulation using a mood freezing manipulation (Manucia, Baumann, and Cialdini 1984). Participants were randomly assigned to condition in a 3 (anger vs. sadness vs. neutral) by 2 (mood-freezing vs. non-mood-freezing) between-subjects design. The mood-freezing manipulation tested whether participants experiencing negative (vs. neutral) emotions would exert effort to achieve a goal even when they believed that such efforts would not change their mood. We predicted that improved goal attainment would not hold for participants told that their mood could not change, but that we would replicate the pattern from experiment 1 among other participants. If so, this would support our proposed mechanism of (implicit) emotion regulation.

Similar to experiment 1, participants worked on word puzzles first and were stopped in order to take part in unrelated tasks that served as manipulations of mood as well as mood-freezing conditions. Next, participants went through the similar mood induction as in experiment 1. Next, as part of an ostensible marketing study on aromatherapy, all participants breathed in the scent of an essential oil. Those in the mood-freezing condition were told that the oil renders people's emotional states temporarily unchangeable. The other half were given no further information.

Next, participants worked on a last word puzzle and completed a second set of mood measures to check on the manipulation of the mood freezing manipulation.

Analyses indicated both the mood induction and mood-freezing manipulations were successful (reports available from the authors). Performance on the last puzzle conformed to predictions: As expected, among participants who did not receive the mood-freezing manipulation, those in the neutral condition took significantly longer to complete the last puzzle ( $M=362.33$ ) than participants in the anger condition ( $M=182.54$ ,  $p<.01$ ), and sadness condition ( $M=192.00$ ,  $p<.01$ ). In support of the theory that those results are a sign of tacit mood regulation attempts, participants who received the mood-freezing manipulation did not differ according to condition on performance of the last task,  $F<1$ . Moreover, mediation results indicated that the combined mood induction and mood-freezing manipulations changed mood due to the effort that participants applied to achieve the goal.

Experiment 3 tested the hypothesis that fun tasks, to which people often turn in order to improve their mood, would be as effective in improving mood as effortful goal attainment – but only in the short-term; hedonic tasks would not be as effective in maintaining a boost in mood after an initial period. Participants were randomly assigned to condition in 2 (mood: negative vs. neutral) by 2 (task: challenging vs. fun) between-subjects design. After the mood induction, participants' mood was measured. Next, participants completed a challenging task (word puzzle) or a fun task (drawing and coloring), after which they completed a second affect report. After a neutral filler task, participants rated their affect again. Analyzing mood reports across measurement times, we found that while both hedonic and challenging effortful tasks improved mood in the short-run, boosts from the hedonic task do not endure, whereas the challenging task conferred longer-lasting positivity.

Experiments 1 to 3 showed that people exert effort to accomplish a challenging goal as a mean to lift their mood when in a negative state. These results raise the question of why people fail to rely on such tasks when the attainment of a challenging goal is so helpful

to mood recovery? Experiment 4 showed that when asked explicitly, people in a negative mood (induced) prefer hedonic tasks over a challenging ones – much like other work on the misprediction of future emotional states (e.g., Gilbert, 2006). In short, experiment 4 showed that people do not recognize the emotional benefits of attaining challenging goals.

In summary, people in negative, as opposed to neutral, emotional state exert more effort to conquer challenging and achievable goals. We demonstrated that this improved performance is due to efforts to improve their mood. Despite being better at achieving goals, people in a negative mood prefer that which is easy, hedonic, and short-lived over challenging and enduringly helpful tasks – an affective forecasting error.

## Growing Up Poor Improves Specific Mental Abilities

### EXTENDED ABSTRACT

Can growing up poor improve certain mental abilities? Evidence thus far suggests the answer is no. People who grow up in resource-deprived environments tend to score lower on tests of intelligence, language, memory, and other abilities. This reduced performance is often taken to imply that early-life deprivation impairs all forms of mental functioning.

We depart from prior work by arguing that childhood adversity shapes consumer psychology in *adaptive ways*. We hypothesized that the minds of individuals reared in resource-deprived environments should be specialized to perform tasks that are most useful in such environments.

We propose that resource deprivation should have specific consequences for mental abilities later in life. *Inhibition* is the deliberate overriding of dominant responses. Consider wanting chocolate cake when one is on a diet. Being able to overcome that urge stems from inhibition. Inhibition is central to self-control, willpower, and self-regulation — all crucial forms of being a healthy consumer. What often has been neglected in consumer psychology, however, is the essential value of shifting abilities. *Shifting* refers to flexible switching between different tasks. Shifting is central to adapting to changing situations rapidly and efficiently. Consider the consumer who needs to juggle tasks related to being a parent, online shopper, and be productive in her home office. Being able to shift successfully enables her to maintain all three roles. Shifting is essential for success in modern life.

We hypothesize that exposure to stressful early-life environments should exert *specific and opposing* effects on inhibition and shifting. Given that stressful early-life environments shape the mind toward short-term opportunism (rather than long-term investment), such environments should diminish inhibition. By contrast, stressful early-life environments should enhance shifting. The ability to shift between tasks flexibly and efficiently is essential for adapting to constantly changing environments. Because opportunities in such environment are fleeting, consumers who can adapt to change, such as by rapidly identifying new patterns and associations, are in a better position to take advantage of new opportunities before they vanish.

The current research investigated the conditions under which adult consumers raised in resource-deprived versus resource-abundant environments shower superior and inferior executive function. We hypothesized that childhood adversity is most likely to influence adult performance when consumers are tested under duress. Three experiments compared the performance of adults reared in high-stress versus low-stress environments on two types of executive function: inhibition and shifting. Critically, the performances of

these two groups were compared in two different experimental contexts: stressful and non-stressful.

Inhibition was tested in Experiment 1, and shifting was tested in Experiments 2 and 3. All three studies had an experimental manipulation that induced stress in half of the participants before the executive function task. Each experiment also assessed individual differences in childhood resources. Experiments 1 and 2 involved college students, who retrospectively recalled the level of childhood resources. Experiment 3 was conducted with a diverse community sample of adults on whom we had detailed childhood environment data. This unique experiment allowed us to replicate the novel shifting finding using more objective measures of childhood environment. It also permitted us to determine which specific type of childhood stress leads people to excel at shifting.

**Experiment 1.** Fifty-seven consumers completed a standard executive function task assessing inhibition. First, psychological stress was elicited in half the participants by having them read a news article about worsening economic conditions. We predicted that individuals reared in resource-deprived relative to resource-abundant environments would perform worse at inhibition in the stressful context. Analyses revealed the predicted childhood resources by stressful experimental context interaction ( $p = .041$ ). In the non-stressful experimental condition, there was no difference in performance among the two groups ( $p = .79$ ). But in the stressful experimental condition consumers from resource-deprived childhoods performed significantly worse on the inhibition task than those from resource-abundant childhoods ( $p = .003$ ).

**Experiment 2.** Experiment 2 tested whether resource-deprived childhoods can *improve* adult performance on a different executive function. Seventy-five people completed a standard executive function task assessing shifting. Analyses revealed the predicted childhood resources by stressful experimental context interaction ( $p = .022$ ). In the non-stressful experimental condition, there was no difference in performance among the two groups ( $p = .86$ ). But in the stressful experimental condition, individuals from resource-deprived childhoods performed significantly better at shifting than those who reported resource-abundant childhoods ( $p = .035$ ).

**Experiment 3.** Experiment 3 sought to replicate the novel shifting finding from Experiment 2 with a diverse group of older participants on whom we had detailed childhood information. Fifty-one people (all age 37) performed the shifting task used in Experiment 2. Unlike Experiments 1 and 2, each participant's childhood environment in Experiment 3 had been rated by trained interviewers at multiple time-points between ages 0 and 10. This allowed us to pinpoint which environmental factor is linked to improved shifting ability.

Findings showed that superior shifting performance was directly related to growing up in an unpredictable environment. There was a childhood unpredictability by stressful experimental context interaction ( $p = .038$ ). In the non-stressful experimental condition, there was no difference in performance among the two groups ( $p = .89$ ). But in the stressful experimental condition, people who experienced unpredictable childhoods performed significantly better at shifting than those who experienced predictable childhoods ( $p = .016$ ).

Can growing up in a stressful childhood environment improve certain mental abilities in adult consumers? The answer is yes—but only in stressful contexts. Three experiments revealed that consumers who had stressful childhoods were worse at inhibition, but better at shifting. Because opportunities in such environments are rapidly changing, those who can adapt to change rapidly are in a better position to take advantage of new opportunities before they disappear.

The current experiments are the first to document that stressful childhood environments do not universally impair mental function-



ing, but can actually improve specific mental abilities in adults in specific contexts.

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# Why Having So Little Means So Much: Scarcity Shapes Consumer Decision Making

Chairs: Meng Zhu, Johns Hopkins University, USA

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## **Paper #1: The Impact of Scarcity on Consumers' Choices of Multiple Items from a Product Class**

Meng Zhu, Johns Hopkins University, USA

Rebecca K. Ratner, University of Maryland, USA

## **Paper #2: How Scarcity Frames Value**

Anuj K. Shah, University of Chicago, USA

Eldar Shafir, Princeton University, USA

Sendhil Mullainathan, Harvard University, USA

## **Paper #3: You Can't Always Get What You Want: The Effect of Childhood Scarcity on Substitution Decisions**

Debora V. Thompson, Georgetown University, USA

Rebecca W. Hamilton, University of Maryland, USA

Ishani Banerji, Georgetown University, USA

## **Paper #4: Effects of Resource Scarcity on Perceptions of Control and Impulsivity**

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### **SESSION OVERVIEW**

As a pervasive aspect of human life (Booth 1984), a fundamental concept in economics (Brock 1968), and one of the most powerful instruments of influence in our society (Cialdini 2009), scarcity has attracted attention from various disciplines. Researchers have made considerable progress in understanding how scarcity of a single object enhances perceived value and demand (Brock 1968; Verhallen and Robben 1994). More recently, consumer researchers have expanded the scope beyond object specific scarcity to general perception of resource scarcity exploring situational activated scarcity (Laran and Salerno 2012; Shah, Shafir and Mullainathan 2012) and individual differences in resource availability (Griskevicius et al. 2013). Yet, our understanding of the psychological and behavioral consequences of scarcity remains limited.

The proposed session highlights the newest research on how scarcity shapes consumers' value construction, product preferences, and daily decisions using a diverse range of theoretical frameworks, methods, and measures. In an attempt to gain better understanding of the interplay between resource scarcity and consumer behaviors, the papers examine how consumers' tradeoff, substitution, purchase, and financial decisions are influenced by experimentally-induced as well as real-life scarcity.

**Zhu and Ratner** examine how a uniform level of scarcity across items in a choice set impacts choices of individual items in the set. They show that overall perception of scarcity versus abundance increases arousal level, polarizes the evaluations of individual items contained in the choice set, and consequently increases (decreases) choices of the favorite (non-favorites). **Shah, Shafir and Mullainathan** argue that scarcity captures attention, makes tradeoffs more accessible and therefore makes valuation more consistent. They demonstrate that participants experiencing various forms of scarcity (including monetary, caloric, and experimentally induced time scarcity) are less susceptible to different context or framing effects. **Thompson, Hamilton and Banerji** examine the effects of perceived childhood socioeconomic status (SES) on substitution behavior. Whereas previous research indicates that experiencing childhood scarcity can make consumers more impulsive, this paper argues that when making substitution decisions, consumers with low (vs. high)

childhood SES will exhibit more patience. When the waited-for item becomes unavailable, however, the low childhood SES participants devalue it, making it easier to choose a substitute. Finally, **Mittal and Griskevicius** demonstrate that resource scarcity produces divergent control beliefs and impulsive behaviors in people as a function of their childhood environments. They hypothesize and provide evidence that resource scarcity leads individuals from relatively poorer childhood backgrounds to feel that they have less personal control, which facilitates preference for smaller sooner rewards.

Taken together, the four papers (all in advanced stages) in this session elucidate the nuanced relationship between scarcity and consumer decision making, noting when and why resource scarcity may lead to suboptimal decisions versus more fruitful behaviors. As the session integrates diverse research to highlight newest theoretical developments in this important yet understudied area, it is expected to appeal to a broad audience, including those interested in scarcity, variety seeking and compensatory choices, self-control and impulsivity, social welfare, and consumer judgment and decision making. Talks will be kept brief to allow time for audience interaction.

## **The Impact of Scarcity on Consumers' Choices of Multiple Items from a Product Class**

### **EXTENDED ABSTRACT**

Consumers often confront abundance or scarcity of items in a choice set. A grocery store can present large or small quantities of each type of fruit and vegetable, a clothing store can display large or small baskets of accessories, and governments can describe natural resources such as national parks as abundant or scarce. How does the degree of overall perceived scarcity of items within a choice set impact what items the consumer selects?

In spite of a rich body of literature on how scarcity of a single item enhances valuation of the specific item (Brock 1968; Verhallen and Robben 1994), how an overall level of scarcity across items from a product class affects the evaluation and choice of individual items in the choice set remains an intriguing, uninvestigated question. We build our theoretical framework based on two separate streams of research. First, it has been suggested that scarcity induces arousal (Brehm 1966; Berlyne 1969; Cialdini 2009). Second, arousal has been shown to alter attention allocation (Broadbent 1971; Easterbrook 1959; Kahneman 1973) giving rise to judgment polarization (Mano 1992; Paulhus and Lim 1994). Building upon this literature, we theorize that scarcity of multiple items from a product class induces arousal, and that the heightened arousal polarizes the evaluations of individual items contained in the choice set, consequently increasing (decreasing) choices of the most-preferred (less-preferred) items.

The objective of Study 1 is to provide support for our main thesis that scarce (vs. abundant) supply of each alternative in a choice set polarizes the liking for the favorite versus non-favorites, and increases choices of the favorite item from the set. Participants were asked to imagine that they were shopping at a grocery shop and decided to buy four yogurts as there was a "Pick Any 4 for \$1" sale. They were told that the store carries a total of five different yogurt flavors including strawberry, raspberry, vanilla, peach and lemon. Participants in the abundant (scarcity) condition were told that there were many (only a few) of each flavor, approximately 50 units (5

units) of each remaining. All participants were then asked to rank the five yogurt flavors according to their preference, rate how much they like each flavor, and finally indicate which four yogurts they would choose. As predicted, we find that scarce (vs. abundant) supply of each alternative in the choice set polarized liking of the favorite versus non-favorites, and led people to select more units of their favorite item from the set.

To examine whether the mere perception of scarcity is sufficient to trigger these effects, in Study 2, participants were presented with pictures of four types of ready-to-eat vegetables. In the scarcity (abundance) condition, eight pieces of vegetables of each type were provided in four transparent large, 32 oz. (small, 8 oz.) food containers. A separate manipulation check confirmed that participants perceived the same supply level of vegetables as more limited when it was provided in the large versus small food containers. Results of Study 2 provide converging evidence for our key proposition, demonstrating that perceived (instead of actual) scarce versus abundant supply also polarized liking ratings and increased choices of the favorite. Further, in Study 2 we added popularity measures to investigate the alternative explanation of perceived popularity, and found that neither absolute nor relative popularity of the favorite was significantly different across the scarcity and abundance conditions.

We subsequently present two additional experiments to provide direct support for the arousal-based theorizing, demonstrating that the effect of scarcity versus abundance on choices between the most and less-preferred alternatives is mediated by reported arousal level (Study 3) and attenuated by experimentally induced arousal state (Study 4). In Study 3, participants were asked to pick four \$25 gift cards from five different stores, and they were told that three participants in this study would be randomly selected to receive the four \$25 gift cards picked by them (total worth \$100). Consistent with our theorizing, scarcity increased choices of the favorite store's gift card and the effect of supply level on gift card choices was mediated by reported arousal level. In Study 4, based on previous arousal research (Menon and Kahn 2002, Vosgerau 2010) showing that bright background color induces high-level of arousal, we manipulated a second factor, survey background color (arousing vs. control), in addition to supply level. Replicating previous results in another real choice context, subjects in the control conditions chose more pieces of their favorite candy in the scarcity versus abundance condition. Importantly, experimentally activating a high-arousal state for all participants through the bright background color eliminated the effects of the scarcity versus abundance condition on the number of pieces chosen of their favorite. Finally, Study 5 generalizes the proposed polarization effect to situations where a general sense of scarcity is activated. We find that activating the general concept of scarcity using a lexical decision task manipulation (Laran and Salerno 2012) also increased choices of the favorite item from a choice set.

To summarize, whereas prior research focused on how the scarcity of a single item impacts its attractiveness, here we examine how overall perception of scarcity across multiple items from a choice set influences choices of individual items in the set. We demonstrate that a uniform level of scarcity (vs. abundance) across items in a choice set increases choices of the most-preferred item, decreasing choices of the less-preferred items. We propose and find empirical support for an arousal-based polarization explanation.

## How Scarcity Frames Value

### EXTENDED ABSTRACT

Value is hard to determine. Rarely can we name an immediate price for a weekend getaway or the value of a beer on a hot sum-

mer day. So we construct value from context. Our decisions might change based on which mental accounts are accessible (Thaler, 1999) or how a question is framed (Tversky & Kahneman, 1981). Indeed, much of behavioral science has been concerned with the features of the environment that introduce malleability into how we make judgments and decisions.

But here we consider how resource scarcity can frame decisions in a more stable way. We suggest that under scarcity, pressing needs capture attention (Shah, Mullainathan, Shafir, 2012). As a result, things like a utility bill or rent payment or other needs are often top-of-mind. These thoughts make tradeoffs very accessible—buying one thing means giving up another. These tradeoffs provide an internal frame of reference that more steadily guides our perception of value. As a result, valuations under scarcity are less subject to irrelevant contextual features and are instead based on these consistent, accessible tradeoffs. Across six studies, we show that scarcity makes tradeoffs more accessible and therefore makes valuation more consistent. This seems true for monetary scarcity, caloric scarcity, and experimentally induced time scarcity.

In Study 1a ( $N=103$ ), participants saw a classic scenario where they named their willingness to pay for a beer that was either purchased from a convenience store or a fancy hotel (Thaler, 1985). Participants typically offer a higher price for the beer from the hotel than convenience store because the contexts have different reference prices. In this study, participants were simply asked to describe what they would think about as they came up with their willingness-to-pay. Wealthier participants were more likely to say that they would think about where the beer was being purchased (i.e., context). Poorer participants were more likely to say that they would think about items they could not buy if they bought the beer (i.e., tradeoffs). In Study 1b ( $N=151$ ) participants named their willingness-to-pay. Wealthier participants replicated the classic effect, offering a higher price for the beer from the hotel. But poorer participants were less swayed by this feature of the context, instead naming prices that were nearly equivalent across both frames. In Studies 1c and 1d we replicated these results on a larger sample from the same population ( $N=604$ ) and on a large, nationally representative sample ( $N=2015$ ).

In Study 2a ( $N=705$ ), we tested a classic demonstration of “proportional thinking” (Tversky & Kahneman, 1981). Participants indicated whether they would be willing to travel 30 minutes to save \$50 on a tablet computer. The tablet was priced at \$300, \$500, or \$1000. People are usually more willing to travel for the discount when the tablet is cheaper (i.e., a higher proportional discount). That is, to get a sense of whether \$50 is worth 30 minutes, people look to the total cost. But we expected that poorer participants would value the discount more consistently. Indeed, higher-income participants were more willing to travel when the discount was proportionally larger, but lower-income participants were less sensitive to the proportional size of the discount. In Study 2b, we directly replicated these results on the nationally representative sample from Study 1d.

In Study 3 ( $N = 505$ ), participants rated the attractiveness of one of two lotteries. One lottery simply offered a chance to win \$9 (otherwise nothing). Another lottery offered the same chance of winning \$9 (otherwise lose 25 cents). People typically rate the latter lottery as more attractive (even though it is dominated) because the small loss makes it easier to evaluate the worth of \$9 (Slovic et al., 2002). Here, this effect holds for the rich, but not for the poor. Again, the poor have a more stable representation of value. In Study 4 ( $N=263$ ), participants considered small accounts (i.e., cash in their wallet) or large accounts (i.e., money in the bank) and then rated the expensiveness of a consumer product. Typically, participants rate the product as less expensive if they have been primed to think of

the large account (Morewedge et al., 2007). This again holds for wealthier participants, but not poorer participants.

We conceptually replicated these results with different forms of scarcity in Studies 5 and 6. In Study 5 ( $N=234$ ), dieters (those experiencing caloric scarcity) and non-dieters considered small or large caloric accounts (how many calories they consume in a day or a week) and then judged how fattening a large order of French fries felt. Non-dieters judged the fries to be less fattening when primed with a large account, but dieters provided more consistent evaluations across contexts. Finally, in Study 6 ( $N=74$ ), we manipulated time scarcity (as in Shah et al., 2012). Participants played a game in which they were given a small time-budget (poor participants) or a large one (rich participants). Afterward, they were primed to think of a small account (time per round) or a large account (time for the whole game). Then, they were asked to imagine losing 10 seconds from a round of the game and to rate how costly that loss would feel. Time-rich participants rated the loss as less costly when primed with the large account, but time-poor participants provided more consistent evaluations across contexts.

Taken together, these studies suggest that scarcity indeed frames problems in a more stable way. These studies have the promise to resolve lingering questions in psychology and economics. Economics makes many predictions about how preferences should unfold, while behavioral science has identified several ways in which those predictions break down. But economics makes those predictions because it assumes that people regularly recognize scarcity in the world and consider the tradeoffs that it imposes. But when we experience slack, those tradeoffs recede from attention, and we can only look to the environment for guidance on what things are worth. However, it may be the case that when scarcity becomes a psychological reality, we create a context which we carry with us and which more steadily frames our perspective.

### **You Can't Always Get What You Want: The Effect of Childhood Scarcity on Substitution Decisions**

#### **EXTENDED ABSTRACT**

One issue all consumers occasionally face is choosing a replacement for an alternative that becomes unavailable, is too expensive or is restricted in some other way (Hamilton et al. 2014). Moreover, consumers with fewer resources may be forced to forgo desired alternatives more frequently than those with more resources. Thus, consumers with fewer resources may get more practice making substitutions than consumers with more resources, potentially changing their cognitive and emotional responses when access to desired alternatives is restricted. This could be considered adaptive if the cognitive and emotional responses of low childhood SES consumers make the substitution process easier. Consistent with this idea, research on life history strategy shows that experiencing scarcity during childhood can have a lasting effect on consumer decision making. For example, research has shown that perceived childhood socioeconomic status (SES) influences risk taking and temporal discounting in response to cues about economic uncertainty (Griskevicius et al. 2013). Although seeing images of recession made high childhood SES participants more willing to delay rewards, the same cues made low childhood SES participants less willing to delay rewards (i.e., more impatient; Griskevicius et al. 2013).

In our research, we examine the effects of perceived childhood SES on substitution behavior. Although previous research suggests that experiencing childhood scarcity can make consumers more impulsive, we predict that when making substitution decisions, consumers with low childhood SES will exhibit more patience than

those with high childhood SES. Specifically, due to their more extensive practice with not getting what they want, consumers with low childhood SES may have learned cognitive and emotional response strategies that make them better at regulating the negative emotions arising from these experiences, and therefore more willing to accept delays in getting a chosen item.

To better understand the process by which consumers experience substitution, we examine consumers' valuations of chosen items over time. Earlier research shows that low SES consumers exhibit a weaker cognitive dissonance reaction than high SES consumers do, and that their valuations of chosen and non-chosen alternatives do not diverge as much after choice as those of high SES consumers (Snibbe and Markus 2005). One possibility, then, is that low childhood SES consumers will devalue their chosen alternative less than high childhood SES consumers when it becomes unavailable. Another possibility, however, is that given their more extensive practice making substitutions, low childhood SES consumers will devalue their chosen alternative more when it becomes unavailable, making it easier for them to select a replacement.

We test these predictions in a series of studies using choices in two different product categories. In the first study, 256 MTurk participants were given information about three movies they could download. After rating all three movies, they chose one movie to download. After choosing their movie, participants were told that unfortunately, due to technical difficulties, the movie they had chosen was unavailable. They answered several questions about how they felt and then were asked how long they would be willing to wait for their chosen movie to become available. If they chose not to wait, participants could select a replacement from among the remaining two movies. Participants then answered questions about their perceived childhood and current SES using items from Griskevicius et al. (2013). Qualifying earlier research demonstrating that high childhood SES consumers are often more willing to delay rewards, high childhood SES Ps expressed less willingness to wait for their chosen movie than low childhood SES Ps, even though there were no differences in initial evaluations of the movies across groups.

In the second study, 485 student participants read a description of four different articles, rated the articles and then chose one of the articles for a task in which they tagged keywords. After choosing their article, all participants were told that unfortunately, the quota for the article they had selected had already been filled. Half of the participants chose among the other three articles and the other half were assigned one of the three other articles for the task. Participants answered questions about they felt, rated their chosen article again and then answered questions about their childhood and current SES (Griskevicius et al. 2013). When they were told that their chosen article was unavailable, low childhood SES Ps responded by devaluing their chosen article significantly more relative to their initial ratings than high childhood SES Ps. Notably, the devaluation effect was stronger when low childhood SES Ps chose a replacement than when they were assigned a replacement, suggesting that the devaluation was motivated by a desire to make the choice process easier.

In summary, these results suggest that consumers with low perceived childhood SES may have developed strategies to make it easier to cope with more frequent restrictions on the availability of desired alternatives. We find that consumers with low (vs. high) childhood SES are more willing to wait for an initially chosen alternative but are more likely to devalue it when it becomes unavailable, making it easier to choose a substitute. In our planned follow-up studies, we will examine the cognitive and emotional responses that lead to these outcomes.

## Effects of Resource Scarcity on Perceptions of Control and Impulsivity

### EXTENDED ABSTRACT

Acquisition of resources is vital for any individual's survival and well-being. Failure to successfully harness resources from the environment is a threat and is therefore undesirable. However, consistent access to resources is not a trivial task because availability of resources has been irregular since the dawn of human evolution (Chakravarthy & Booth, 2004). Even modern life is rife with inconsistencies in resource availability. Not only does the economy continue to be characterized by periods of boom and bust, but there is considerable inequality among people in access to resources at any given time. So, how does resource scarcity affect consumers' beliefs, decisions and behavior? For example, do they feel that they are in charge of their lives during tough times or do they feel that they are helpless? Might these beliefs drive their financial behaviors?

Drawing on life history theory, recent work indicates that resource scarcity leads people to respond in divergent ways as a function of their childhood environments (Griskevicius et al., 2013). In the present work, we add to this growing body of work by investigating the effects of resource scarcity on people's perceptions of control and impulsivity. We hypothesize and provide evidence that resource scarcity leads individuals from relatively poorer childhood backgrounds to feel that they have less personal control. Consequently, this psychological sense of decreased control facilitates preference for smaller sooner rewards.

We conducted four experiments to test our hypotheses. In Study 1, we examined our basic prediction that resource scarcity produces different effects on people's control beliefs depending on their childhood backgrounds and not their current economic conditions. We experimentally manipulated scarcity by having participants view a series of photos successfully used in previous research (Hill et al., 2012). In the control condition, participants viewed a series of images depicting objects commonly found in an office. We then examined their sense of control using a state version of an established measure (Lachman and Weaver, 1998). Results revealed that resource scarcity led to a *decrease* in sense of personal control among individuals who had relatively poorer childhoods. Importantly, these beliefs did not vary as function of respondents' current economic conditions.

Study 2 sought to conceptually replicate and extend the findings from the first study. If resource scarcity alters personal sense of control, as predicted by our model, then it should produce different patterns for personal and non-personal sense of control. We tested this possibility in Study 2. Participants read a news article either about the recent economic recession or a control article. Next, they responded to a six item measure of personal sense of control and a six item measure of others' sense of control adapted from a validated scale (Dew & Xiao, 2011). Study 2 conceptually replicated the very specific finding from Study 1. In addition, it showed that this effect was specific to people's *personal* sense of control rather than their more general perceptions about everyone's level of control.

In Study 3, we aimed to show that perceptions of personal control mediate the relation between resource scarcity and impulsive financial behavior. Resource scarcity was manipulated using the procedure as in Study 1. Next, sense of control was measured using the same items as in Study 1. Finally, financial impulsivity was assessed using a set of randomly presented lotteries (Green & Myerson, 2004). Results indicated continued support for our initial predictions. Resource scarcity led individuals from relatively poorer backgrounds to feel a diminished sense of control as compared to individuals from relatively wealthier backgrounds. Furthermore, our

mediated moderation analyses revealed that the influence of resource scarcity on people's impulsive behavior was indeed statistically mediated by their sense of personal control.

Study 4 provided additional support for the mediating role of sense of personal control on impulsivity under resource scarcity. To provide further process evidence, we adopted a moderation-of-process experimental design in Study 4. Specifically, besides control and resource scarcity conditions, we included a third condition in which participants experienced a temporary boost in sense of control in addition to exposure to cues of resource scarcity (Whitson and Galinsky, 2008). All participants then responded to questions on impulsivity and childhood SES used in previous studies. We predicted that the observed effect of resource scarcity on impulsivity would be nullified for those experience a temporary boost in sense of control. The results were consistent with this prediction. Resource scarcity led people from poorer backgrounds to become significantly more impulsive as compared to people from poorer backgrounds. More importantly, we no longer found this effect in the condition where participants experienced a boost in sense of control despite being exposed to cues of resource scarcity.

In summary, the current research substantially extends previous work on the effects of resource scarcity on people's psychologies and behaviors. We not only show that resource scarcity produce divergent control beliefs in people as a function of their childhood environments, but we also show that these beliefs may be driving important behaviors such as impulsivity. These findings have important implications for public policy interventions that wish to improve the future life conditions among the ones that are the most susceptible to the effects of resource scarcity. Our findings suggest that infusing a sense of personal control among such individuals may help in reducing impulsive financial behaviors resulting in greater consumer welfare.

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# Competitive Papers—Full

## “I Regularly Weigh Up Just Getting Rid of Facebook”: Exploring Restriction as a Form of Anti-consumption

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### ABSTRACT

Recent years have witnessed increased interest in anti-consumption with various conference and journal special issues devoted to clarifying our understanding of the concept (Lee et al. 2011; Lee, Cherrier, and Belk 2013). This body of research reveals that anti-consumption is manifested in a variety of ways, some more extreme than others. Lee et al. (2011) identify three non-exclusive types of anti-consumption: reject, restrict and reclaim. A review of relevant literature reveals theoretical advancements in relation to rejection and reclamation, but restriction has received significantly less attention. To address this imbalance, this paper aims to gain a deeper understanding of restriction as a form of anti-consumption. The context for our study is Facebook. Social networking sites have been shown to facilitate anti-consumption (Hutter and Hoffman 2013), but research has yet to investigate anti-consumption of social networking sites themselves.

The contribution of our paper is twofold. First, we demonstrate that restriction may be more wide-ranging than currently acknowledged and we illustrate how restriction enables consumers to negotiate tensions between their anti-consumptive discourses and their decision to continue to consume. Second, while previous research favours more extreme examples of anti-consumption such as dumpster diving (Fernandez, Brittain, and Bennett 2011), Freeganism (Pentina and Amos 2011) and boycotting (Friedman 1999), we contribute by demonstrating how anti-consumption develops within mundane, daily practices.

**Ubiquitous Facebook.** Facebook consumption involves the acquisition of a user profile, usage of the site and disposition or deactivation of user profiles. User statistics reveal that consumers' engagement with social media has evolved from a novel practice to a facet of everyday life. To date there are 1.4 billion Facebook users worldwide with American users spending on average 37 minutes each day on the site (Business Insider 2014). The pervasiveness of Facebook can therefore be considered as a form of mundane, daily consumption. Mundane consumption has been defined as “consumer behaviour which occurs in situations that the consumer perceives [as] neither extraordinary nor dramatic and which are often characterised by routine” Holttinen (2014, 3). Ulver-Sneistrup, Askegaard and Kristensen (2011) suggest that exploration of mundanity allows more subtle understandings to emerge. Such consumption though unremarkable and everyday has nevertheless been theorised to be particularly insightful across a range of consumer culture issue including: consumer identity (Kleine, Schultz-Kleine, and Kernan 1993), subcultural belonging (Cronin, McCarthy, and Collins 2014) and display of cultural ideals (Holttinen 2014). Miller (2011) argues that as a form of mundane consumption the consequences of Facebook are particularly far-reaching both in terms of consumer identity (“On Facebook, you find out who you are” (179) and the “expansion and transformation of social relations” (204). Miller (1998, 12) argues that researchers should pay more attention to the mundane and every day since these practices are the essential components of consumer experience and if such activities “matter to them [they] should matter

to us”. Such references to the pervasiveness and influence of mundane consumption such as Facebook may however conceal the contested relationship between consumers and everyday consumption and mask their anti-consumption practices.

Technology consumption has often been typified as dichotomous with consumers loving or loathing technology (Kozinets 2008; Borgmann 2000). Recent studies however have begun to consider that this oppositional approach conceals a greater complexity of emotions and interaction. Laing, Newholm and Hogg's (2009) study of online health-based forums consider the mix of anxiety, ambiguity and alienation experienced by users and members of these communities. Mick and Fournier (1998) suggest that in these negative and uncertain situations consumers employ coping strategies, some of which have anti-consumption characteristics, such as avoidance and distancing. These strategies allow consumers to negotiate their feelings of dislike, resistance and resentment (Zavestoski 2002). Within our research, we witnessed similar instances of complex and coexistent emotions specifically in relation to Facebook. Because of Facebook's ubiquity consumers considered avoidance impossible and so employed various forms of consumption restriction beyond distancing. The following section situates restriction within the broader framework of anti-consumption.

**Conceptualizing Anti-Consumption.** Broadly anti-consumption can be understood as a means against consumption (Zavestoski 2002; Lee, Fernandez, and Hyman 2009) which can manifest itself as both an attitude and an activity or behaviour (Cherrier 2009; Hogg, Banister, and Stephenson 2009). Anti-consumption can be oriented at the macro level and include discourses of dislike and acts of opposition to consumption in general or at the micro level where it is directed to particular consumption activities, products or brands (Cherrier, Black, and Lee 2011; Craig-Lees 2006). This distinction is present within Iyer and Muncy's (2009) typology of anti-consumption which distinguishes between ‘general’ (against all consumption) and ‘specific’ (individual brands and products) as the objects of anti-consumption, and ‘societal concerns’ and ‘personal concerns’ as the purpose of anti-consumption. According to Cherrier, Black, and Lee (2011) self-interested and socio-environmental concerns relate to a consumer's subjectivity and their desire of self-expression. This perspective is particularly relevant to social networking sites which do not correspond to any grand narrative of anti-consumption. Instead, anti-consumption of social networking sites reflects greater consumer subjectivity and personal choice. As such, considering consumer's anti-consumption from the micro lens allows us to consider individual choice. Contributing to this perspective, Cherrier, Black, and Lee (2011) introduce the concept of intentional non-consumption. This can be understood as both an act of resistance against other careless consumers and anti-consumption positioned by the consumer's own subjectivity.

Lee et al. (2011) categorise anti-consumption into three types; *reject*, *restrict* and *reclaim*. These three phenomena are non-exclusive and can overlap within consumption practices. Rejection occurs when consumers intentionally avoid or exclude certain products

from their consumption habits. The concept of rejection has amassed much research from boycotting behaviours to brand avoidance (see Lee, Fernandez, and Hyman 2009; Friedman 1999). In comparison to more visible displays of anti-consumption, rejection has been described as passive because it "involves products not purchased; services not accessed; and brands not chosen" (Hogg, Banister, and Stephenson 2009, 156). In relation to symbolic anti-consumption, Hogg, Banister, and Stephenson (2009) found aversion as an affective element would precede the behaviours of avoidance and abandonment. Iyer and Muncy's (2009) typology of anti-consumers focuses upon rejection, such as rejection of brands perceived as contributing to societal or environmental problems.

Reclaiming consumption occurs at the ideological level where consumers through their practices actively alter the normal consumption cycle of acquisition, use and disposal, for example by growing their own produce or upcycling products. Hunter and Hoffmann (2013, 219) offer a recent example in their investigation of carrotmobs, who reward pro-environmental behaviour and "reclaim social and ecological responsibility from companies instead of rejecting or restricting their own consumption patterns."

Finally restricting consumption can occur when consumers reduce or lower their consumption of certain products. According to Lee et al. (2011) the reduction of certain consumption acts occurs when full rejection is not possible, such as consuming utility services. However, in comparison with rejection and reclamation, restriction has been less well researched. We argue that there is a need to better deconstruct the concept of restriction.

Importantly, Lee et al. (2011) claim anti-consumption (acts of rejection, restriction, reclamation) can overlap with consumer resistance (opposing an organisation's products, practices and partnerships). Resistance to consumption (particular or general) can be understood as an active manifestation of anti-consumption (Garcia-Bardida, Nau, and Rémy 2011). Consumer resistance is distinguished from other anti-consumption elements by opposition against the power of institutions (Penaloza and Price 1993). It has been suggested that anti-consumption attends to consumption issues whereas consumer resistance focuses upon power issues (Lee et al. 2011). As such, the blending space between anti-consumption and consumer resistance opens up the opportunity to explore consumer's consumption acts and discourses which are shaped by multiple, yet distinct consumption and power concerns. Supported by Cherrier, Black, and Lee (2011) who propose the intersection of consumer resistance and anti-consumption provides greater understanding to empirical phenomenon.

## METHODS

The findings within this paper form part of a larger project concerning the consumption of social networking sites, specifically Facebook. Anti-consumption discourses and behaviours appeared as an emergent theme. This research was informed by interpretivism and used ethnographic interviews of 15 participants (aged 19-26). This demographic was selected as they are amongst the heaviest users of social networking sites and have grown-up using it since the mid-1990s (Ellison et al. 2011). As the findings emerged from a larger study participants were not selected based on their anti-consumption behaviours.

This located conversational approach to interviewing allows the researcher to gain richer understanding of consumer experiences (Sharman Heyl 2008; Holt 1997). Due to the mobile nature of social networking site consumption interviews were conducted in participants' homes, public places, restaurants and cafes. Interviews were recorded and transcribed in full. To prompt reflection upon their

consumption practices participants were asked to display their own social networking pages (e.g. Facebook Timeline) using a laptop, tablet or smartphone device. These pages were used as an elicitation method following Heisley and Levy's (1991) account of 'autodriving' which can stimulate underlying responses and helps participants convey richer meaning. Following interview guidelines from Holt (1997) participants were encouraged to give rich descriptions of their consumption practices by recalling previous uses of social networking sites, share stories about experiences. This approach allowed participants to think deeply about their consumption practices and how it affected their lives.

The data was analysed using Stern's (1996) guidelines for deconstructive analysis. This method focuses upon revealing contradictions within texts (Derrida 1982). As such, it was particularly useful for pulling-apart the paradoxical and dichotomous assumptions which were previously imposed upon technology consumption. A close reading of each text was undertaken (Stern 1996) followed by a structuralist reading to expose recurring patterns. Finally, deconstructive stage sought multiple meanings within participants' complex narratives. This used Derrida's conceptualisation of *différance* which focuses on revealing plurality and acknowledging contradictions (Stern 1996). As such, reading for *différance* allowed the multiple meanings of anti-consumption to surface and be explored.

## FINDINGS

Findings begin by exploring the mixed emotions our respondents exhibited towards Facebook consumption and then discuss the forms of restriction they employed.

*Consuming Facebook: Love/Hate.* For all participants, the consumption of Facebook was revealed as central to everyday life so much so that it becomes "daily routine" and "second nature", characteristics of mundane consumption (Gronow and Warde 2001). This is demonstrated by Kate, a 24 year old student, who did not consider herself a heavy user but admitted checking Facebook throughout the day:

*Kate: I check it a lot every day. I think it is becoming a bit of a habit, whenever I'm bored or if I haven't been on it for a couple of hours. I will check mine multiple times a day. It is hard to put a number on it. Like at least 20 times a day. If not every hour then every couple of hours. I generally try to have read everything on the newsfeed. So I will go down until I think I have seen that before and then I stop.*

Other participants made similar comments in relation to regular daily checking of the site. The ability to connect with friends, keep up-to-date with social happenings and centralise communication in groups were viewed as the main drivers for continued consumption. These hourly, daily, weekly routines are means of consumers negotiating and enacting group belonging through their practices (Cronin, McCarthy, and Collins 2014).

However, alongside discussion on the perceived communication and social benefits of Facebook, participants would simultaneously comment on how much they disliked their behaviour, variously referred to as "tragic", "sad" or "horrible." The mixed feelings towards technology that were evident in Mick and Fournier's (1998) research are therefore equally relevant within the social networking era. Although many of our participants questioned their consumption behaviour, none of them had ever deleted Facebook or fully rejected it. Jack, a 23 year old student, came the closest to deleting his profile however he remained active on Facebook from 9am to 5pm most days.



*Jack: I regularly weigh up just to get rid of Facebook. [...] I hate how I use it. [...] I have such a disdain for it that I wonder why I am even on it. [...] If you choose not to exist on Facebook, everyone always says "Aw but you can't communicate with other people!" But yes you can. It is not that hard. And I find that I have actually a great deal of respect for the people who do [delete Facebook].*

While it is possible to reject Facebook, for Jack he chose to participate despite his antipathy for Facebook consumption. Along with other participants, Facebook consumption had become so mundane and embedded within daily lives they would not consider deleting it however strong their negative affective response. It stresses the importance of consumer subjectivity within anti-consumption (Cherrier, Black, and Lee 2011) as consumers choose their own position along the consumption to anti-consumption continuum. Our findings therefore support the idea that Facebook is a form of normative consumer behaviour. Much like Cherrier and Gurrieri's (2012) study of alcohol abstinence, we suggest that cultural barriers prevent total Facebook rejection. As a compromise, our participants engaged in various restrictions which we now discuss.

*Restricting Facebook Consumption.* We recognise that instances of anti-consumption are not always driven by motivations that are against consumption (Chatzidakis and Lee 2013). Within our data we found examples of restricted Facebook consumption explained in terms of age (those who used Facebook less as they got older) or substitution (participants who had switched to alternative social networking sites). However, here we focus specifically on participants who translated their dislike of Facebook consumption into actively restricting how they use the site.

*Self-imposed Barriers: Reducing and Replacing.* Our findings reveal that participants used a variety of self-imposed barriers to facilitate the restriction of Facebook consumption. Having been a heavy user of Facebook in the past, Wendy replaced her morning routine of checking Facebook before getting out of bed with checking news websites.

*Wendy: I actually downloaded SkyNews as an app so I've something more productive in the morning. So now I have started looking at the news to save me going on Facebook. I'm trying to go on other things like SkyNews and Groupon to see if there are any offers on! And then I'm like "Oh 10 minutes up I need to get out of bed can't check Facebook!"*

Wendy also actively restricted her Facebook consumption by putting her phone on silent until she arrived home from work. It is important to note Wendy is not rejecting Facebook as she uses the site every evening to check notifications and communicate with friends. Instead she restricts her consumption and replaces Facebook with other "more productive" media sites. A further example of a self-imposed barrier was given by Megan, a 23 year old amateur dramatics co-ordinator, who actively restricted her Facebook consumption by not buying an internet enabled phone. Instead Megan would continue her Facebook consumption by visiting the site each night on her laptop. Like Wendy, Megan has created a practical strategy which allows her to limit the amount of time spent of Facebook whilst continuing to consume Facebook in a restricted fashion. In earlier research Mick and Fournier (1998) termed similar behaviours 'coping strategies' where consumers would create practices in order to mediate their paradoxical feelings towards technology consumption. However, the strategies devised by Facebook consumers should not be understood as affective coping strategies, but instead should be viewed for their practical utility at the functional level.

*Social restrictions: Deleting and Withholding.* Our findings also revealed instances of restriction when participants would limit their online visibility in order to regain control over their projected selves. This relates to the concept of intentional anti-consumption where acts against consumption are directed towards other 'careless' consumers (Cherrier, Black, and Lee 2011). Participants viewed 'over-posting' as 'careless' and disliked behaviour. In response to such behaviour, participants would delete friends, erase comments and 'de-tag' themselves from photographs in order to reduce the amount of information other 'friend' connections could see:

*Kate: I have often thought I need to clear out some friends. A few weeks ago I did actually delete a few people. [...] It is more about me not wanting them to see what is going on in my life. [...] Like there is the odd horrible picture that crops up and you think oh my God why did someone feel the need to put this up? I have seen me untag from pictures that I really don't want people to see.*

For Kate, reducing the amount of people who can see information regarding her personal life, and restricting what information gets posted on Facebook allows her a degree of control over her identity. Other participants admitted concealing their birth date from Facebook to stop annual congratulations, and posting profile pictures late at night to avoid catching the attention of other users. As such, this type of restrictive behaviour allows consumers to minimize their presence and reduce their online footprint.

Interestingly, other participants actively restricted what they shared online, thereby going against the cultural norm (Cherrier and Gurrieri 2012) associated with Facebook. This is demonstrated by Jack who decided not to post his degree results on Facebook:

*Researcher: Did you put your exam results up?*

*Jack: No. Yet again I've been doubly devious about it because by not engaging in that I am critiquing that. I am above it apparently. But I mean I see what everyone is doing because I am on Facebook. So I am essentially looking and not telling. You could argue which one is worse. I'm not sure. [...] But in reality I am still looking at it all. I am still part of the circle so I really don't have any right to that criticism. So perhaps it should be either do it and engage with it or don't do it and don't engage. [...] I am a hypocrite.*

As expressed earlier, Jack considered deactivating his Facebook account, but chose not to discontinue his heavy use of the site. For Jack, limiting his actual participation on Facebook (posting, commenting, and uploading) allows him to anti-consume whilst still checking it daily, even if he remains unsettled by his consumption behaviour (*I am a hypocrite*). Withholding behaviour provides us with a nuanced form of restrictive anti-consumption which limits the expansion of social relations, deemed as central to Facebook.

*Institutional Restriction: Concealing and Disguising.* Findings reveal that another driver of restriction is against the commercial forces of Facebook and other data collecting corporations, indicative of the blending between anti-consumption and resistance suggested by Lee et al. (2011). Some participants believed their Facebook profiles were viewed by corporations as "marketing data". These concerns had prompted them to restrict and remove the majority of their personal information from Facebook by deleting and de-tagging:

*Martin: Yeah mine is completely locked down. The threat nowadays is probably more relevant to what it has been in the past.*

[...] That is one of the kind of flaws that not everyone understands how open their information is... Folk can abuse it and they do.

Jack: I don't have where I work. I don't have my current city. I don't like...that is maybe a minor quibble. I don't like that Facebook knows things about me.

Many participants shared similar concerns about how companies could manipulate their personal information. Some had even considered adopting pseudonyms to protect their identity from corporations, an adaptation they believed would enable them to continue using the site whilst simultaneously consuming against wider forces. Such restrictions could be viewed as resistant and efforts to reduce the power of institutions (Penaloza and Price 1993).

## CONCLUSIONS

Although it is recognised that anti-consumption can be classified in multiple ways (Lee et al. 2011), understanding of restriction as a form of anti-consumption remains limited. Lee et al. (2011) suggest that restriction involves "cutting, lowering and limiting consumption when complete anti-consumption is not possible." This definition implies that restriction is a compromised form of anti-consumption that is only enacted if a more extreme manifestation is unachievable. Our findings suggest that motivations driving restriction are not always as straightforward as this definition implies. While Facebook can be considered as a form of mundane consumption (Holtinen 2014) it remains a context within which "complete anti-consumption" is possible. If so desired, consumers could completely avoid or reject Facebook. Although it is embedded within our participants' daily lives, they do not depend on its consumption to survive and in this respect it is far removed from the examples of "restricting electricity and water use" offered by Lee et al. (2011). Rather it is the affective and cultural aspects of mundane consumption (Cronin, McCarthy, and Collins 2014) which act as barriers (Cherrier and Gurrieri 2012) to total Facebook rejection such that rejecting Facebook completely would be a personal, social and cultural sacrifice. Hunter and Hoffman (2013) concluded that an unwillingness to make sacrifices often discourages engagement in pro-environmental behaviour. We suggest that avoidance of sacrifice is not solely limited to the ecological context but may also be applicable to other forms of anti-consumption.

Exploring mundane consumption allows a more nuanced insight (Ulver-Sneistrup, Askegaard, and Kristensen 2011) into restriction and shows how consumers adapt their pattern of consumption by creating their own self-imposed barriers, such as reducing their consumption or replacing traditional routines with new ones, withholding and concealing information from other consumers and resisting the power of institutions. We suggest that previous contributions in relation to rejection and reclamation may be extended to restriction. First our consumers exhibit characteristics of Iyer and Muncy's (2009) anti-loyal consumer (resistance to a brand (Facebook) that is driven from personal concerns). Previous research focused upon such consumers' rejection behaviour. We demonstrate that a combination of specific brand and personal concerns can also lead to restriction. Second in relation to reclamation, Fernandez, Brittain, and Bennett (2011) suggest that consumers use a variety of coping strategies to negotiate the tensions between their anti-consumption ideologies and the fact that they rely upon consumption to survive. We suggest that a similar negotiation is evident with reference to restriction: restricting consumption allows anti-consumption discourses to co-exist alongside continued consumption. We finally suggest that the definition of restriction needs to be broader: "cutting, lowering

and limiting consumption when complete anti-consumption is either not possible or not desired." Future research should further explore the implications of this broader understanding of restriction across a range of consumption contexts.

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TABLE OF FINDINGS

Forms of Restriction	Description	Participant Data
Self-imposed Barriers: Reducing and Replacing	Participants use a variety of self-imposed barriers to facilitate the restriction of Facebook consumption. These range from consciously reducing their participation on Facebook, to replacing Facebook with other activities.	Sarah: Sometimes I sit there [on Facebook] thinking “God...like...stop”. I’ll get out of bed and just take a wee walk around and start tidying things up, doing things that I am supposed to be doing.. [...] For me, when I’m not using it I’m like “Oh my God”. When my phone is dead and I’m out it is actually a nice feeling. It’s like I’ve got no one to contact me because no one can and you are a bit freer in a way. [...] I like leaving my phone at home.
Social restrictions: Deleting and Withholding	Participants limit their online visibility in order to regain control over their projected selves. This includes withholding information within their online posts, deleting contacts or information posted by others.	Martin: The whole tagging situation now, you can actually de-tag which is a good feature. Have I done it? Yeah I have. For the exact same reason as everyone is would. [...] I don’t think I take very good pictures. No seriously, I am not that kind of camera friendly person. [...] If there is a picture I don’t like...then I’ll de-tag myself.
Institutional Restriction: Concealing and Disguising	Participants restrict their online footprint as an act against the commercial forces of Facebook and other data collecting companies. Concealing and disguising their identities achieves this form of institutional restriction.	Zara: You have to be really careful about what you put on [your profile]. We talked earlier about that program about people being employed to search Facebook and Twitter for marketing purposes. For supply and demand of products. So I think social media is used by, you don’t realise it is used by companies. [...] Actually anything you put online you have to make sure you are happy with pretty much everyone seeing it. [...] You can optimize things to make them private but then I think nothing is 100% secure. People can always hack into places. So I have my account, well I think to the best of knowledge, it is set to private, all my pictures are private. Jack: Facebook is interesting. On Facebook you are just a little, you are just a number to Facebook. All you are is just marketing information that they can sell on. Which again is why this sort of, which is why it built the way and why it encourages people to use it the way it does. Again this sort of, oh you should like things, you should attach things to your self image that is just marketing data.

## 50 Shades of Grey: Ancestral Consumption and Conceptual Compromise

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### ABSTRACT

*I am as free as nature first made man,  
Ere the base laws of servitude began,  
When wild in woods the noble savage ran.*

John Dryden (1672), "The Conquest of Grenada"

Christopher McDougall's *Born To Run* spawned tremendous interest in barefoot running. Told against the backstory of the legendary Tarahumara tribe of barefoot runners from Mexico's Copper Canyon, a central theme of the book is that modern running shoes are harmful (or at best, superfluous) instruments, sold to us by an unscrupulous shoe industry, standing in the way of happy, healthy and biomechanically-correct running. Eschewing shoes in favor of bare feet is presented as the path to running nirvana, yet in the years following *Born to Run's* publication (2009) the running shoe industry grew explosively, fueled in large part by a massive increase in so-called barefoot running shoes. Consumers interested in running without shoes began buying running shoes more frequently than ever before (Austin 2013).

The reverberations of *Born to Run* illuminate a consumer phenomenon we refer to as *ancestral consumption*, defined as the intentional engagement in behaviors aimed at approximating one's ideal, natural self (alternately referred to as seeking the *ancestral self*). The purpose of this research is to illuminate the concept of ancestral consumption and to propose a conceptual model detailing its motivations and hypothesized processes. Ancestral consumers view many mainstream technological advancements as unnatural, and possibly detrimental to both physical and mental health. They therefore attempt to revert to apparently more authentic forms of consumption, yet the concept of authenticity is so loosely defined and individually malleable that it has become mythical (Brown et al. 2013). Consider, for example, the proliferation of ancestral dietary advice in recent years. The popular Paleo diet (aka the Caveman diet) claims to be "the original human diet" (Wolff & Cordain 2010). At the same time, food writer and activist Michael Pollan instructs his readers to avoid "anything your great grandmother wouldn't recognize as food" (Pollan 2008, 149). Though both of these diet prescriptions reference the past, the temporal gap between the caveman and any current living person's grandmother is enormous. In spite of this gap, however, both ideals from the past appear pure and authentic when compared to modern industrialized food.

The construct of ancestral consumption and its relationship with authenticity have very loose borders, since they emanate from consumers' perceptions. In this research, we consider ancestral consumption to be anything that consumers determine more authentic, real, or closer to a mythical standard of idealized human existence. The marketplace is filled with examples of this phenomenon, including religious practices, such as Shamanism and sweat-lodging, home birthing, bow hunting, truffle hunting, urban foraging, home brewing, knitting, hiking, fishing and camping. The knowledge and understanding driving ancestral consumption ranges from naïve to sophisticated. Consumers might have a romanticized, wholly inaccurate view of "the way things (never) used to be" – indeed, ancestral consumers often gloss over the fact that conditions in the past frequently included maternal and infant mortality, infectious diseases, malnutrition, backbreaking physical labor, unchecked racism, sex-

ism, and religious intolerance – or they might have scientific, ethical, and/or political motivations for choosing to consume in a more "old fashioned" way. The drivers for ancestral consumption decisions are cognitive, affective, emotional, or symbolic, or some combination thereof. In short, different motivations can lead to identical behavioral outcomes.

Yet one of the most curious aspects of ancestral consumption is its grounding within the boundaries of the contemporary marketplace. Ancestral consumers might find aspects of modern life objectionable, but rather than rejecting them outright, seek to integrate what they perceive as authenticity into their everyday consumption behaviors. Aspiring to a mythical standard of authenticity while simultaneously operating within the conventions of modern economic hegemony (Beverland & Farrelly 2010) gives rise to the paradox at the heart of ancestral consumption, a process we term *conceptual compromise*. In the case of ancestral consumption, there is conflict between the mythical and the attainable. Much of this tension arises from the often overwhelming stream of information consumers receive from marketers, self-help gurus, popular media, friends and family, salespeople, other consumers, academics, bloggers, and more. In this environment, attempting the optimal decision can become a murky estimation. Furthermore, physical reality often intrudes on people's best-laid plans. For example, runners who seek the authenticity of unshod running typically wear shoes specifically designed (and marketed) to approximate running barefoot, simply because actually running without shoes is too uncomfortable. In general, Western consumers are savvy enough to recognize that ancestral products are not entirely untainted by modernity, yet consume them nonetheless – hence, engaging in conceptual compromise.

Research on consumers' interest in extraordinary experiences (e.g., Arnould & Price 1993, Celsi, Rose & Leigh 1992, Kozinets 2002, Tumbat & Belk 2011) finds that modern life is tedious, enervating, and repetitive. Consumers seek transformation through hedonic consumption, e.g., skydiving, mountaineering, river rafting, that allows them to feel fully alive (Campbell 1987). Though motivated – in part – by similar dissatisfaction with modern conventions, ancestral consumers seek vitality through hedonic consumption that is *not* extraordinary. Rather, their focal behaviors involve everyday, routine consumption, such as diet and exercise.

Regardless of their motivations, consumers pick and choose which products and industries to avoid in favor of ancestral alternatives. For example, someone might work for a large, multinational corporation, yet consume only organic, heirloom, locally-grown foods. Very few consumers attempt to entirely avoid technological/marketing advances (Austin et al. 2007), lest they completely alienate themselves from the flow of modern life (Dobscha 1998). Given the strictures of modernity, i.e., how bound up people are with markets and technologies, including the poorest people in the world (Pralhad 2010), it is actually quite challenging for consumers to simplify their lives and still take advantage of the health and lifestyle advances of the 20<sup>th</sup> century. Conceptual compromise exists because people want to live "authentically," but only as long as the discomfort authenticity engenders is tolerable.

This conceptual investigation integrates literature from academia and the popular press to examine consumer pursuit of the ancestral self. We focus on ancestral consumers' preference for products and brands that support and reinforce their desire for au-

thenticity, but which simultaneously keep them embedded within Western socioeconomic convention (Brickman & Campbell 1971). We investigate the dimensions of two focal constructs – ancestral consumption and conceptual compromise, explore the tensions between the aspirational and normative aspects of these constructs, and present a conceptual model of decision-making in this domain.

## THEORETICAL AND CONCEPTUAL BACKGROUND

The forces of both modernism and postmodernism contribute to consumers' sense of being unmoored in the marketplace. In the late 19<sup>th</sup> century, modernism ushered in "boundless opportunities for self-transformation" (Kozinets & Handelman 2004, 692), contributing to the dilemma of consumer hyperchoice (Mick, Broniarczyk & Haidt 2004). In the current, postmodern/social media era, empirical information has become fragmented and de-centered, leading consumers to see "truth" as a subjective construct (e.g., Arnould and Thompson 2005, Arias and Acebron 2001, Firat and Venkatesh 1995). When overwhelmed by complexity, consumers typically cherry-pick information to support whatever belief is most desirable or involves the least effort (Tversky & Kahneman 1974, Fiske & Taylor 1991).

Extant research describes Western consumers' tendency to seek stability, authenticity and "realness" through experiences and products that promise a return to a romantic concept of simplicity. Unlike the quest for "primitivism," which has been researched extensively, ancestral consumption does not embrace foreignness as superior to the consumer's native culture (cf. Canniford & Shankar 2007). Nor do ancestral consumers necessarily engage in cultural appropriation of "exotic," "lower" cultures (Canniford & Karababa 2012, Costa 1998) in their pursuit of more authentic lifestyles. Rather, the search for the ancestral self involves looking to a generalized (or even fictionalized) human past that offers simplified guidance for how life "should be," without disrupting how life already is.

A plausible explanation for the popularity of ancestral consumption lies in its mythic nature (Brown et al. 2013), since it accommodates a variety of consumer desires to re-create a past when humans were supposedly happier and healthier than we are now: a time and place where people were not indoors most of the time, largely sedentary, obese, disconnected from their food sources, and interacting more often with screens than with faces. Although mythical, the idea of ancestral consumption is normative, insofar as people believe that it's the way we have evolved, as organisms, to flourish. Ancestral consumers believe that although our built environment has changed radically, we are not so different from the *Homo sapiens* of 30,000 years ago, and should therefore consume accordingly. Hence, the appeal and success of *Born to Run* and similar titles. However, our understanding of how our ancestors lived 30,000 years ago is extremely limited; our understanding how our ancestors lived even 300 years ago is not entirely clear. Therefore, ancestral consumption, while normative on its face, is guesswork, at best. In other words, the ancestral self is a myth.

Previous research has found that myths provide salvation in times of socio-cultural and identity uncertainty (Brown et al. 2013), and acquire widespread popularity because they are both universal and singularizable. Prominent myths take hold in the public psyche because they have broad appeal, yet are vague enough to allow each individual to derive his or her own understanding of what the myth means. The mythology underlying ancestral consumption addresses consumers' unarticulated fears (Brown et al. 2013) in this case, their health and well being, and the confusing nature of an asymmetrical, technocentric, modern marketplace. ("Are my choices causing me more harm than good? How do we really know what's best? The science is always changing.") For many consumers, ancestral con-

sumption represents an unconscious flight from complexity (Simon 1957), and finding a simple and actionable coping strategy for such vexing questions is a source of relief for consumers, even if it's built on a myth.

As a mythical concept, the ancestral self is amorphous, closely linked with the *zeitgeist*, and therefore easily shaped, promoted and manipulated by marketers. (Consider the impact of *Born to Run* on consumers and the market, from supply chains through point of sale.) The fact that the ancestral self is a moving target, susceptible to market forces, means that the reality of pursuing it is far from simple, and not necessarily beneficial to the consumer. Given that people seeking ancestral products and experiences are not typically interested in fundamentally altering their consumption patterns, i.e., consuming less and disengage from modern economic structures, the ancestral consumer is for sale.

This has powerful implications for marketers. The paradox of "barefoot running shoes" is a case in point. In theory, barefoot running should simplify the act of running, and require less time, effort, and money than conventional running. In fact, the popularity of *Born to Run* sparked enormous consumer interest in specialized shoes. Consumers intrigued with the idea of running barefoot ironically began to believe that they needed *more* shoes in order to run "better," e.g. more efficiently, faster, with fewer injuries (Austin 2013). This effect has been so powerful that even dilettante runners are now likely to have a wardrobe of differentiated shoes.

The notion that one needs to purchase additional equipment in order to run "barefoot" highlights the contradictions and compromises central to ancestral consumption. Ancestral consumers are not necessarily voluntary simplifiers (Gregg 1936), consumer rebels (Dobscha & Ozanne 2001), or activists (Kozinets & Handelman 2004) – previously studied populations with superficial similarities to ancestral consumers. Rather, ancestral consumers pursue "authenticity" without challenging or venturing beyond the normative structure of accepted/acceptable market exchanges. As Daniel Lieberman writes in *The Story of the Human Body*, "advocates of primal lifestyles are not advocating that you quit your job, move to the Kalahari Desert, and abandon all the best conveniences of modern life such as toilets, cars, and the Internet (which is essential to blog about your Stone Age experiences to other similarly minded folks)" (Lieberman 2013, 7).

Blogging aside, most manifestations of ancestral consumption are individualistic, in both philosophical orientation and in practice (Christopher & Hickinbottom 2008). This is a significant departure from other forms of alternative consumption documented in prior research, which tend to be community - or ecosystem - oriented. For example, in his examination of "consumer emancipation," Kozinets (2002) finds that consumers at the annual Burning Man celebration seek *authentic community* with their fellow participants and often carry the lessons they learn back to their "regular" lives. Dobscha and Ozanne (2001) interview environmentally focused subjects whose everyday choices reflect their desires to protect themselves, their community, and the natural environment from as many environmental adulterants as possible. Sandikci and Ger's (2010) female Turkish subjects seek a simple guiding principle that "provides a solution to the macro and micro anxieties of the modern world" (24). On the surface, these sentiments echo the desires of ancestral consumers, yet all these behaviors result in the formation of new communities. Ancestral consumers appear largely unconcerned with the community implications of their consumption. They are not hostile toward their fellow travelers (cf. Tumbat & Belk 2011), they simply co-exist. Those who socialize and exchange information related to their behavioral choices and associated conceptual compro-

mises (e.g., bloggers) could be considered a community of practice (Wenger 2011), but they are generally not cohesive enough form a brand community (Muniz & O’Guinn 2001).

Although building community is not a priority for ancestral consumers, the motivation to engage in ancestral behavior is not completely intrinsic. Promotional messages associated with this phenomenon are often based on socially oriented intrinsic motivations (Nicholls 1984), i.e., building a community of individuals. For example, Vibram, a dominant player in the barefoot running market, is currently running a “What’s Your Story?” campaign, leveraging the notoriously eccentric Olympic skier Bode Miller to champion the notion of “carving [your] own path” (Vibram 2014). This appeal is in line with optimal distinctiveness theory, which holds that consumers cultivate “optimal identities” by balancing their need for uniqueness and need for affiliation (Brewer, 1991, 2003; Sheldon & Bettencourt, 2002). In general, the factors driving ancestral consumption appear to favor individualism over collectivism, while couching the appeal of the behavior in terminology that is non-threatening to modern market structures.

### METHODOLOGY AND MODEL

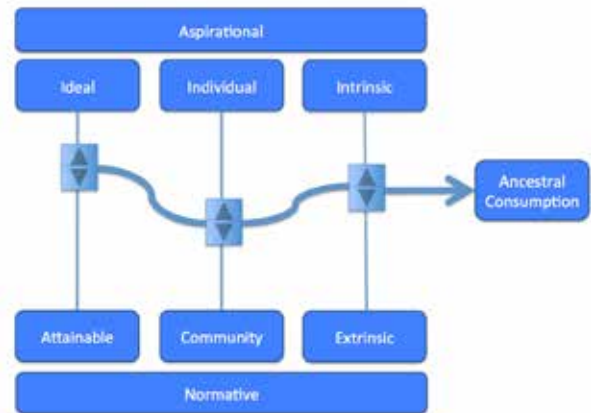
The objective of this research is not only the descriptive illumination of ancestral consumption and conceptual compromise, but also the development of a conceptual model delineating potential drivers of these consumer behaviors. Throughout the model development process, we were particularly interested in the apparent or implied contradictions at play in consumers’ pursuit of ancestral consumption. These contradictions, and how consumers resolve them, are the basis for our realization that consumer compromise and ancestral consumption are inextricably linked.

We derived this model by conducting an iterative analysis (Spiggle 1994) in the constructivist paradigm (Creswell & Miller 2010). Following the protocol modeled in Tumbat & Belk (2011), both authors relied on our personal experience as runners – one as a recreational runner, the other as a competitive ultra-distance runner – to inform the initial conceptual data collection (Creswell & Miller 2010). The concept was not running-specific, and included sources such as popular media, documentary films, blogs and discussion boards, books, consumer booklists on Amazon, and survivalist television shows. Although it would be impossible to ignore our experiences as we engaged in the research process, this is not an auto-ethnography (Holt 2003). On the contrary, to limit first-person analytical bias, we consciously bracketed ourselves out of the analysis, and used qualitative analyses independently generated by a trained student research assistant familiar with the material to help assure the validity of our interpretations (Dreyfuss 1982; Creswell 2007).

Examining and sorting the data, we inductively developed themes related to running in particular, then ancestral consumption and conceptual compromise more generally, that sharpened the focus of our evolving research questions (Spiggle 1994). We used theoretical lenses suggested by related research on hedonic self-seeking behaviors to inform and deepen our ongoing data collection and analysis, generating avenues for future research to test the concepts that were emerging. This inductive process produced an extensive and wide-ranging literature review (e.g., history, philosophy, economics), which further guided development of the major constructs in our model. Using these interpretive methods of data collection and analysis, i.e., “dialectical tacking” (Beverland & Farrelly 2010, 841, Geertz 1975, 52), we thus arrived at the general model of ancestral consumption and conceptual compromise presented here.

FIGURE 1

Figure 1: A Process Model of Conceptual Compromise. Conceptual compromise is the process whereby consumers navigate between aspirational and normative consumption on X number of personally salient factors.



### DISCUSSION AND IMPLICATIONS

One possible explanation for people’s interest in ancestral consumption is the desire to return to a simpler, more natural way of life, yet the majority of consumers show little interest in simplifying their lives more broadly. This apparent contradiction speaks to the tensions and compromises involved in ancestral consumption. Seeking their ancestral selves, consumers run a gauntlet of marketplace dichotomies – compromising all along the way – in search of behaviors to adopt that are satisfactorily “authentic” (cf. Beverland & Farrelly 2010).

Our work extends the research on hedonic consumption, much of which is built upon on a dichotomous paradigm that frames issues around often-weighty consumer choices. Tumbat and Belk (2011), drawing on extant research (e.g., Arnould and Price 1993), explore the domains of “authentic versus commercial, community versus market, nature versus culture, extraordinary versus quotidian, sacred versus profane, liminal versus everyday, and liberating versus constraining” consumption (2011, 44). These dyads, and the consumer culture theory (CCT) work on extraordinary experiences that illuminates them, are invaluable for conceptualizing and understanding the phenomenon of conceptual compromise.

However, we hypothesize that the paired concepts in our proposed compromise model represent endpoints of fluid continuums, rather than dichotomous choices. In other words, conceptual compromise is fluid and idiosyncratic. There are examples of this type of decision-making in the literature as well. Turkish women’s veiling (Sandikci and Ger 2010) is an individual choice that represents a conceptual and behavioral compromise between liberation and constraint. Similarly, shoppers at farmers’ markets (Thompson & Coskuner-Balli 2007) find harmonies between community and market orientations. As they wend their way through modern life, ancestral consumers do not have to choose one side of the model or the other; rather, conceptual compromise rests on the premise of simultaneity. Consumers can decide what shade of grey best fits their individual needs and satisfies their understanding of the ancestral myth.

Conceptual compromise occurs in an environment that is rich with information and opinions – highly informed, and woefully not – and most consumers’ perception of what constitutes the social construct of “authenticity” is filtered through contemporary marketing and media practices (Peterson 2005). For example, for most people, the decision to shop at farmers’ markets occurs not because they grew up on farms themselves (USDA 2002), but because they have

learned – from magazines, word of mouth, online, etc. – that this food is somehow better: better for them, better for the environment, better tasting, better all around. Given that consumers' perception of ancestral consumption is similarly formed by interactions with other people (most of whom aren't scientists or historians), we posit that this construct is largely disconnected from the boundaries of time, space, and physical reality.

However, benefits do exist for ancestral consumers, even under artificial, commercialized conditions such as "extreme" obstacle racing, where they set goals, improve their dietary and exercise habits, feel the satisfaction of accomplishment, and have fun (Widdicombe 2014). Nonetheless, instead of natural consumption, ancestral consumers largely engage in *naturalistic* consumption, thanks to the compromises they make. Therefore, we must consider the strong possibility that "the usurpation of reality by the fake" (Brown et al. 2013, 603) has monetary, psychic, and physical consequences. As Sklair (1995, 504) writes,

*Ordinary so-called 'counter-cultures' are regularly incorporated into the consumer culture and pose little threat. Indeed, by offering both real and illusory variety and choice, they are a source of great strength to the global capitalist system and of personal enrichment for those able to enjoy the abundance of cultural forms undeniably available.*

In other words, their willingness to conceptually compromise makes ancestral consumers susceptible to exploitation in an increasingly complicated marketplace

## CONCLUSION

The primary limitation of this research is its conceptual nature. We do not know how large the phenomenon of ancestral consumption is, nor whether it is particularly Western, or even American (the current primary target market for ancestral consumption), or perhaps even upper-middle class white American – a solution to so-called "First World problems" (Oxford Dictionary 2014). Therefore, future research must include exploring the boundaries of such consumption, what forms it takes across populations, and the diversity of consumer desires in this domain. Additionally, since we have argued that conceptual compromise is a process occurring within individual ancestral consumers, we must also consider differences in this process across various consumer segments. Future work can build on the conceptual framework and model presented here by examining how businesses – perhaps even entire markets – emerge in response to consumer demand for ancestral human experiences. In turn, consumer responses to these market developments, both behavioral and emotional, also merit investigation.

Many consumers believe that modern humans have become domesticated to disastrous effect, and seek to reverse this process and its consequences by pursuing the ancestral self. Ironically, from a historical perspective, "the idea of a self that can determine the good through inward reflection would be incomprehensible to residents of ancient and pre-modern societies" (Christopher & Hickenbottom 2008, 567). In other words, ancestral consumers' motivations and behaviors would be unintelligible to the very types of people they are trying to emulate. Conceptual compromising allows modern, Western consumers to approximate traditional behaviors while essentially ignoring the profound philosophical underpinnings of those behaviors. Irrespective of physiology, diet, training, Westerners will never be able to run like the Tarahumara because they are not Tarahumara (McDougall 2009). Potentially more troubling is the prospect that "for many non-Western folk and indigenous psychologies, the kind of separate sense of self that is taken for granted and promoted in

Western cultures is seen as illusory, limited, and the source of suffering" (Christopher & Hickenbottom 2008, 568). By so strongly linking ancestral consumption and self-determination, consumers who seek enlightenment through these pursuits and behaviors might actually be moving further from it.

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# Can Sustainability be Luxurious? A Mixed-Method Investigation of Implicit and Explicit Attitudes towards Sustainable Luxury Consumption

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## INTRODUCTION<sup>1</sup>

The ecological impact of our day-to-day consumption has been called one of the greatest concerns of modern times (Randers, Meadows, Behrens, & Meadows, 1974; Turner, 2008). Existing research has addressed the issue by focusing on sustainable commoditized products, such as food (e.g. Johnston, Szabo & Rodney, 2011; Verbeke & Viaene, 1999) or cosmetics (Freestone & McGoldrick, 2008; Ngobo, 2011). Despite commodity consumption's much larger market share and environmental impact, the luxury goods market is a major influence on the consumption and production habits of lower-end goods (Kapferer, 2013). Existing studies investigating the issues of sustainability in the luxury industry are scarce, and mainly focus on advertising strategies (cf. Boenigk & Schuchardt, 2013; Steinhart, Ayalon, & Puterman, 2013). Yet many consumer sectors attempt to capitalise on consumers' desire to own luxury goods by mimicking dominant social representations surrounding the luxury sector. A notorious example is 'fast fashion' – low-cost clothing quickly produced in line with luxury trends – which tries to mimic the luxury industry's exclusivity through limited functional life, planned obsolescence, and quick turnaround of production (Fletcher, 2008; Guiltinan, 2009; Joy, Sherry, Ventakesh, Wang, & Chan, 2012).

The luxury-goods market thus fuels the extravagant expenditure and over-production which characterises mass-market consumption, and is in direct opposition of the notion of sustainability. In the present research, we explore the associations between luxury consumption and sustainability, investigating attitudes towards sustainable luxury.

## LITERATURE REVIEW

### Luxury and Sustainability in Socio-Historic Contexts

The social histories of luxury and sustainable consumption indicate a conceptual opposition, suggesting that the juxtaposition of the two concepts may be ill-received by consumers. For instance, Berry (1994), analysing the concept of luxury notes that its inherent values of hedonism, expense, rarity, affluence, and inessentiality mean that it has, particularly in Europe, been historically perceived as a social and moral transgression. To Plato, a luxury-consuming society was an 'unhealthy', 'fevered' polis in contrast to 'healthy' societies that limit themselves to necessities, and Hobbes (1651) argued that man's natural insatiability for luxury leads to violence and anarchy. Weber's (1930) seminal study reveals how these overtones have emerged from Europe's religious history: how Protestantism's reaction against Catholic ostentation gave rise to an enduring social context in which wealth was ethical only when industriously gained and austere used. Luxury was seen as moral and spiritual depravity: 'idolatry of the flesh' and rebellion against the innate social order (Slater, 1997). This legacy shapes views of luxury even today (cf. Hilton, 2004).

Conversely, sustainability's inherent ethically-grounded values of altruism, restraint, and moderation contrast with luxury's inherent hedonism, aestheticism, rarity, affluence, superfluity, and its immoral socio-historical narrative (Carrier & Luetchford, 2012).

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### The Self, Luxury, and Power

Luxury possessions also reflect a particular manifestation of social self. There is a consensus within the literature (Bourdieu, 1984; Douglas & Isherwood, 1996; Veblen, 1899) that luxury consumption is a highly communicative act, signalling status, wealth, class and thus social and economic power (see also, Eastman, Fredenbergwe, Campbell, & Calvert, 1992). Power is commonly conceptualised as the capacity to influence others while resisting external impositions of influence (Hogg & Vaughan, 1995). Indeed, studies suggest that powerful individuals have a greater capacity to resist external normative influence, making them more likely to behave in socially-unacceptable ways (cf. Brown & Levenson, 1987; Caspi, Lynman, Moffitt, & Silva, 1993; Harnett, 2010; Magee, Gruenfeld, Keltner, & Galinsky, 2005; Xianchi & Fries, 2008). Moreover, there are indications that individuals can also gain status and power by breaking social norms. In four studies, van Kleef, Homan, Finkenauer, Gundemir, and Stamkou (2011) showed that participants perceived individuals violating norms – by, for example, dropping cigarette ash on the floor or taking food from others – as much more powerful than non-norm-violating individuals. The researchers concluded that rule-breaking aids in ascendance of power in others' eyes.

Altogether, these findings suggest that consumers use luxury consumption to enhance status and power, and that this might also result in being more likely to violate social norms related to responsible and sustainable consumption rather than actively engaging with them.

### Sustainable Luxury: Mixed Findings

Although the past two years have seen a few relevant qualitative and quantitative investigations examining consumer attitudes towards sustainable luxury, these have presented a range of inconsistent or contradictory conclusions. Steinhart, et al. (2013) conclude that an environmental claim positively enhanced consumer perceptions of both utilitarian and luxury products through an experiment in which subjects were asked to imagine scenarios in a supermarket setting in which they came across toilet paper (a 'utilitarian' product) or 'fancy napkins' (their example of a luxury) that were either marked with an eco-label or not (see also Boenigk & Schuchardt, 2013). Ducrot-Lochard and Murat (2011) theorised that the luxury industry will logically evolve towards sustainability as luxury customers have extended their high quality expectations to include environmental factors. Additionally, Kapferer (2013) reasoned that luxury already possesses sustainable characteristics, calling it "the business of lasting worth" and durability.

However, other evidence suggests sustainable luxury goods are perceived more negatively, and seen as less desirable, than regular, non-sustainable luxury products. Achabou and Dekhili (2013) presented affluent male and female French participants with labels for luxury Hermès-branded shirts, some of which were described as containing recycled material. A significant negative correlation was found between the perception of the product and the presence of recycled fibres. Also, a brand's environmental commitment was the least important selection criterion in luxury purchasing decisions (with quality, price, and brand reputation the most considered; see also Joy et al., 2012). Similarly, Davies, Lee, and Ahonkai (2012) found that consumers considered sustainability and ethics much less in their luxury consumption decision-making process than in their commodity consumption decisions, although luxuries were perceived as relatively more sustainable

when compared with commodity products. Participants also perceived luxury goods as having a lesser impact on the ethical image portrayed to peers, and thus fewer social consequences.

## **A MIXED-METHOD APPROACH TO THE STUDY OF SUSTAINABLE LUXURY**

The present research offers a mixed-method approach to the study of sustainable luxury consumption. Consumers' attitudes towards sustainable luxury consumption were explored using implicit (studies 1 and 2) and explicit attitudes measures (study 3). The notion of sustainable luxury was further explored using a focus group (study 4). The combination of quantitative and qualitative methods addresses recent calls for mixed-method research (Peracchio, Luce, & McGill, 2014), and was used as a triangulation tool to further understand the basis upon which consumers attitudes towards sustainable luxury goods are held. As previous research (e.g. Davies et al., 2012) has observed that men have a higher degree of ambivalence towards luxury consumption, only women were included in these studies.

### **STUDY 1: IMPLICIT ATTITUDES TOWARDS SUSTAINABLE LUXURY**

The purpose of the first study was to test the hypothesis H1 that consumers will more readily associate luxury with unsustainability than with sustainability.

#### *Method*

Implicit attitudes towards sustainable luxury consumption were examined using the Go/No-Go Association Task (Nosek, & Banaji, 2001). The test investigates implicit attitudes by assessing the strength of a participant's automatic associations between mental representations by measuring response latencies in sorting words into categories. Faster responses indicate easier pairings and thus stronger implicit associations than slower or inaccurate responses. In this study the object category 'luxury' was paired with the attribute categories 'sustainable' vs. 'unsustainable' to study participants' associations of luxury and sustainability. 31 women were surveyed in a pre-test, to collate text stimuli for the attribute categories 'sustainable' and 'unsustainable'. These participants wrote down as many words associated with 'sustainable' that they could in 90 seconds (e.g. green, eco-friendly...). 31 additional women aged 16-51 (M=31.16, SD =10.59) took part in the subsequent Go/No-Go association task.

#### *Results*

Subjects' scores showed a greater sensitivity to the pairing of luxury brands and words associated with unsustainability (, ) than for the pairing of 'luxury' + 'sustainability' (, ). A t-test revealed a statistically significant difference between consumers associations of luxury and unsustainability, compared with luxury and sustainability (, Table 1 summarizes the results.

### **STUDY 2: IMPLICIT ATTITUDES TOWARDS SUSTAINABLE LUXURY VS. COMMODITY**

The purpose of study 2 was to further explore implicit attitudes towards sustainable luxury goods, by adding commodity consumption products as a context. Davies et al. (2012) suggest that a context of commodity consumption induces consumers to perceive luxury products as comparatively more sustainable. Study 2 therefore tested the hypothesis H2 that, when high-street brands are added as a context, luxury brands would not be associated with unsustainability.

#### *Method*

Procedures were similar to study 1, with the exception that the object categories 'luxury' vs. 'high-street' were paired with attribute categories 'sustainable' vs. 'unsustainable' to test whether a change in

context affects implicit attitudes. The words for the category 'luxury' (Céline, Gucci...) were the top 18 brands from the World Luxury Index Report (2012). Eighteen well-known women's high-street brands were chosen for the 'high-street' category (Marks & Spencer, Primark...), as no equivalent report was found. Well-known mid to low-price point brands were chosen to prevent any overlap with the 'luxury' brand category. 21 women aged 22-61 (M=31.43, SD =12.41) took part in the study.

#### *Results*

No effect of pairing direction was found in Study 2, supporting hypothesis H2 that participants would not associate luxury with unsustainability against a context of high-street brands. Table 1 summarises the results.

### **STUDY 3: THE EFFECT OF A SUSTAINABLE LABEL OF EXPLICIT ATTITUDES TOWARDS LUXURY GOODS**

The purpose of study 3 was to further explore attitudes towards sustainable luxury by looking at the effect of a sustainable product label on consumers' explicit attitudes towards luxury goods. Study 3 used a within-subject experimental design to test the hypothesis H3 that consumers will find luxury items less luxurious when labelled 'sustainable'.

#### *Method*

41 women aged 17-66 (M=29.87, SD =11.97) took part in the study. Participants taking the survey were shown six pictures of well-known luxury handbags, in randomised order, as visual stimuli. Each bag was accompanied by a short standardised description giving the bag's name and brand. Three bags were randomly labelled 'sustainable versions' by a computer, with the remaining three left unlabelled. This label was left non-specific – not clarifying what was meant by 'sustainable', as it was desired that the results give a general attitude towards sustainable luxury consumption, and providing greater detail would have limited the results' scope. Participants were then asked whether they liked each bag, how much they believed each bag to cost, how much they would pay to own each bag, and ranked how luxurious, how desirable, and how sustainable they found each bag out of 100. Each bag had a specified £1000 price range to anchor estimations of cost and ensure that they were comparable across participants (ranging from £1000-£2000 to £3500-£4500). Finally, participant's self-perceived power was measured on a 7-point scale using a measure adapted from Smith, Wigboldus, and Dijksterhuis (2008). Scores of luxury, desirability, and sustainability were normalised within participants to control for subjects' individual sensitivity to these concepts: for example, all the bags may have seemed highly luxurious to one participant, but mundane to another. To obtain this normalised ranking, each score was compared to that subject's average score across each category.

#### *Results*

A manipulation check confirmed that participants ranked bags labelled sustainable as 6.94 percentage points more sustainable than unlabelled bags (, ). Controlling for participants' own assessments of bags' sustainability, bags labelled sustainable were ranked on average 4.87 percentage points less luxurious than bags without such a label (, supporting hypothesis H3, that subjects would deem luxury items less luxurious when labelled sustainable. Sustainability labels did not affect bags' desirability. Additionally, although subjects rated a bag more luxurious when they were told that its price range was higher (with a £1000 increase in price range corresponding to a 4.74-point increase in luxury scores; ), price had the opposite effect on assessments of

**Table 1: Summary of the Quantitative Studies (1-3)**

Study 1 – Participants' Mean Sensitivity ( $d'$ ) and Standard Deviations for GNAT Conditions in which Luxury Words Are Paired with Words Associated with Sustainability and Unsustainability					
		Luxury + Sustainability		Luxury + Unsustainability	
Mean Sensitivity [ $\bar{d}'$ ]		1.51		1.68	
(SD)		(.92)		(.90)	
Study 2 – Participants' Mean Sensitivity ( $d'$ ) and Standard Deviations for GNAT Conditions in which Luxury Is Paired with Sustainability and High-Street with Unsustainability, and Vice Versa					
		Luxury + Sustainability & High-Street + Unsustainability		Luxury + Unsustainability & High-Street + Sustainability	
Mean Sensitivity [ $\bar{d}'$ ]		1.38		1.39	
(SD)		(.75)		(.58)	
Study 3 – Coefficients of Regression and Standard Errors for Survey Items					
		Response Variables			
		1	2	3	4
<i>Fixed Variables</i>					
Labelled 'Sustainable'	1.47 (2.11)	6.25 *** (1.94)	-2.99 <sup>a</sup> (2.03)	-.033 (.107)	
Given Price Range (in '000s)	.421 (1.39)	-4.59 *** (1.27)	4.74 *** (1.31)	.197 *** (.069)	
<i>Response Variables</i>					
1. How desirable do you find it?	- <sup>b</sup>	.151 * (.060)	.395 *** (.057)	.007 * (.003)	
2. How sustainable do you find it?	.171 * (.068)	-	.168 * (.066)	.002 (.003)	
3. How luxurious do you find it?	.422 *** (.061)	.159 * (.062)	-	-.002 (.003)	
4. How much would you pay (in '000s)?	2.55 * (1.27)	.688 (1.20)	-.748 (1.23)	-	
<i>Interaction Term <sup>c</sup></i>					
How sustainable do you find it?	-.330 (.390)	-	-.694 * (.312)	3.61 (14.6)	
Self-perceived power	.000 (1.30)	-	.000 (1.04)	104 (48.6)	
How sustainable X Self-perceived power	.179 * (.079)	-	.209 ** (.063)	.665 (2.93)	

*Note.* Coefficients and standard errors are calculated by regressing linearly each of the four columns on the response variable above (1-4), along with responses to 'Do you like it?' and 'What do you think is the price?'. Multiple regressions on variables 'Do you like it' and 'What do you think is the price?' are not reported here as no significant effect of sustainability label, sustainability ranking and luxury ranking emerged from the analysis.

<sup>a</sup> This relationship is significant when 'Labelled Sustainable' is regressed on 'How luxurious...', controlling for 'How sustainable...'. (See text.)

<sup>b</sup> A dash indicates that this variable was excluded from analysis.

<sup>c</sup> These rows were regressed separately on the response variables above.

\*  $p < .05$ . \*\*  $p < .01$ . \*\*\*  $p < .005$ .

sustainability (with the same £1000 increase decreasing sustainability assessments by 4.59 percentage points; see table 1).

Other findings indicated a more complex relationship between luxury and sustainability. For example, sustainability labels or sustainability scores did not affect how much subjects were willing to pay for the bags. There was also a positive association between subjects' own rankings of sustainability and luxury, with a one-point increase in sustainability scores corresponding to a 0.168 increase in luxury rankings. Similar positive relationships were observed between luxury scores and desirability rankings and between sustainability scores and desirability rankings (see Table 1). Furthermore, significant interaction effects of self-perceived power on the relationship between subjects' sustainability ratings and luxury and desirability ratings were found. A one-point increase in subjects' self-perceived power scores increased the coefficient of the relationship between sustainability and luxury scores by 0.209, and increased the coefficient of the relationship between sustainability and desirability scores by 0.179. Therefore, while people with high self-perceived power scores had a strong positive relationship between sustainability and perceived luxury, and between sustainability and desirability scores, these effects decreased in size for people with lower self-perceived power scores (Table 1 summarizes the full results).

#### STUDY 4: A QUALITATIVE PERSPECTIVE ON SUSTAINABLE LUXURY CONSUMPTION

A focus group was used to further probe results from the three previous studies, particularly the contrasting findings on the effect of sustainability labels (whether externally-labelled sustainable, or deemed sustainable by the participant) on luxury ratings. 6 women, aged 21-25, were selected following a purposive heterogeneous sampling procedure, on the basis of including a mixture of regular and infrequent luxury customers with varying interests in sustainable practices. The focus group was transcribed and analysed using thematic analysis (Braun & Clarke, 2006, see figure 1 for thematic networks).

Figure 1: Summary of the Qualitative Study (4): Thematic Networks



#### A perceived incompatibility between sustainability and luxury for luxury consumers.

Participants disagreed with the argument that luxury may already be viewed as intrinsically *sustainable* because of its higher quality and *durability*. Likewise, the conceptual differences between 'sustainability' and 'luxury' and their corresponding divergent social histories were referenced by the group. Luxury consumption's intimate connection with class, status, and social stratification was mentioned 8 times. Conversely, sustainability was spoken of as a social responsibility.

When discussed generally, sustainability and luxury were often implied to be incompatible, with participants apprehensive and uncomfortable when discussing their juxtaposition. Five of the group members opined that luxury shoppers would react negatively to sustainable luxury ("The people who normally buy from Gucci would not be inclined to buy sustainable shoes...I think it takes away the 'special factor' for that market", participant 1). This was also related to the notion of status, with participants implying that sustainable luxury bags do not carry as much status-increasing social capital as non-sustainable luxury bags.

However, when discussing more personal opinions, many group members had positive reactions to sustainable luxury. For example, when asked how she would feel about a sustainable version of a luxury bag she liked, one participant said: "my opinion would change. I would be happier to buy them, but I would say that most of the people don't care." (participant 5). This suggests that individually-held attitudes are more complex than either being positive or negative towards sustainable luxury, and that the results of the Study 1 may indicate perceived wider social belief rather than individual attitudes (cf. Olson & Fazio, 2004).

#### Internal vs. external labels of luxury and sustainability

Communicating status through display of luxury was described in a negative light as something predominantly that others did or that was enforced upon individuals. Participants were averse to being defined by luxury possessions and brand image, and valued luxury purchases when they were a product of internal taste rather than an externally-imposed image. This same pattern – negative perceptions of imposed definitions and positive reactions to internally-derived labels – was replicated in the group's reactions to sustainable luxury. There were 20 separate vocalisations of cynicism towards brands' own labels of sustainability on luxury items, mostly due to expectations of ulterior motives of image or profit enhancement. When discussing sustainable luxury in these terms, the group showed no desire to own it, echoing study 3's result that bags labelled sustainable were ranked less luxurious than those not labelled. However, group members spoke of desiring to own sustainable luxury when this sustainability was premised on an internally-derived belief, mirroring the survey results that if subjects themselves ranked a bag as more sustainable, they would pay more to own it and rated it more luxurious ("I still would consider [a sustainable luxury product] better. If it's sustainable more, then it's better...It has everything I want it to be", participant 3). In both of these cases, attitudes towards luxury and sustainable luxury, participants cast themselves as in tension with and having opposite attitudes to the rest of society.

#### GENERAL DISCUSSION

The present research highlights the complexity of consumers' associations between luxury and sustainability consumption. In Study 1 participants more readily associated luxury with unsustainability than with sustainability. This was not the case when luxury was assessed against a context of high-street brands (Study 2). This latter result supports the findings of Davies, et al. (2012), that con-

sumers considered luxury products more sustainable when assessed against a context of high-street consumption. Additionally, in Study 3, subjects deemed luxury items less desirable and luxurious when labelled sustainable. Likewise, in study 4, focus group members experienced difficulty attempting to associate the two concepts, echoing established socio-historic legacies of sustainability and luxury, and voiced the belief that luxury shoppers would chose a non-sustainable luxury item over a sustainable one, as this would endow the owner more status, social power and prestige.

The present results, however, also paint a more complex picture, pointing to a contrast between internally- and externally-derived labels of luxury and sustainable luxury. In the experimental survey, subjects' own assessments of bags' sustainability were positively associated with desirability and luxury rankings, and how much subjects would pay for the bags. Similarly, when sustainable luxury was discussed from the point of view of participants themselves believing a product to be sustainable, focus group members displayed an individual preference for sustainable luxury goods, a marked difference to the cynicism which externally-imposed labels of sustainability elicited. Often, participants opined that 'everyone else' would have the opposite reaction.

The above definition of power as the ability to assert one's own influence while resisting others' (Hogg & Vaughan, 1995) appears to be an apt description of the phenomenon observed here. The negative reaction to society's impositions upon the individual – whether imposed characterisations based on inadvertent signalling of luxury status, or sustainability labels on goods – can be seen as a desire to resist society's objectification of the self, or external loci of power. Conversely, the privileging of individual taste and internally-derived labels of luxury and sustainability can be seen as a desire to retain and impose one's own power in resistance.

This interpretation of a struggle between external vs. internal *loci* of labels may be seen to be supported by, and might help reconcile, the contradictory extant research which has found both positive and negative reactions to sustainable luxury. Indeed, previous research which has asked participants to *imagine* sustainable luxury items has found positive reactions towards sustainable luxury (e.g. Steinhard et al., 2013), whereas research presenting sustainability claims on labels has found negative reactions (e.g. Achabou & Dekhili, 2013).

## CONCLUSION, LIMITATIONS AND FURTHER RESEARCH

The external validity of the present study is limited to the nature of the sample used (female participants, most of which were students). In addition, the cultural Western individualist context might – at least in part – explain some of the findings, due to the socio-historical and cultural contingency of consumer practice and identities.

The small effect size and large variance from which the results of Study 1 suffered may have been due to the fact that the concepts contrasted in the GNAT were more complicated than those traditionally used in association tests (e.g., 'good/bad' and 'White/Black American') and do not necessarily elicit immediate or automatic reactions. Additionally, subjects were unlikely to have had experience with sustainable luxury goods in the past, and may have had no strong automatic associations to be measured (Bargh, Chaiken, Govender, & Pratto, 1992).

Overall, the present study provided a systematic investigation of attitudes toward sustainable luxury consumption. The apparent complexity of attitudes towards sustainable luxury lent itself well to a mixed-methods approach. From experimental research to consumer culture theory, future research on the topic should combine per-

spectives to account for the complexity of seizing attitudes towards luxury goods. This complexity could be further explored looking at the attitudes of different types of luxury consumers, for instance investigating whether 'patrician' vs. 'poseur' luxury consumers would express different attitudes towards sustainable luxury products (Han, Nunes, & Dreze, 2010). Additionally, a cross-cultural investigation of attitudes towards sustainable luxury consumption might reveal interesting differences between collectivist and individualist cultures.

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Figure 1: Summary of the Qualitative Study (4): Thematic Networks

# Alternative Conceptualizations of the Extended Self

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## ABSTRACT

Belk's (1988) formulation of the extended self is an influential conceptualization of the relation between people and possessions. It has recently been updated (Belk 2013) to include digitally mediated ways of constructing, co-constructing, and expressing self. The updated conceptualization adds brand attachments and virtual possessions to the original specification of possession and person attachments as the foundation for self-extension. But this view of the relationship between the self and the material world is not the only possible view. In this paper I outline alternative formulations that have been proposed for conceptualizing the uses and effects of real and virtual objects in establishing and communicating a sense of self. To keep the task manageable I focus on four alternative conceptualizations and compare them to each other and to the formulation of the extended self by Belk:

1. The Expanded Self (e.g., Aron, Aron, Tudor, and Nelson 1991; Connell and Schau 2013)
2. The Extended Mind (e.g., Clark 2003, 2011; Clark and Chalmers 1998)
3. Multiple Narrative or Dialogic Selves (e.g., Ahuvia 2005; Bahl and Milne 2010)
4. Actor Network Theory (e.g., Callon 1986; Latour 1987, 2005).

These perspectives do not exhaust the alternative possibilities, but are arguably the most fruitful to consider with a focus on implications for consumer behavior. By examining these alternatives we can see what may be added or lost in adopting one of these different perspectives.

In order to save space I will assume familiarity with Belk (1988, 2013), but will bring in elements of this formulation as points of comparison for the other four models. By framing the four comparisons as alternatives I mean to recognize their differences from the extended self formulation, but I do not mean to imply that they are all wholly incompatible with the extended self formulation or each other. As will be seen, none of the five perspectives are simply restatements of each other and each has different implications for researching and understanding our relationship with things.

## 1. The Expanded Self

The formulation by Aron and Aron (1986) was initially proposed as a model of "including other in the self." That is, Aron and Aron proposed that close others such as our mother and close friends are viewed as a part of self. The inclusion of others as part of self is an element that was included in Belk's (1988) formulation as well and both perspectives were developed empirically by having people rate whether certain people were "me" or "not me." However, Belk's extended self also includes material and non-material objects and places as potential parts of self, while Aron, et al. do not. Nevertheless, as Connell and Schau (2013) observe, some consumer researchers have used the Aron and Aron (1986) framework to also include love not only for people, but also for consumer objects incorporated as a part of self (e.g., Ahuvia 2005; Fournier and Mick 1999). They also note that most consumer researchers cite Aron, et al. (1991) as only involving incorporating other people as a part of self. And they also note that when psychologists cite Belk's extended self, they only refer to the inclusion of objects in self rather than people, thus dif-

ferentiating the two approaches based on whether the discussion involves objects or people.

In developing and testing their IOS (Incorporating Other in Self) scale, Aron, Aron, and Smollan (1992) had students identify their closest other. The researchers then represented self and this close other through a Venn diagram composed of two overlapping circles. The subjects were asked to respond to a series of scales pertaining to the diagrammatic representation, including "the degree to which I have expanded myself through being in the relationship with the other person" (p. 608). Reimann and Aron (2009) have recently used the self-expansion model in the realm of consumption by focusing on incorporation of brands within the self, and have developed another scale, Inclusion of the Brand in the Self (IBS). Besides its scale approach, this expansion of the self-expansion model differs from that of the extended self (Belk 1988) by only including abstract brands rather than the singularized possessions that they may become after they leave the marketplace and enter the consumer's life (see Appadarai 1986). In fact Reimann and Aron (2009) posit that the longer the consumer-brand relationship lasts the weaker it becomes (but also that the *brand* is more likely to be seen as a part of self), whereas Belk (1989) contends that for possessions to which we have become attached (e.g., a home, a pet, a wedding ring), the longer the attachment to this specific object, the stronger it becomes.

At a more basic conceptual level, Connell and Schau (2013) aptly note that while the extended self invokes a metaphor of outward extension, the expanded self invokes a metaphor of inward inclusion. Ahuvia, Batra, and Bagozzi (2009) characterize the expanded self as incorporative. As Belk (1988) recognized, the extended self is a masculine metaphor. The expanded self is characterized as a feminine metaphor by Connell and Schau (2013). Ultimately they call for a fusion of the two perspectives.

## 2. The Extended Mind

As Andy Clark (1997) put it in one of his earlier books on the subject, "Mind is a leaky organ, forever escaping its 'natural' confines and mingling shamelessly with body and with world" (53). He means this quite literally. Not only is the mind seen as embodied, it is seen as extended into the world around us—a phenomenon he calls embedded cognition. Imagine solving a math problem "in your head." This is the way we usually think about the brain and cognition. Now imagine solving it with the aid of counting on your fingers—an embodied example that is easily encompassed within traditional models of the mind, just as using paper and pencil would be. Now imagine solving the problem with the aid of a computer. If it seems problematic to regard this external prosthesis as a part of the mind, imagine that the computer chip that performed the calculation was embedded in your head, effectively making you a cyborg. But we are already cyborgs Clark (2003) maintains. If we read with the aid of glasses or contacts, rely on our smart phone to "remember" telephone numbers and addresses, or use Google to ascertain or verify information, are we not extending our mind with the aid of mechanical and electronic prostheses? If we remember a travel route with the aid of landmarks and road signs these too might be considered to be part of the extended mind. And if we rely on a GPS or augmented reality projected onto our glasses, the same mind extension should apply.

This version of mental extension is quite different from the extended self and the expanded self. We need not be emotionally

attached to our paper and pencil or to the road signs in order to have them be a part of the extended mind as Clark conceives of it. In his model artificial intelligence is just the latest development in a process of mind extension that began when we first learned to throw a stone or to reach the bananas with the aid of a stick. Still, it is a rather structural and cognitive model of behavior. It champions reason and instrumentality. The mind is seen as embodied and embedded in its environment, but it is rational rather than being sentimental in the way that the extended self and expanded self are. It also does not much consider other people as a part of our proximal environment. Other people are seen as components of the system in the same way that the musician uses an instrument or a car relies on its component parts. The human is seen as an adaptive responder relying on the “scaffolding” of our external physical environment to guide behavior. Even culture, language, and institutions are referred to as scaffolding for the brain and as part of the external environment that acts upon the brain. Clark (1997) describes language as “the ultimate artifact ... Not only does it confer on us added powers of communication; it also enables us to reshape a variety of difficult but important tasks into formats better suited to the basic computational capacities of the human brain” (193). Call it cognitive imperialism with a dose of behavioralism.

### 3. Multiple and Narrative or Dialogic Selves

A quite different conception of how the self relates to objects is found among consumer researchers who maintain that the self of an individual should be conceived of as involving multiple or plural selves (e.g., Ahuvia 2005; Bahl and Milne 2010). In this view of the extended or expanded self, we harbor different selves which may feel different attractions, repulsions, attachments, and alienations with regard to a particular objects. For example, Ahuvia (2005) describes Pam whose business woman self purchased a practical dining room table and her bohemian self who loves Bugs Bunny cartoons. Tian and Belk (2005) found that the possessions in professionals’ offices often reflected a tug-of-war between their home self and work selves. And Bahl and Milne (2010) find that Brad’s closed self likes donuts as a comfort food while his critical self sees donuts as making him fat and unattractive to girls and his athletic self resists donuts as slowing his soccer performance.

In such conceptualizations, the self is comprised of either simultaneously or sequentially different personas that are differentially attracted to certain objects. Still, as Ahuvia (2005) sees it, there is a drive toward unity through a constructing a coherent self narrative. He finds that the conflicting selves are resolved through one of three processes: choosing one self over the others and demarcating this self through choice of loved objects; compromising selves by finding middle ground objects that are compatible with conflicting identities; or synthesizing selves by finding objects that allow each identity to be recognized and reconciled. Bahl and Milne (2010) find that different strategies are used in a dialogue between different selves in order to arrive at a meta-self. These strategies involve managing the conflict through negotiation or coalition, avoiding the conflict, for example by compartmentalizing and accepting that different selves will prevail on different occasions, or privileging a dominating self that suppresses the other selves.

If we were to diagram the conceptualization of self and consumer objects within this alternative perspective that sees the self as multiple, we might well find something like the multi-dimensional scaling representations that Bahl and Milne (2010) obtained from their informant data. Such a representation consists of the different selves surrounded by different, but sometimes overlapping, clusters of objects and activities. As Belk (1988) originally recognized, the

self is dynamic and ever changing. Likewise these multiple self perspectives also recognize the shifting and dynamic nature of the self and the objects and choices through which it is expressed and transformed. But what these perspectives also recognize along with Belk’s (2013) updated model is that the idea of a singular core self is an illusion. Desirable as this illusion may be, these perspectives also recognize a more complex view of the simultaneous presence of different selves supported by different sets of objects and activities.

### 4. Actor Network Theory

Actor Network Theory or ANT recognizes that actions are caused by both human and non-human actants. That the human actants often engage things intentionally and the non-human actants unintentionally is not of great consequence in this perspective. LaTour (2005) points out that the following alternative formulations of self and object interactions are not the same and the latter are difficult or impossible to imagine:

*...hitting a nail with and without a hammer, boiling water with and without a kettle, fetching provisions with or without a basket, walking in the street with or without clothes, zapping a TV with or without a remote, slowing down a car with or without a speed-bump, keeping track of your inventory with or without a list, [or] running a company with or without bookkeeping (p. 71).*

Thus, we may properly regard these objects as acting—the hammer hits the nail, the kettle boils water, the basket holds provisions, and so forth. But it takes the whole network of actants, usually including the human for these actions to take place.

In some instances like the hammer and the builder, the musical instrument and the musician, and the computer and the hacker, the symbiosis of the person and the thing allows actions that would not otherwise be possible (Csikszentmihalyi and Rochberg-Halton 1981). In other instances however, the object takes on functions that would once have resided with the person alone. Tian and Belk (2005) found in their study of offices that “prosthetic possessions” like computers and phones, “remembered” things for consumers. Dengeri-Knott and Molesworth (2013) found that consumers used software like their Amazon wish lists to “desire” for them. That is, once they put objects on the list, they no longer had to sustain their desire in their minds because the list did it for them. As we rely on our digital devices to do more and more, they become an increasingly indispensable part of our selves. ANT also specifies that as long as networks of people and things are functioning smoothly, “punctualization” occurs—that is the individual parts of the network fades from our awareness and we concentrate only on the whole. For example, so long as our car is working properly, we remain unaware of its individual parts and even our own actions in operating it. But when the engine fails to work, depunctualization occurs and we suddenly become aware of the car and driver as a collection of parts (LaTour 1999).

Besides a person and multiple objects, actor networks are also often composed of multiple people. For instance Epp and Price (2010) chronicle the changing role of a dining room table in knitting together the lives of an extended family. This inclusion of multiple people in the human-object assemblage marks an important difference from each of the other formulations considered here. Whereas the focus of the extended self or mind is on one person or mind extending out or incorporating objects and people within itself, and the focus of multiple selves is on connecting different objects to different personas, in ANT the focus is on networks of multiple people and objects which act together in establishing the relationships between



persons and things. That is, from an ANT perspective we are not focused on the internal representation of self as much as the fact that people and things act together to cause behaviors to occur. We might in fact see the entire Internet as being the result of an unseen network of people and things (users, programmers, digital devices, routers, servers, and so forth) culminating in the vast array of information, images, games, and more that we can access online. On a narrower scale, our network of “friends” on Facebook help to co-construct our identity with posts, photos, tags, and other “metadata” that appears on our timeline (Belk 2013). Our interconnections to others are invoked and exploited when we ask online, “How do I...?” (e.g., download photos from an iPhone to my computer). Meaning too is

jointly constructed. And while ANT has received the most attention in consumer research, there are many other perspectives on empowered objects including entanglement theory, vibrant matter, alien phenomenology, postphenomenology, assemblage theory, meshwork, the political ideology of things, and trajectories of the technium.

**CONCLUSIONS**

We can see in these alternative formulations to the extended self an enriched and enhanced set of perspectives for construing the relationship between people and things. There is more to these differences and possibilities than I have been able to summarize here. The table below provides an even more condensed summary of these distinctions.

**Table  
Summary of Differences in Models of Self and Things**

	<b>Extended Self</b>	<b>Expanded Self</b>	<b>Extended Mind</b>	<b>Multiple Selves</b>	<b>ANT</b>
<b>Person Focus</b>	Individual	Individual	Individual Mind	Multiple Facets of Self	Multiple Individuals
<b>Object Focus</b>	Possessions & Brands	Brands	Objects in the Environment	Objects & Actions	Objects & Possessions
<b>Relation to Objects</b>	Emotional Attachment	Love/Hate	Functional	Emotional Attachment <sup>1</sup>	Emotional or Functional
<b>Relation to Self</b>	Extension	Inclusion	Cognitive Incorporation	Inclusion <sup>2</sup> or Extension <sup>3</sup>	Behavioral Interaction

<sup>1</sup>Different selves may feel differential attachment or repulsion to an object

<sup>2</sup>Ahuvia (2005)

<sup>3</sup>Bahl and Milne (2010)

As noted earlier, these alternative formulations are not necessarily mutually exclusive. Ahuvia (2005) has been cited here with regard to both expanded self and multiple selves. Tian and Belk (2005) as well as Bahl and Milne (2010) have been cited in the context of both extended self and multiple selves. Connell and Schau (2013) combine extended and expanded self. And Epp and Price (2010) invoke both ANT and extended self perspectives. Nevertheless, the different mechanisms and emphases of the models summarized in the table suggest that they all bring something different to the party. Since much of the exposition of these models, including the present summary, is conceptual, what seems most rewarding and needed is empirical work that looks at the array of options available and chooses the one or ones that seems most capable of enlightening the problem at hand.

What is common in all of these models is that the self does not end with the mind and the body. People, places, and things, including virtual things, are all a part of our identity and behavior. The ways in which these entities interact is the primary focus of study in consumer research. To have such an array of options at our disposal for studying and discussing this central consumer research mission should be seen as potentially enriching the original concept of the extended self.

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# Zooming In While Zooming Out: How a Consumption Context Animates a Macro-focus Investigation and Stimulates New Opportunities for Theoretical Insights

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## ABSTRACT

Consumer researchers have long recognized the power of contexts in facilitating theoretical insights (Arnould and Thompson 2005; Arnould, Price, and Moiso 2006) and have discussed the importance of historicizing (Brown, Hirschman, and Maclaran 2001), as well as the need to pay attention to the context of context (Askegaard and Linnet 2011; Earley 2014). This conceptual article further expands these discussions on how context matters by focusing attention on the predominant level of analysis linked to particular theoretical constructs. Because consumer researchers have been utilizing contexts as platforms for their theorizations, the ontological status of certain concepts reflects a particular level of analysis demanded by particular contexts. This eventually leads to an inherent link between the conventional understanding of a concept and a particular class of context and level of analysis. In this article, we illustrate and discuss how contexts can be utilized to rethink the ontological status of concepts—once derived through study within particular contexts—by highlighting the importance of a circuit of analysis that involves various levels of analysis.

We exemplify this argument by a focus on the concepts of *consumer acculturation* and *nostalgia*, and demonstrate how a particular research context—in this case a divide in consumption patterns between formerly East and West Germany—can challenge the conventional understanding of these concepts colored by prevalent individual or microsocial levels of analysis. By moving the analysis to a macrosocial level we can break free of conceptual conventions de-

rived from earlier contexts and raise novel research questions about the interplay between different scales of observation (Desjeux 1996). This opens the door to rethinking the ontological status of consumer acculturation and nostalgia, to derive new theoretical insights, uncover complex interactions, and identify theoretical boundary conditions that have eluded us so far.

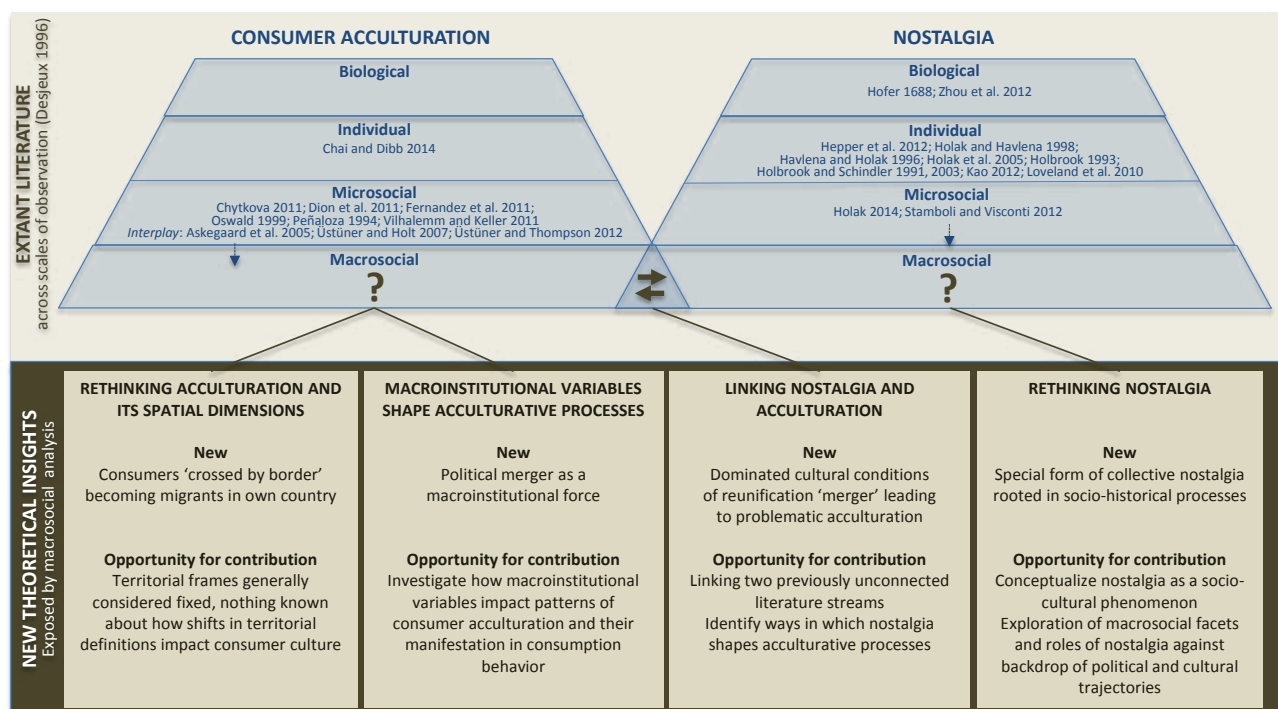
The paper is structured as follows: We start with a description of the facilitating research context before discussing how contexts can be leveraged for theory building using a multilevel circuit of analysis. We proceed with an illustration of a concrete example of this process by taking inventory of existing literature on consumer acculturation and nostalgia, and showcasing how a macrosocial level of analysis stimulates reinquiry of these concepts. This in turn fertilizes new theoretical insights and links, which are synthesized in Figure 1. We conclude with a discussion of methodological, conceptual, and theoretical contributions and implications.

## FACILITATING RESEARCH CONTEXT: CONSUMPTION IN GERMANY

The research context, which serves to illustrate how a shift in the level of analysis exposes voids in previous literature and thus new theoretical connections, revolves around consumption behavior in contemporary Germany. When it comes to consumption, Germany is still a divided country: consumers of the former East (GDR) and West (FRG) differ in their purchase choices and patterns as well as the meanings they attribute to consumption overall.

FIGURE 1

Facilitating research context: Prevailing divide in East and West German Consumption Behavior



What belongs together would soon grow back together: The fall of the Berlin Wall and subsequent reunification in 1990 induced a process of adaptation and acculturation to a new market and consumption system among East Germans. A consumption culture characterized by abundance (as opposed to the ubiquitous scarcity previously experienced) was a key driver of the peaceful revolution and something East Germans had yearned for. Hence the expectation was that East German consumers would eagerly adapt and acculturate to the Western consumption culture they had fought so hard to access. However, the assumption that both consumer cultures would soon converge proved delusive. On the contrary, the sphere of consumption across the formerly separate states even today highlights the fact that considerable differences prevail. While some former GDR brands regained an 85% market share in East Germany, they remain largely unknown in the West. In some product categories the disparity appears insurmountable to the point where large Western manufacturers have started to refocus their marketing efforts by concentrating on the former Western territory only, thereby disregarding the East—a market they had once taken by storm after the Wall fell, when East German products were quickly discarded, rejected and replaced by long-desired Western goods perceived to be “the real thing” (Berdahl 1999; Veenis 1999).

Following the initial phase of hyperconsumption of Western brands, we now witness a nostalgic revival of formerly disliked GDR-associated brands, objects, practices and consumptionscapes (Merkel 2006). Formerly discontinued products reappear on supermarket shelves with retailers offering “GDR product” promotions customized only for the former GDR territory. Mail order companies selling solely GDR brands are flourishing and dispatching parcels to East Germans living inside and outside their former home base. The love and idealization for East German consumer products is accompanied by a resurgence of consumptionscapes such as GDR-themed hotels, “city safaris” in the iconic Trabant car, restaurants offering GDR cuisine, GDR product fairs, as well as consumption communities celebrating GDR consumption objects and practices in social media spaces. After 25 years of consumer adaptation and acculturation, the undiminishing disparity in consumption cultures and resurgence of formerly despised and rejected consumption objects and services surprises.

The paradoxical nature of the persistent gap in consumption behavior in a country that has been politically reunified in 1990 renders it a highly stimulating context for research. Contexts with extreme features are valuable in that they enable detection of previously uncovered construct properties, processes and relationships as well as interactions with other constructs (Arnould et al. 2006; Mook 1983). When compared to similar research contexts, such as nostalgia in Eastern Europe, the German context presents an extreme case. While the evolution from a socialist to a capitalist society took place gradually in the rest of the former Soviet Bloc, the sudden nature with which these two opposing cultures collided and had to be negotiated by East German consumers presents an ideal opportunity to rethink existing theories and their boundary conditions, as exemplified in the latter part of this paper.

The consumer acculturative processes of adapting to a new market system that followed the fall of the Wall, as well as the observed nostalgic revival of GDR-related consumption, foreground consumer acculturation and nostalgia. Comparing opposing consumption cultures and their negotiation moreover allows for a reframing of similarity and difference in fruitful ways (Arnould et al. 2006). Hence we follow the call for extraordinary research contexts which, based on their extreme features, enable us to scrutinize and

expand extant theories, their boundary conditions and interactions (Mook 1983).

## LEVERAGING THE CONTEXT FOR THEORY BUILDING – THE MULTILEVEL CIRCUIT OF ANALYSIS

There are several approaches to levels of analysis: be it the rigid abandoning of levels of hierarchical relationships such as those advocated by some theoretical lenses like Actor-network theory (ANT) that rely on flattening levels of analysis to derive theorizations on consumption and marketing phenomena (Bajde 2013; Giesler 2012); the recognition of the interplay between more immediate microlevel consumer experiences and more hidden macrosociological processes (Askegaard and Linnet 2011; Earley 2014); and Desjeux’s (1996) scales of observation of consumption that suggest biological, individual, microsocial, or macrosocial levels of analysis as starting points for observing social reality in order to break down the complexity that emerges in attempts to observe social and cultural dimensions at once.

While Arnould and Thompson (2005, 875) state that consumer culture theoretical (CCT) research in particular strives to “systematically link individual (or idiographic) meanings to different levels of cultural processes and structure” situated “within historical and marketplace contexts,” researchers have come to critique the shortcoming of CCT research to deliver the kind of integrative theorizing it set out to achieve, and pointed out that the existential-phenomenological tradition endemic in consumer research has led to an overemphasis on the individual level of analysis, and therefore neglects the macrosociological forces that shape consumption behavior (Askegaard and Linnet 2011; Earley 2014). We intend to encourage more research that takes advantage of a circuit of various levels of analysis, thereby complementing insights from one level of analysis with another one. This is grounded in Desjeux’s (1996) original argument that a particular scale of observation serves merely as the entry point for analyzing consumption, followed by what we call a circuit of investigation: the subsequent, hermeneutical and triangulated use of various levels of observation. Because knowledge is co-constituted in Desjeux’s (1996) terms *between* the different scales of observation—biological, individual, microsocial, macrosocial—theorizing within contexts requires a greater focus on the forces that shape the consumption phenomenon under investigation, which contextualize the predominantly used scale of observation. This means it is crucial to shed light on the meaning of the context—in Askegaard and Linnet’s (2011) terms “the context of context!”—and acknowledge that ontological claims about concepts are derived from the use of a particular level of analysis; albeit that these claims have to be situated vis-à-vis knowledge that is derived from the use of other levels of observation.

Our research context presented above exposes the predominantly applied foci of individual and microsocial lenses as embedded in complex larger political, institutional and cultural environments and conditions. The one-to-one transfer of West German hegemonic structures turned East Germans into largely passive receivers (vs. active co-creators) of a new political, economic and social system. The dominant manner in which systemic changes occurred sowed the seeds for later contestations. In terms of consumption, East and West Germany were characterized by opposing cultures, each with their own value grids, patterns and ideological infrastructures. While West Germany’s culture of consumption was adhering to a capitalist market ideology, East Germany’s culture of consumption followed a socialist ideology. This context therefore specifically foregrounds the negotiation of these two diverging consumer cultures rooted in

opposing market systems and political value systems and therefore presents an opportunity to explore as yet untouched facets of consumer acculturation and nostalgia by emphasizing the relevance of macrosocial levels of analysis. That is, the German context highlights how supposedly microsocial and individual consumption phenomena of acculturation and nostalgia have to be understood vis-à-vis the larger institutional, political and historical trajectories of which they are part.

### AN INVENTORY OF EXISTING LITERATURE

Using Desjeux's (1996) scales of observation to analyze extant research on consumer acculturation and nostalgia, it becomes clear how theorizations and conceptualizations are tainted by the use of a particular level of analysis, rather than a circuit of investigation exploiting the range of different scales of observation. Predominantly, we find that individual and microsocial scales of observation are used to research nostalgia and acculturation. As argued previously, we suspect that this is related to the particular contexts chosen for studying the operation of these concepts.

*Consumer acculturation.* In the case of consumer acculturation, with a few exceptions that analyze the concept at the individual level of analysis, such as Chai and Dibb's (2014) recent exploration of how acculturation influences interpersonal trust, the majority of studies take a microsocial approach based on contexts of migrating groups of consumers and their adaptation to subjectively new host cultures (e.g., Chytkova 2011; Dion, Sitz, and Remy 2011; Fernandez, Veer, and Lastovicka 2011; Oswald 1999; Peñaloza 1994; Vihalemm and Keller 2011). Only a few studies explicitly address the interplay between microsocial and macrosocial levels. For example, Askegaard, Arnould, and Kjeldgaard (2005) relate the construction of ethnic identities to larger scales of global consumer culture and home/host culture, and others integrate institutional domination in acculturative processes (Üstüner and Holt 2007; Üstüner and Thompson 2012). While these recent studies have begun taking advantage of macrosocial levels of observation to inform consumer acculturation, they still conceptualize consumer acculturation primarily as a microsocial phenomenon shaped by macrosocial forces. Through the lens of the context of Germany's reunification, however, questions arise as to how consumer acculturation can be understood primarily as a macrosocial phenomenon shaped by microsocial forces, because it challenges the ontological status of acculturation involving physical migration of particular groups of consumers.

*Nostalgia.* As for nostalgia, a similar pattern emerges, with the individual level of observation as its predominant anchor point instead. While there are studies conceptualizing nostalgia through a biological scale of observation, such as Hofer's (1688) description of nostalgia as a medical condition linked to homesickness and melancholy and Zhou et al.'s (2012) conceptualization of nostalgia as maintaining physiological comfort and mental health by increasing perceptions of physical warmth, the majority of consumer research portrays nostalgia as an individual phenomenon. This is reflected in the conventional understanding of nostalgia as sentimental longing for the past (Holbrook and Schindler 1991) and the interpretation of this "longing" as an emotion, cognition or experience on the individual level that has either some consequences for consumption or is reflected in consumption choices. In this line of thought, prior research includes a focus on the emotional and cognitive components of nostalgia (Holak and Havlena 1998; Hepper, Ritchie, Sedikis, and Wildschut 2012), consumption preferences (Holbrook 1993; Holbrook and Schindler 2003; Loveland, Smeesters, and Mandel 2010), and proneness to nostalgia (Holak, Havlena, and Matveev 2005). Interestingly, a number of studies suggest microsocial and macro-

social facets that play a role in consumers' individual nostalgic projects (Havlena and Holak 1996; Kao 2012). However, these studies are grounded in the individualistic conceptualization of nostalgia. Only very few studies develop a perspective on nostalgia through the use of micro- or macrosocial levels of observation such as Holak's (2014) investigation of nostalgia in the context of a consumer group's diaspora (microsocial), or Stamboli and Visconti's (2012) work opening up the (macrosocial) study of nostalgia as the collective quest for cultural comfort. Yet we know surprisingly little about the operation of nostalgia on a macroscope. Comprehending nostalgia through the lens of the context described above highlights our limited understanding in terms of the macrosocial facets and roles of nostalgia against the backdrop of political and cultural trajectories.

### A MACROSOCIAL SCOPE: REINQUIRING EXISTING CONCEPTS AND FERTILIZING THEORETICAL LINKS

Because previous literature indicates, but does not develop further, the role of macrosocial facets in the operation of both consumer acculturation and consumer nostalgia, these concepts invite re-examination from a macrosocial perspective. As illustrated in Figure 1, the selection of a unique research context can facilitate such shifts in scales of observation, thereby exposing limitations of conventional understandings of these concepts, which shall be briefly discussed hereafter:

*Rethinking acculturation and its spatial dimensions:* Consumer acculturation is generally considered as a "process of movement and adaptation to the consumer cultural environment in one country by persons from another country" (Peñaloza 1994). Hence the majority of previous consumer research frames consumer acculturation as a process of physical migration. While this is accurate for a certain class of contexts, the German case highlights another class of context for acculturative processes. Here, with the fall of the Wall, East German consumers were crossed by the border (rather than physically migrating across the border), and thereby exposed to a new cultural environment. Such acculturation without migration presents a new form of adaptation currently not captured by a microsocial definition of acculturation. Because the dominant view of acculturation holds that territorial frames are generally considered fixed, there is little known about how shifts in territorial definitions impact consumer culture. The German context exposes this boundary condition.

With territorial changes and redefinitions ongoing globally (e.g., new countries forming, borders being built and falling, ethnic groups striving for independence), this class of context presents opportunities for rethinking the spatial dimensions of consumer acculturation.

*Macroinstitutional variables shape acculturative processes:* As previously highlighted, prior studies focused mainly on microsocial processes of migrants. The historical instance of a political merger in Germany foregrounds the previously underexplored role of macroinstitutional forces in shaping consumers' acculturative processes and their subsequent manifestations in consumption behavior. Very little attention has been devoted to the role of macroinstitutional variables in consumer acculturation. Hence the German context presents a unique opportunity to explore how macroinstitutional variables impact patterns of consumer adaptation, and it opens the door to the study of ways in which other institutional forces (e.g., economic crises, military conflicts, globalization) may shape acculturative processes.

*Exposing a conceptual link between acculturation and nostalgia:* The shared goal of consumer acculturation theory is "to understand and conceptualize the various forces that define, allow,

facilitate, or complicate consumer acculturation under specific cultural conditions” (Luedicke 2011, 238). While the concepts of acculturation and nostalgia have been treated largely separately in the literature, conceptual links are suggested when the level of analysis is raised to macro perspectives. Acculturative processes still ongoing in Germany today are intertwined with nostalgia. The dominated cultural conditions of the reunification suggest that in addition to the acculturation forces identified and defined by Luedicke (2011), nostalgia is likely to be a previously unaccounted for cultural resource that shapes acculturation processes by facilitating, inhibiting or reversing adaptation. Hence the German context reveals the opportunity to study the interaction of these concepts by investigating the cultural roles of nostalgia in acculturative processes.

*Rethinking nostalgia:* As highlighted by the literature review, nostalgia has been primarily investigated by applying individual (and very few microsocial) scales of observation. Our context suggests that nostalgia in East Germany emerges as a special form of collective nostalgia rooted in contested sociohistorical processes. Thus it is important to conceptualize nostalgia as a sociocultural phenomenon vis-à-vis existing individualistic and microsocial conceptions and explore the macrosocial facets and roles of nostalgia against the backdrop of political and cultural trajectories.

Extant literature fails to explain the processes inherent in Germany’s reunification with regard to consumer acculturation of consumers who have become migrants in their own country, and with regard to the role of nostalgia in contemporary German consumer culture against the backdrop of historical and institutional trajectories on the macroscope (Askegaard and Linnet, 2011; Brown et al. 2001). That is, the context explicitly foregrounds the interrelation of individual-level experiences with microsocial practices with the German reunification as a macrosocial process. As summarized by Figure 1, zooming out in the scale of observation (i.e., shifting attention toward these macrosocial levels) allows researchers to zoom in on new opportunities for theoretical insights by making previously undiscovered conceptual links discernible.

### CONCLUDING REMARKS

Neither consumer acculturation nor nostalgia take place exclusively on biological, individual, microsocial, or macrosocial levels, and therefore should not be studied through an exclusive application of just one scale of observation. Rather, we encourage more research to take advantage of the circuit of various levels of analysis. Our contribution to the field of interpretive consumer research is threefold, namely of methodological, conceptual, as well as theoretical nature:

(1) Following Arnould et al. (2006) we contribute to a much-needed discussion on how to make unique contexts matter theoretically, by showing how a change in the scale of observation facilitates breaking free of pre-existing assumptions, leading to theoretical insights and the exposure of boundary conditions as well as conceptual interactions previously undetected.

(2) We conceptualize and substantiate our suggestion with the help of a concrete example and showcase how the unique context of a prevailing divide in East and West Germany’s consumption behavior, if moved to a macrosocial level of analysis, can not only extend existing theories of consumer acculturation and nostalgia, but moreover expose conceptual links between both bodies of literature that were previously treated as separate.

(3) From a theoretical perspective, our context informs *four important extensions* to existing research on acculturation and nostalgia. Firstly, the situation presented here of consumers being “crossed by a border” rather than physically crossing the border into a new

sociocultural environment exposes a boundary condition of extant acculturation literature, namely that territorial frames are generally considered fixed and little is known about how shifts in territorial definitions impact on consumption culture. Secondly, the case of a political merger foregrounds the previously underexplored role of macroinstitutional forces in shaping consumers’ acculturative processes and their subsequent manifestations in consumption behavior. Thirdly, the dominated cultural conditions of the reunification suggest that in addition to the acculturation forces identified and defined by Luedicke (2011), nostalgia is likely to be a previously unaccounted cultural resource that shapes acculturation processes. Raising the analysis to a macrosocial level exposes a complex conceptual interaction between theories of nostalgia and acculturation that has so far been largely neglected. Fourthly, in contrast to the largely biological, individual, or microsocial contexts informing the study of nostalgia thus far, nostalgia also emerges as a special form of collective, sociocultural resource that has roots in contested sociohistorical processes. Hence existing individualistic and psychological theories of nostalgia have to be complemented by sociocultural conceptions that explore the macrosocial facets and cultural roles of nostalgia against the backdrop of historical, political and cultural trajectories.

In this article, we have suggested that the application of a macrosocial scale of observation to a particular context—zooming out, in the scale of observation—is conducive to zooming in on a theoretical and conceptual level, i.e., the operation of such concepts within consumer culture. That is, we advocate zooming out as an important step in the multilevel circuit of analysis—an approach that challenges the assumption that a concept, here exemplified with nostalgia or consumer acculturation, can be accurately understood through an exclusive focus on either individual and/or microsocial levels of analysis.

The challenge ahead for consumer researchers lies in tackling the emerging complexity that goes hand-in-hand with the application of macrosocial scales of observation. For this, prior knowledge created using other (individual or microsocial) scales of observation provides important landmarks and conceptual starting points for macrosocial investigations and the subsequent exposure of theoretical voids and boundary conditions.

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# Nuances of Cooperation and Competition among Lower-Class Consumers

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## ABSTRACT

The marketing discipline has recently displayed an increasing concern over lower-class consumers, giving rise to two overarching bodies of research. In the first, studies aim to design solutions for the alleviation of consumers' impoverished conditions, either through the market (e.g., Prahalad and Hammond, 2002), public policy (e.g. Varman, Skalén, and Belk, 2012; Viswanathan et al., 2012), or community entrepreneurship (e.g., Viswanathan, Rosa and Ruth, 2010). In the second, researchers seek to primarily understand the lived experiences of the dominated (Üstüner and Holt, 2007), vulnerable (Backer, Gentry, and Rittenburg, 2005), or simply put, poor consumers (Hill 2002). In both sets, studies attribute great importance to communal relationships and the social networks of these consumers either as a key to cope (Hill 2001; Hill and Stephens, 1997) and overcome objective conditions of deprivation (London, Anupindi and Sheth, 2010), or as the grounds from which identity projects will be produced (Üstüner and Holt, 2007). The underlying assumption is often that people experiencing similar conditions of deprivation would share a sense of collectivity and develop forms of cooperation and solidarity as belonging to the same class or "culture" (Bourdieu 1979; Hoggart 1970). However, the same social conditions that foster a sense of solidarity, can also originate tensions and competitive feelings and behaviors among social groups (Portes 1998).

Extant sociological literature has found evidences of this more "heterogeneous array of behaviors and outcomes" regarding communal relationships among poor people (Small, Harding, and Lamont, 2010: 15). Studies have shown the diverse circumstances in which they choose not to participate in communitarian projects (Small 2002), avoid help their peers (Smith 2010), and openly engage in competitive and conflictive relationships among each other (Portes and Sensenbrenner, 1993). In the same vein, but in different types of collectivities, consumer research has described tensions in communal relationships. For example, in a study of home moving practices, Marcoux (2009) has shown that consumers would rather opt to contract commercial moving services instead of asking their network of friends for favors, which would generate a need for "reciprocity". In a study of commercial climbing expeditions, Tumbat and Belk (2011) have described how the temporary community formed around a common objective was, contrary to the usual liminal camaraderie, fully permeated by competitive and individualistic feelings. As these evidences in and outside poor collectivities indicate, studies of social relationships put the attention on one side or the other, but fail to integrate both dimensions and give a more complete picture of these relations. Could cooperation and competitive dimensions be substitutable or complementary? What are the specific conditions for engaging in one or the other?

We seek to understand these apparent contradictions through the analysis of the conditions in which lower-class consumers engage in cooperative-solidarity versus competitive-individualistic relationships. Drawing from Bourdieu's conceptualization of social capital as "the aggregate of actual and/or potential resources that are linked to the possession of a durable network of more or less institutionalized relationships of mutual acquaintance and recognition" (1986: 249), we have conducted an ethnography of the daily interactions in a group of lower-class consumers living in a squatter neighborhood in Brazil. Social capital is "a system of durable obligations," which are socially constructed within any collectivity from norms

of reciprocity (Mathwick, Wiertz, and Ruyter, 2008), bounded solidarity, and enforceable trust (Portes 1998). At the same time, social capital can generate both positive (e.g., help to overcome objective conditions of impoverishment) and negative (e.g., excessive claims over a few community members and restriction of personal freedom) outcomes (Portes 1998). We seek to understand how our informants frame this system of obligation and anticipate its outcomes in the context of their daily relationships at the community level. In doing so, they engage in diverse market-mediated forms of cooperation and competition among each other. Through the thick description of each of the identified relationships, we account for the underlying moral, structural, and situational conditions of those relationships and advance on the understanding of the communal relationships among disadvantaged consumers.

This study echoes the recent calls in Transformative Consumer Research, which proposes to leverage trust and social capital in the context of poverty (Blocker et al., 2012). Our contribution is three-fold: first, we challenge the dominant view of lower-class consumers as being necessarily cooperative when facing objective conditions of impoverishment; second, we enhance the understanding on the ways lower-class consumers protect and take advantage of their social network through the use of market resources; additionally, our accounting for social capital broadens the perspective of the research on sociability and reciprocity in consumer culture theory, beyond the often dyadic notions of the gift economy (Giesler 2006).

## CONTEXT AND METHOD

Despite experiencing economic growth for over a decade, Brazil still faces strong social inequality. Lower-classes (those occupying the two lowest tiers in a rank with eight income-classes) vary from 36% to 42% of the households in the country, depending on the classification adopted, with a monthly income not higher than US\$183 per member of the household (Kamakura and Mazzon, 2013). Beyond income classifications, the modernization process of the country has produced a deep structural gap of access to education and other kinds of relevant impersonal capitals between the lower- and middle-classes, the first composed by those individuals mainly holding positions of manual workers (Souza 2010). Over six months, we have conducted an ethnography of the daily life of six families belonging to this lower-class group, living in a squatter neighborhood in a Brazilian state capital.

Brazilian cities provide an interesting context for research on lower-class consumers for many reasons: (1) Brazilian lower-class usually faces long-term poverty, experienced during several generations, which is considered a base for the transmission of certain forms of capitals (Bourdieu 1979); (2) squatter areas are known for being dense spaces for sociability and communal relationships; and (3) lower-classes are directly benefiting from recent economic growth, objectively increasing consumption patterns, therefore having an impact in daily and communal life (Souza 2010). As our research site unites these features, it provides an extreme context that allows to foreground our theoretical argument (Price, Arnould, and Moiso, 2007).

Fieldwork was conducted by the first author. Data collection was composed of participant observation of the daily routine of six families at home, with neighbors, and in their interactions with local shops and services. During the six months of fieldwork, three to four



days a week, during different hours, were spent in the neighborhood, observing daily interactions and taking part in many dinners, birthday parties, and social gatherings inside the neighborhood. The first author also lived in the neighborhood for 15 days at the very end of the fieldwork. Four sets of in-depth interviews were conducted with the head of the families and one interview with each member of the families, totaling 43 consumer interviews. We also mapped all 49 local commerce points and interviewed the owners of the seven main businesses, such as grocery and hardware stores. In total, data collection was registered in 83 single-space pages of field journal notes, 1,000 minutes of audio, transcribed in 181 single-space pages of text, 17 minutes of video, 232 pictures taken, and 30 pictures collected from informants. Data analysis followed the guidelines of the hermeneutical approach (Thompson 1997), evolving our understanding of the social relations within the neighborhood through several part-to-whole interactions, from emic to etic perspectives. As we evolved

in our interpretation of the data, we grouped the diverse communal relationships found into four distinct forms of cooperation or competition, which we further describe and discuss in the following parts of this paper.

**FINDINGS**

We have identified four broad dimensions of social capital relationships among our informants (see table 1). For each dimension, we depart from the description of the relationship, its practices and discourses associated, and explain the combination of moral (norms and values), structural (durable conditions of impoverishment), and situational (immediate context of social and personal relations) conditions that make it possible in the context of the localized relationships. Finally, we understand its relations with consumption and markets, as well as the consequences at the community level. Although all forms are present among our informants, we chose to present each one through the story of a single and illustrative case.

**TABLE OF RESULTS**  
**Table 1 – Conditions of Social Capital Relationships**

Dimensions of Social Capital Relationships	Conditions			Role of the market
	Moral	Structural	Situational	
<b>Strong Reciprocity</b>	Family reciprocal obligations	Structured family, long term conditions	Geographical proximity (household) and kinship	means
<b>Loose Solidarity</b>	Obligation and compassion; receiver's merit	Network of Interdependence	Personal proximity, trust	ends, replaced
<b>Opportunism</b>	Entitlement	Limited set of perspectives; Long term shared conditions	Necessity and opportunity	ends, undermined
<b>Distance managing</b>	Moral superiority	Perception of upward mobility	Personal and geographical proximity	means

**Strong Reciprocity**

Strong reciprocity comprehends the emotional, bodily and financial engagements directed towards the mutual improvement of life conditions, especially among family members sharing the same household. Family is a primary unit of social capital relations among the poor (Viswanathan, Sridharan, and Ritchie, 2010), as Silvia (55 years old) provides best example. She migrated from the countryside with no formal education and relied on a few friends to get her first jobs, first at the assembly line, and then as cleaning lady. Silvia incarnates the identified relationship by engaging in daily sacrifices to improve life conditions within the family core.

Now both my kids are working. But Carlo [her son] needs to change, because his job [as garbage collector] is terrible. They only give him one set of clothes and I don't have the heart to let him go with the same clothes two days in a row. I wash his clothes at the night, and at 4AM I have to dry it on iron. For me is no sacrifice, as a mother my concern is improving. You cannot give up. Do you think I bother sleeping at that mattress there [she sleeps at the mattress so her children can sleep at the bed]? I do not.

This relationship is rooted in the moral obligations among the nuclear family members (Coleman 1988). Silvia feels compelled to

support her children. This support is market-mediated in many ways, such as the daily abundance of food at home, or in the purchase of a new TV set to “conquer their heart”, and in the form of the manual labor illustrated above, which fostered her purchase of a washing machine to automate the laundry task. However, not only are the sons expected to reciprocate, but they are also explicitly socialized as part of this domestic moral economy: “When the tots were still small I got widow. There was only me for everything. I had to pay for day-care. Then, when Carlo started to be able to take care of Keyla I used to say: “watch your little sister, so that will save us more [money] to buy things for you to eat””. Sharing the same household is the main situational condition for this sense of shared obligations and responsibility to arise, as closeness makes our informants more involved in each other’s lives and as they all concur to the expenses of the house. Those reciprocal obligations are more likely to flourish under limited structural conditions, notably among minimally structured families facing a long term history of economic and educational deprivation. Often, in the less structured families we met, expectations of reciprocity are broken, generating tensions, mutual distrust and resentment among family members. Yet, in more structured and less economically constrained families we met, children are socialized to go to school and their reciprocal obligations move from actively helping at home to develop discipline and prospective behavior dispositions through engaging in studies, closer to middle-class patterns (Souza 2010). Thus, at the same time that strong reciprocity increases short-term access to market goods, it also limits family members’ long-term improvements, especially via education (Portes 1998).

### Loose Solidarity

Loose solidarity encompasses the network of favors, referrals, and trades within or outside the community (Coleman 1988). That is the most documented form of social capital relations among the poor, usually represented in a positive tone (Hill and Stephens, 1997; Weidner et al., 2010) and is close to the studies on gift economy (Giesler 2006; Sherry 1983). Lia (37) best illustrates this dimension. She also went to the city searching for job opportunities. In her migration process, she relied on the pioneer relatives to get by the hard beginnings. As Lia, most of the informants remember those favors with gratitude. She currently lives with her two boys (2 and 11) in a well-built brick and mortar house. Maybe because she has received important favors during her trajectory, she keeps helping other neighbors who “deserve it” (Smith 2010). During the fieldwork she referred a neighbor to her boss and helped another to buy a wardrobe by lending her personal credit, a common practice among the lower-class in Brazil (Mattoso and Rocha, 2009). She also mentioned that she had morally paid a debt to her boss, for whom she was working for less than her usual earnings after having received an important favor.

The moral underpinnings behind this narrative are (1) the sense of obligation (and entitlement) or compassion with peers (Portes 1998) and (2) the assessment of whether the receiver needs and deserves the favors in the dyadic relation (Smith 2010). Reciprocity is broadly expected and required, feeding the durable obligations among the network (Gouldner 1960). By its turn, the existence of a network of interdependence among the parties is the main structural condition that drives the loose solidarity. It stems from sharing similar objective conditions (Portes and Sensenbrenner, 1993). Additionally, solidarity is performed in priority to close neighbors, friends or employees. This personal closeness goes hand in hand with trust in the other party, which is required more as the favour become more risky, such as in cases involving credit between neighbors and local commerce.

Contrary to the first form, loose solidarity mostly replaces market solutions (donations of goods from inside and outside the communities, helping with maintenance or building of houses, helping with childcare) or increases marketplace participation (lending credit or money, referring to jobs, helping navigate public institutions). However, at the same time that it helps to objectively overcome consumers’ vulnerabilities (Baker et al. 2005), it also reinforces hierarchies and structures of power inside and outside of the community.

### Opportunism

The same structural interdependence that fosters loose solidarity also provides the grounds for opportunistic practices among neighbors, as well as among local commerce owners and their customers. Opportunism refers to the possibilities of free-riding, cheating and advantage-taking that our informants deal with in their communitarian daily life. Despite being rather unproblematized in consumer research, this competitive dimension is documented in different instances of communal relations (Portes 1998). Oscar, a local grocery store owner in his 50’s, provides the best examples for such case. He runs the most successful grocery store of the neighborhood for more than a decade. Coming from one of the few relatively wealthy families in the neighborhood, he likes to say that he is very helpful and supportive of his neighbors, which does not spare him from being a major target of opportunism.

*The exchanging [of goods in the shop] is a big problem: for example, I know that one can take the milk even after a month [it’s expired]. You know what they say if it is expired on the very day? “The milk is rotten”. Oh, it makes me mad! But, then I wonder: “What if you had bought it there at the Carrefour, would you pay the bus to go there and exchange it?” No, it’s because the fool here will exchange for you. And more, we sometimes see a person stealing from the shop. The worst part is that sometimes it is and old person. But we don’t speak up, you know why? Because they will make a bad face and not come back anymore. An old grandma, man, we never imagined! The woman was taking a dip in her pocket! Gee, how can a person that saw you growing, practically raised you, be stealing a dip from you? What about that person to whom you denied some credit? Like, they think that because they buy from you, you have an obligation to help them in the crunch.*

The moral justification underlying those opportunistic behaviors can be found in the feelings of entitlement among members of the community. For those engaging in opportunistic practices, sharing similar conditions would give them the right to similar outcomes. In such closed communities, the emergence of a shared normative structure allows the “less diligent members [to] enforce on the more successful all kinds of demands” (Portes 1998: 16). We witnessed numerous situations in which these claims were made. When a family got one of the first personal computers in the neighborhood for the son, their house was quickly turned into a “public cybercafé”, as the parents complained. In another case, one of our informants complained after a neighbour, who she had lent money to, was caught barbecuing (a status sign in the neighborhood) the next day. Opportunity and timing are among the main situational conditions for such practices. As Oscar says, his costumers don not exchange merchandise when they buy it from the big supermarket chains in the city. Although opportunism capacitates consumption in the short term, it does so at the expense of the relationship between parties, increasing mistrust among neighbors and undermining businesses in the community.

## Distance Managing

Distance managing includes the discourses of valorization of dimensions that differentiate the poor from the “inferior other”, such as a stable formal work, discipline to save money, and ability to raise well-educated children; as well as practices of avoidance of potentially opportunistic or dangerous neighbors. Ilário (56), a retired office clerk, lives with his wife and younger son in a house considered big for the neighborhood. He proclaims that he is not very much part of the neighborhood. He inherited the land from his father and proudly recounts that he transformed the former small house into a big one without much help. When talking about the relationship with his neighbors he states:

*We do not live together with the neighbors; we only hang out with my sister and with the guys from the market [Grocery Store owners, considered “rich”]. Other houses we have no friendship. Here the purchasing power of the people is very low, then you handle friendships here and then they do not leave your door, biting you, asking you things, disturbing you, then you’d better not have friendship with such people. Then instead of going forward you will only go backwards. Then you say “no” and people get bad face. Then if you do not have friends, you have no way they’ll extort you. My sister has some friends who, now and then, are biting her. This kind of friendship that is biting you does nothing. I avoid, hence the person has no way to reach you.*

The distinction Ilário quickly seeks to make between him and the other neighbors is pervasive among our informants. The discourse here is anchored in a frame of a moral superiority (Saatcioglu and Ozanne, 2013) towards those seen as undisciplined, gossipy, vagabonds, or criminals, in contrast to being an honest worker (Sarti 2005; Zaluar 2000). Structurally, this form stems from the combination of long term shared objective conditions of deprivation and individual experiences of dissonant mobility in the face of intra-class differences in the broad community. Geographical and personal proximity provide the situational conditions for the need to manage distance. The same personal closeness that fosters solidarity, on the one hand, sets the grounds for a network of social comparison, envy, and gossip at the local level, on the other hand. In this dimension the market provides the means to escape the burden of the gift economy (Marcoux 2009) and to state distinctions among peers (Üstüner and Holt, 2007). Distance managing protects individuals and increases status positions of avoiders. In the long term, however, it increases mistrust and breaks the communal mechanisms of reciprocity.

## DISCUSSION AND CONCLUSION

This paper shows that among lower-class consumers, cooperation and competition can be substitutable depending on a specific combination of moral, structural, and situational conditions. Different from previous research (Hill 2002; Tumbat and Belk, 2011), the four identified dimensions are observable among people at the same collectivity. These consumers adapt and engage in one or another form of social capital in order to get the most benefit possible from their communal relations. Moreover, we observed that the same person can engage in different forms of relationship among their community, which extends Saatcioglu and Ozanne’s (2013) account of fixed moral identities among poor consumers. We demonstrated that social capital holds a complex and nuanced nature, as one can not only maintain relationships of solidarity within a group, but also perceive it’s closure as a threat or a source of opportunity, therefore avoiding to help, isolating him or herself, or even taking advantage

of other’s good will. This reinforces the idea that social capital can be best understood as a relational system (Portes 1998).

Social capital is usually regarded as a way to establish and maintain a spirit of community in a group (Bourdieu 1986). However, our study shows that collective feelings and belonging are not always desirable. This challenges the dominant view that the poor would necessarily engage in solidarity as a way to cope with and overcome objective conditions of deprivation (Hill 2002; London et al., 2010). For example, we found that opportunism can be also a way to cope and overcome these conditions. Also, social capital is supposed to facilitate collective living (Coleman 1988). However, we found that opportunism and distance managing actually complicate it, mutually reinforcing feelings of resentment and individualism. We contend that future work on lower-class consumers should take this nuanced and complex nature of social capital into account, both to better understand the lived experience of poor consumers and to elaborate solutions for poverty alleviation.

Market resources play a key role on broad social dynamics and processes of identity construction (Thompson 2013). Despite the acknowledged importance of those resources for lower-class communities (Hill 2002), extant literature has left its relationship with social capital relatively untouched. Addressing this shortcoming, we showed that markets and consumption can be (1) the means through which social relationships are constituted (2) the result of a social relationship, where cooperation or competition increase or undermine the access to markets, and (3) can be replaced by a network of favors among neighbors. So, market resources are embedded in different dimensions of communal relationships, which can bring new insights to the body of research on reciprocity in consumer culture theory. As our analysis suggests, the theorization of social capital encompasses elements of both gift-giving (Giesler 2006) and sharing (Belk 2010). Thus, future research can explore social capital as an integrative framework to understand the positive and negative possibilities at the intersection of communal relationships and consumption.

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# Conceptualizing the Space of Markets: How Spatiality Influences Market Dynamics

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## ABSTRACT

From the emergence of Starbucks and the coffee movement in Seattle to the role of Hollywood in Los Angeles' fashion and design markets (Molotch 2002; 2003), there is something "in the air" (Marshall 1890, 332) that explains why companies and industries tend to aggregate in certain places over others. Such localized industries benefit not only from a common talent pool and knowledge spillovers (Marshall 1890), but also from the specific culture associated with these spaces (Molotch 2002, 2003).

Space shapes the creation, disruption, and evolution of markets. For instance, prior market-level research has explored how the territory claimed by industries facilitates their legitimation (Humphreys 2010b), how a network of locales such as coffee shops serves as spaces for the performance and diffusion of consumption practices (Karababa and Ger 2010), and how the creation of a consumption infrastructure not only brings a community together, but also catalyzes market emergence (Martin and Schouten 2014). However, marketing researchers' general bias in assigning agency mostly to consumers and producers might have influenced the observed paucity of research where space would otherwise take a central and agentic role (recent exceptions include Canniford and Shankar 2013; Epp and Price 2010; Giesler 2012; Martin and Schouten 2014). To address this theoretical oversight this paper positions space as an active category in market processes.

The growing interest in joining the study of markets and space in cultural, human, and economic geography (see Boeckler and Berndt 2012), as well as in the sociology of markets (Fligstein and Dauter 2007) evidences this theoretical shortcoming in marketing. If the above-mentioned fields are particularly apt at inquiring about the ways cultural, social, and economic forces shape producers' activities and their influence on market dynamics, our field is well-positioned to contribute to understanding the role of the marketing institution (e.g., Araujo, Finch and Kjellberg 2010; Bjerrisgaard and Kjeldgaard 2012; Cayla and Arnould 2013), consumers (e.g., Martin and Schouten 2014; Scaraboto and Fischer 2013), and the interaction between producers and consumers (e.g., Thompson and Coskuner-Balli 2007) on geographically-embedded markets.

To address this shortcoming, we introduce a theoretical framework drawing on four central spatial concepts: place, territory, scale, and network (PTSN). As we will demonstrate, these concepts provide an analytical apparatus fitting to the study of market dynamics. We then discuss the agentic quality of these four theoretical constructs and highlight their contribution in our understanding of the patterning of sociospatial relations (Jessop, Brenner, and Jones 2008). We subsequently re-examine existing market dynamics research focusing on market creation at the industry-level (Humphreys 2010a, b) and at the product-level (Giesler 2012) using this sociospatial approach to highlight the benefits of our proposed framework for one of the instances of market dynamics: market emergence. This follows the recommendations of Martin and Schouten (2014) that revisiting existing market emergence cases with a focus on object agency can reveal a richer picture of phenomena. We conclude by opening the discussion on the uses of our spatial framework and how it strengthens current explanations not only of market creation, but also of disruption and evolution, before proposing specific future research directions brought about by this new theoretical approach.

## SOCIOSPATIAL CONCEPTS AND MARKETS

In this section we seek to explain how markets rely on, create, and are created by space embedded in the relationships between the many entities (objects, individuals, and institutions) that order economic and social life (Giesler 2012). To do so, we draw on the analysis of the spatial dimensions of place, territory, scale, and networks (PTSN) (Jessop et al., 2008). PTSN is an integrative framework that provides diverse entry points to understand sociospatial relations "in terms of a path-dependent, path-shaping dialectic" (Jessop et al., 2008).

Place is a concrete and limited space that is acknowledged, understood, and invested with meanings and value (Tuan 1979). When the dimension of place is at the forefront, notions of meanings, identity, symbolic exchanges, experiences, and intersubjectivities are among the most visible (Souza 2009). All social phenomena are embedded; however, more than a mere backdrop, place mediates social life (Gieryn 2000). Place has ontological prevalence in the PTSN model. It is at the center of sociospatial relations as "more formative and generative, primal in its power, than the others" (Casey 2008, 403). Territory is a spatially bounded field of forces (Souza 1995). It is a space in which the access, purposes, or meanings are controlled by individuals, groups, or institutions (Sack 1986). The dimension of territory emerges when power relations, control, bordering, and delimitation are taken into account (Jessop et al. 2008; Souza 2009). As an empirical reality, more established territories are spatial agents that stabilize and naturalize power relations (Kärholm 2007). Scale refers to the hierarchical ordering of the world in levels of representations, such as global, national, regional, and local, which is constantly negotiated through tensions between structural forces and the practices of human agents (Marston 2000). The ways in which the relationships at one level contribute to the formation of the other is key to scalar thinking (Marston and Smith, 2001). Networks refer to the interconnections that are established among disperse entities in horizontal relations with each other (Marston et al., 2005; Jessop et al., 2008). As such, networks conceptually contrast the notion of scale, which is based on vertical relations (Leitner 2004; Marston et al., 2005). While place and territory are as much physical and concrete realities as they are conceptualizations, scale and networks are the geographical abstractions of how the multiple forms of diverse spatial entities can relate to each other.

The four spatial dimensions are co-constituting of and co-constituted by social life, as well as by the dynamics of market systems. We contend that markets rely on and create sociospatial assemblages that (1) arrange patterns of interaction that constitute network-formation and collective action; (2) secure and grant otherwise intangible cultural norms and values, such as those implicit in the logic of the market; and (3) stabilize and give durability to socio-structural categories, differences, and hierarchies that shape market-mediated social dynamics (Gieryn 2000; Miller 2010). Simply put, markets create spaces that create markets. However, little attention has been given to the spatial dynamics of markets in consumer culture theory (CCT)-oriented research. The different combinations of place, territory, scale, and networks help to bring this dynamic to the forefront.

Combining place and scale provides an explanation on how consumption practices and markets are developed through space. For example, the market-mediated reproduction of gender relationships

at the domestic scale in American suburbs informs the social space of men and women at the job-market scale, and the relation between the two helps give rise to some of the most culturally prominent gendered myths at the national-scale: the juggling mother (Thompson 1996) and the man-of-action (Holt and Thompson 2004). Localized practices can also foster alternative explanations to processes of formation of multiple consumer cultures (Karababa and Ger 2011), to instances of localized consumer resistance (Thompson and Coskuner-Balli 2007; Giesler 2008), and glocalized consumption practices (Kjeldgaard and Askegaard 2006). In this case a sociospatial approach allows for an understanding of places as unique enablers of the emergence of discourses and practices in a particular form. The combination of place and territory allows for contextualized investigations of place-making processes (Smith 1999). Driven from different forces, interests, and alignments of agents (Gieryn 2000), markets influence the design, representations, and experiences of commercial (Kozinets 2003; Maclaran and Brown 2005) and public places (Chatzidakis, Maclaran and Bradshaw 2012; Visconti, Sherry, Borghini and Anderson 2010). At the same time, the combination of place and network helps to enhance our understanding of how markets are also created by sociospatial relationships. For instance, the existence of a broad network of localized practices can be seen as an important driver of the emergence of the mini-moto market (Martin and Schouten 2014). In the same vein, the existence of a network of localized practices can be helpful to understand why some consumption practices and discourses become accepted in mainstream markets (Sandikci and Ger 2010) while others fail (Scaraboto and Fischer 2013). The PTSN framework therefore allows for other theoretical combinations to be used in understanding diverse market dynamics. To better demonstrate our argument, we next apply this idea to two pathbreaking papers Humphreys (2010a) and Giesler (2012) that focus on one of the key aspects of market dynamics: market creation.

## METHODS

Consumer researchers have recently called for a re-examination of previous market emergence studies. According to Martin and Schouten (2014, 868), “[a] disciplined look at the agency of material objects, spaces, and institutions may expand our understanding of a very differently structured market.” Echoing the authors’ timely and relevant imperative, we focus on sociospatial relations to reveal a “richer picture of market emergence” (Martin and Schouten 2014, 868). To pursue this goal, we adopted the re-inquiry approach previously used in marketing and consumer behavior research (e.g., Askegaard, Arnould, Kjeldgaard 2005; Garg, Inman and Mittal 2005; Murray 2002; Thompson 2002; Wilk 2001). Re-inquiries can generate valuable insights and a more complete understanding of a consumption phenomenon through the integration of different perspectives (Thompson 2002). Furthermore, to organize our findings, we use the established extended case method (e.g., Cayla and Eckhardt 2008; Holt and Thompson 2004; Holt 2002; Allen 2002). This methodological orientation is especially relevant for our research questions due to the fact that it “has become a favored methodology for researching macroscopic, often global, questions concerning market and cultures from an interpretive perspective” (Holt 2002, 73).

In particular, we chose to critically examine two influential market creation studies: the industry-level analysis of the emergence of casino gambling (Humphreys 2010a, b) and the product-level analysis of the rise of Botox Cosmetic (Giesler 2012). To do so, we first engaged in an archival search of all scholarly articles, media reports, and books with the words “Atlantic City, casino, and gambling” for the industry-level case, and “Botox Cosmetic” for the

product-level case. The complete data set totaled 20 newspapers and 51 academic articles. These sources were purposively selected to highlight the emergence of the markets, which entailed us pursuing a geographically and temporally bounded sampling method. Similar to Karaba and Ger’s (2010) work, we used a textual approach to data analysis and examined the sequence of events in these texts, as well as the authors’ arguments, rationales, and justifications regarding the emergence of casino gambling in Atlantic City and Botox Cosmetic in the U.S. In line with the re-inquiry method, we then compared and contrasted these results with the findings provided by Humphreys’ (2010a, b) and Giesler’s (2012) work. Although this type of method generally approaches data from a top-down perspective rather than a bottom-up manner, an iterative and back-and-forth interpretive process nonetheless prevailed. Next, we present how a sociospatial theoretical lens can inform market creation.

## RE-EXAMINING THE INFLUENCE OF SPACE ON MARKET CREATION

### How do new industries emerge in a particular context?

Humphreys (2010 a, b) explains the rise of the casino industry in Atlantic City as a result of central actors using framing strategies to reposition the discourses about gambling, and journalists changing the rhetorical meanings of casinos. Together, these articles provide a producer-driven and discursively-based explanation for the legitimization of Atlantic City’s gambling.

Industries emerge in specific geo-historic contexts (Scott 2000). Atlantic City’s growth, for example, was dependent on the emergence of the railroad industry: the city has always been a resort destination receiving influx of visitors from nearby locales (Stansfield 1978). “Changes in transport technology and recreational geography” (Stansfield 1978, 238) were responsible for the city’s downfall in the sixties. The trains coming in were phased out after World War II and the narrow streets of the city and numerous pedestrian zones were at odds with the booming auto tourism. At the time casino gambling was legalized in Atlantic City, the city was in economic despair: the unemployment rate was higher than 20% and in the last 15 years, the population size had decreased by 25%, tourism and taxes revenues were steadily declining and hotels’ room capacity had dropped by 40% (Braunlich 1996; Rubenstein 1984). The city needed a solution, and casino gambling was seen as a way to “facilitate the redevelopment” of the city, “encourage the replacement of lost hospitality-oriented facilities” and “attract new investments” (New Jersey Statutes Annotated 1982). More, because of the city’s history as a resort destination, it benefitted from an adequate infrastructure and talent pool, as well as 50 million potential visitors in a 300-mile radius (Braunlich 1996). In the words of Martin and Sunley (2006, 398), “the context-specific, locally contingent nature of self-reinforcing economic development” made legalizing gambling the next logical step in the cycle (Stansfield 1978).

Not only does a geographical approach illuminates our understanding of the emergence of the industry, but it also benefits our comprehension of its crystallization over time: if we compare Atlantic City to its closest rival, we notice how the industry was shaped under a different network of citizens, interstate relations, and regulatory systems. “In Las Vegas, they built the city to support the casinos. But in Atlantic City, they built the casinos to support the city” (Tesker and Sur 1991, 130, citing Baker 1989). For example, in Atlantic City, casinos had to be part of a hotel, and the superficialities of the casino was dependent of the room capacity of the hotel; casinos were not to be the main source of income from touristic activities; they could not have direct access to the street; they had less slot machines and more labour-intensive games than Las Vegas to keep

employment high (Braunlich 1996, 50; see also Lehne 1986). How the casino industry was defined in Atlantic City was a result of social, historical, and geographical factors unique to the city, the relation it had in a network of resort cities, and the distance it wanted to keep with Las Vegas.

In summary, a sociospatial approach places the emergence of the casino industry in Atlantic City as a contextualized phenomenon tied to a local economy, a city's infrastructure, and a state legislative framework. The sociospatial shaping of the region is perhaps more informative than a discursive approach to explain the reasons why Atlantic City became the first city in the East of the United States to legalize gambling, and why it held this monopoly for close to twenty years.

**How are innovations adopted?** Giesler (2012) explicates the gradual social acceptance of technological innovations, such as the Botox Cosmetic self-enhancement injection, as a conflictive, dyadic, and discursive-based process between official brand images promoted by the innovator and doppelgänger brand images (Thompson et al. 2006) publicized by other stakeholders. However, by focusing solely on rhetorical tactics, this study has overlooked the important role of spatial elements in legitimizing radical innovations.

Even though Botox had been occasionally administered in doctors' offices across the U.S. to treat wrinkles, it was not until the FDA's approval for cosmetic-use in 2002 that the innovation started to disseminate through a unique form. As Kim (2006, 8) recounts, following FDA's approval, "[the] floodgates burst open in convivial form, giving rise to a phenomenon known as Botox Parties." Botox parties – "[a] consumption ritual taking place either in upper-class living rooms or in the practices (or homes) of exclusive Botox dermatologists" (Giesler 2012, 59) – were not part of the innovator's initial marketing campaign. Rather, they were created by medical practitioners in Los Angeles, U.S.A.'s plastic surgery epicenter, who saw these temporary market-spaces as an opportunity not only to save costs and make higher profits by injecting several patients at once (Zimmerman 2002), but also to introduce new customers to the innovation, and gain word-of-mouth advertising and free publicity by combining two disparate scenes: the house party with the doctor's office.

These spaces, co-created between doctors and early adopters, seamlessly integrated highbrow party elements (such as a hors d'oeuvres, champagne, and jazz music) with common medical components (including sterilized needles, vials of Botox, and consent forms). As such, they provided the safety and security of the domestic environment (McCracken 1989) in combination with the expertise of medical professionals, which gave consumers the confidence and comfort to experiment with a potentially healthy and morally risky innovation. This spatial fusion became an instant hit across the U.S., soon moving from exclusive private homes at the domestic scale to "servicescapes" (see Booms and Bitner 1981) at the public scale, when Las Vegas hotels began offering Botox spa weekends, casinos and radios gave away complementary injections at local malls, and a Botox party was held live on the popular "Entertainment Tonight" television show (Cooper 2002). Hence, the Botox party, a safe and familiar market-space, acted as a "market catalyst" (Martin and Schouten 2014) in the diffusion of the cosmetic innovation during its launch phase by fostering a brand community (Muniz and O'Guinn 2001) and evangelizing new consumers.

In sum, we found evidence that the widespread acceptance of new, illegitimate, and risky consumer practices, regardless of the institutionally powerful market actors supporting them, can be facilitated by market-mediated safe spaces.

Our sociospatial analysis of two market creation phenomena has demonstrated how spaces exert different forms of agencies over market actors and processes. At the industry-level, Atlantic City's resort structure and geographical characteristics provided the grounds to attract and legalize the city's casino industry. At the product-level, Botox parties provided a safe and controlled environment from which the innovation spread to the general public.

## DISCUSSION

As we have shown, markets are emplaced and embedded within localized cultural, social, and economic forces. Places provide specific cultural, human, and material resources, as well as political and legal environments that influence the creation and evolution of markets. Temporary market spaces allow for the performance and reproduction of market practices by local social actors. Accordingly, markets are co-constituted by geography (see Shove and Pantzar 2005). Catering to the role of geographies shed a new theoretical light on micro to macro market-level processes. We show how places provide cultural, human, and material resources, as well as political and legal environments that influence the creation and evolution of markets, as well as how temporary market spaces in a domestic setting can serve as safe spaces for the diffusion of market practices and the recruitment of market actors.

So far, marketing researchers have been committed to understanding the role of actors, institutions, discourses, and practices (in order: Scaraboto and Fischer 2013; Humphreys 2010a, b; Shove and Pantzar 2005) on market dynamics, leaving space rather unexplored (some notable exceptions include Bjerrisgaard and Kjelgaard 2012; Cayla and Eckhardt 2008; Humphreys 2010b; Martin and Schouten 2013). Our proposed framework is aimed at redressing this shortcoming by offering four interlinked theoretical concepts. We suggest moving away from the overtly discursive approach to the study of markets (e.g., Giesler 2012; Humphreys 2012b; Sandicki and Ger 2010; Scaraboto and Fischer 2013) and instead focus on how the materiality of space shapes market creation, disruption, and evolution. Through our re-examination of two prominent market creation cases, we have shown how geography can extend existing approaches. The combination of the four spatial concepts allows us to provide novel research avenues addressing market dynamics. Table 1 below shows the theoretical focus brought about by the use of each concept, each combination of concepts, and the specific research questions that emerge from such a focus.

The marketing field's strength is the study of consumers and their interaction with producers. We are not suggesting that geography should overshadow an analytical focus on those actors. Rather, we believe our field is uniquely positioned to question how space impacts consumers, producers, and markets. Our spatial turn solely broadens our theoretical apparatus, and we hope that this sociospatial approach will allow for future fruitful research avenues.

Table 1. Concepts, objects of study and possible research avenues

Concept	Object of study	Application to market systems
Place	Cities, neighborhoods, regions, locales (as marketplaces)	How are markets emplaced?
Place x Territory	Core vs. periphery; places as territories	How is distance from a market center impacting a peripheral market?
Place x Scale	Global vs. local; Russian doll spatial division (home - local - national - global)	How are global markets enacted locally?
Place x Network	Network of places; Partnerships; Movements of actors	How do market actors associated across places?
Territory	Borders and boundaries	How are markets' (multiple) borders maintained or expanded upon?
Territory x Scale	Market division (local; global); Multilevel governmentality	How are market divisions sustained?
Territory x Network	Interstate market systems; Multi-territorial market alliances	How are marketing territories influencing the structuration of markets?
Scale	Hierarchies, global vs. local	How are nested market practices influencing each other?
Scale x Network	Flat ontologies; ascalar market entry	How are new markets recruited to a market system?
Network	Flows, networks	How are markets constituted across spaces?

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# All the Fun of the Fan: Consuming Burlesque in an Era of Retromania

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## ABSTRACT

Retro is often associated with a cosy, cupcaked, rose-tinted worldview. Some consumers, however, resist the comforts of capitalist commodification through retro-sexual activities. This paper studies one such community of fun-loving, fan-wielding Burlesque dancers in France, revealing their retrospective lifestyles and resistant pursuits.

*The most important element in burlesque is fun. If you're having fun, the audience will feel it.*

—Jo Weldon (2010: 18)

## INTRODUCTION

According to Cova and Cova (2014), retromarketing is one of only four strands of Consumer Culture Theory (CCT) that have made the leap from academic contemplation to management practice. This may or may not be fair comment, but what is incontestable is that we live in a retroactive age, where throwback branding is burgeoning and newstalgia is all around (Kozinets 2013). Although there is considerable disagreement on the causes of today's yester-yearning – some attribute it to the ageing of Baby Boomers, others to the overpowering pace of technological change, yet others to consumer cocooning in an increasingly threatening world – most commentators concur that contemporary consumption is being “inundated with images of the past” (Wilson 2005, p.161).

Within marketing and consumer research, retro has had a fairly easy ride (Cova and Cova 2014). It is viewed in a positive light. Not only is it recommended as a viable branding strategy for hard-pressed marketing managers (Brown, Kozinets and Sherry, 2003), but the nostalgic feelings retro evokes are considered healthful, nothing less than rose-tinted salves that transform occasionally unpleasant memories into uniformly enjoyable reveries (Zhou, et al. 2012). The past is a palliative (Lindstrom 2011). It makes the present palatable. Whose heart doesn't lift a little when the cute, cuddly, cartoonish, child-like VW Bug cruises by? Who isn't looking forward to J.J. Abrams' reboot of *Star Wars* with most of the original cast in place?

Reading the above, it is easy to infer that retro is a soft option, the lazy response of unimaginative brand managers who rummage in their archives for languishing logos and moldering brand mascots (Walker 2008). It is cheap, it is cheesy, it is egregious, it is exploitative (Harris 2000). It is reactionary, basically (Reynolds 2011). Retro, however, can also be a site of resistance, a sequestered space where anti-commercial activities are enacted and a cheeky, counter-capitalist ethos is articulated. Drawing upon a detailed, three-year ethnographic study of Burlesque dancers, we show that, far from being dewy-eyed yester-yearners, the Burlesque dancing community regards their retro-inflected activities to be a carnivalesque challenge to commodification and consumerism. Our paper commences with an overview of latter-day retromania and its marketing manifestations, continues with a stripped-down account of the Burlesque art-form and our data gathering activities, culminates in a compact results section, which reveals the retro and resistant components of dancers' fun-filled, fan-handling pursuits, and concludes with a few words on the retro-equals-reactionary stereotype.

## RETRO HO!

Way back in the dim and distant days of the mid 1990s, the provocative French philosopher Jean Baudrillard (1994) proclaimed that history had been thrown into reverse. Sensing the then-imminent millennium, when the capitalist west's “progress” would be weighed in the balance and found wanting, he announced that an age of reflection, of reminiscence, of retrospection was upon us. The overall aim of these collective recollective activities, he further averred, was to settle the score and wipe the slate clean before starting from scratch in the 21<sup>st</sup> century.

Twenty years on from Baudrillard's undeniably brilliant hindsight insights, the philosopher himself is dead and gone, but the retrospective epoch he anticipated is still going strong. Nostalgia is everywhere. Yestermania is rampant. The past is more present than ever in popular culture. Whether it be blockbuster movies (*Noah*, *Dawn of the Planet of the Apes*, *X-Men: Days of Future Past*), bestselling novels (*Bring Up the Bodies*, *Life After Life*, *Stoner*), Broadway musicals (*Wicked*, *Jersey Boys*, *Rock of Ages*), must-see TV (*Mad Men*, *Downton Abbey*, *Dallas*, alas) or indeed the ongoing financial scandals, with their unsettling echoes of the 1930s, we live at a time when the shock of the new has given way to the schlock of the old.

So retromaniacal are consumers nowadays, according to popular culture commentator Simon Reynolds (2011), the first ten years of the 21<sup>st</sup> century should not have been called the “noughties”, as they often were, but nothing less than the “Re-” decade. The 2000s, he rants in an outraged 500-page tirade, were dominated by the re-prefix: revivals, reissues, remakes, re-enactments, re-launches, reformations, restorations, rehabilitations, recapitulations and non-stop retrospection, not least in the music industry and its analogous affiliates like fashion and dance.

Numerous scholars, needless to say, have tried to make sense of these developments, both with regard to the nostalgia boom in general and retro-branding in particular. Davis (1979), for instance, draws a distinction between private nostalgia and collective nostalgia; Boym (2001) contrasts restorative nostalgia with reflective nostalgia; Jameson (1991) separates traditional nostalgia and neo-nostalgia; Brown *et al.* (2003) maintain that nostalgia brands are not the same as retro brands; Maclaran (2003), de Groot (2008) and dozens of others have plumbed the depths of this retrospective impulse, using a range of qualitative and quantitative methods. For the founding father of this field, though, the most remarkable feature of the 21<sup>st</sup> century's preoccupation with the past is “Postmodern Ironic Nostalgia”, which mines the past and mocks the present simultaneously (Lowenthal 2014). Instead of venerating bygone times, PIN makes fun of them and revels in contemporary anachronisms. Thus *The Onion* satirically declares that, such is the demand for revivals, America is not only running out of heritage but considering rationing what remains in order to preserve stocks of times past for future consumption!

## A BRIEF HISTORY OF BURLESQUE

Burlesque, in the words of the *Oxford Reference Dictionary*, is “a variety show, often incorporating striptease.” This definition, however, hardly does justice to a venerable and valuable cultural form. Burlesque is a multi-disciplinary performance art that, throughout history, has built on different theatrical traditions includ-

ing playing, singing, dancing, clowning and, since the late 19<sup>th</sup> century, stripping.

The first burlesque show, in the tradition we know today with nude and exotic dancers, took place in Paris in 1894 at the Divan Japonais and spread to celebrated cabarets like Moulin Rouge, Casino de Paris and Folies Bergeres, as well as the United States (Do Carlo, Von Berlin, and La Motta 2011). From the Roaring Twenties onward, sophisticated burlesques were performed in New York cabarets and theaters, with star strippers such as Gypsy Rose Lee, Tempest Storm, Lili St. Cyr and the peerless Betty Page (Do Carlo, et al 2011).

After a dip during the 1970s, when hardcore pornography, live sex shows, and full nudity images in the media decreased the public's appetite for top-class strip-tease, the genre was revitalized in the 1990s thanks to a number of female celebrities who revived Hollywood glamour through the New Burlesque (or Neo-Burlesque) movement, both in the US (Dita von Teese) and Europe (Immodesty Blaize). In France, for example, strip-tease classes have opened in major cities; a number of annual events have been established by dance enthusiasts; and, ever since the success of the road movie *On Tour* (which features American new burlesque performers Mimi Le Meaux, Kitten on the Keys, Dirty Martini, Julie Atlas Muz, Evie Lovelle, and Roky Roulette), the movement has featured regularly in women's magazines and its accessories are on sale in many drug-stores.

## METHODS AND FINDINGS

As summarized in Table 1, our three-year ethnographic study of the French burlesque community evolved through three main phases. It began with non-participant-observation of the community, originating from the lead author's vintage collecting interests. A second

phase involved deeper immersion in the subculture, when the lead researcher joined two burlesque associations, Neo Retro and Tassel Tease, and participated in their activities. The third phase necessitated full involvement in the community, though regular attendance at strip-tease classes – once per week for a year – and performing on stage in a group show, *Follie Follies* (June 30<sup>th</sup>, 2012, Mas des Escarvatiers, France). This not only offered a unique opportunity to experience the emotions created by the gaze of spectators, but it helped minimize researcher dominance and “otherness” (Madriz 2000) and facilitated the co-creation of meaning. Interviews were also conducted with burlesque art director, performer and historian Lady Flo, famous burlesque performer Cherry Lyly Darling, cabaret performer and professor La Violeta, as well as the make-up and hair-stylist Krystie Red Sugar. In addition, several trainees were interviewed (Lady Strawberry, Lady Pee, Bambi Freckles, Barbie I Doll, etc.), as were spectators at burlesque events and burlesque/vintage store managers. Field notes were taken, furthermore, as were pictures and videos during preparation for the show. In parallel, a second researcher was observing the community as an outsider. He related the analysis to existing theoretical frameworks. He also ensured that the first researcher, by dint of being deeply involved in the community, would not become blinkered by the burlesque community's beliefs and mores (Schouten and McAlexander 1995). Themes started to emerge early during the second phase of the research and were formalized thereafter, as follows:

### *Burlesque's Retro Aesthetic*

The burlesque community is rich and varied but its members are as one in their can-do mentality. They consider femininity and beauty to be a *production*. As Dita von Teese (2006), stresses, wom-

**Table 1: Overview of Methodology**

	PHASE 1 (June 2010-October 2010): Non Participant Observation	PHASE 2 (October 2010-June 2011) Overt Participant-Observation as an outsider	PHASE 3 (June 2011-Dec. 2012): Participant-Observation as an insider
Data collection	Vintage Brocantes ; Vintage stores; Cabaret shows and Burlesque performances; Movies; Paris Burlesque Festival (Oct 2010)	Adhesion to Tassel Tease and Neo Retro; Neophyte Strip-tease classes, retro make up and hair styling classes , DIY classes (nipples) as a researcher Paris Burlesque Festival (Oct . 6-9 2011)	Weekly training to perform on stage; Nice Feria (April 2012 ); On stage in a collective show (June 30 <sup>th</sup> 2012) French national holiday: retro 50's (July 14 <sup>th</sup> 2012) Paris Burlesque Festival (Oct. 2012)
Researcher status and involvement	Spectator Collector of vintage furnitures (occasionally clothes) Fan of the 50's-60's Hollywood movies	Involvement as a researcher	Involvement as a trainee and performance on stage
Researcher tasks	Informal interviews with spectators at events Informal interviews with vintage sellers First contacts with performers	Formal interviews with pros (2 performers and 1 make up artist) Formal interviews with participants (3 participants) and informal interviews with 5 other participants Formal interviews with 3 women spectators Formal interviews with 2 sellers Begin to discern themes Member checks	Acculturation Being forgotten as a researcher and accepted as a culture member; Understand the culture from the inside Understand the emotions when performing; Informal interviews through interactions with performers and trainees; Taking pictures; Develop analytical framework

en produce their look through exaggerated make-up and feminine attire. Not all women are born beautiful yet every woman can *become* beautiful with appropriate work involving cosmetics and costumes. In today's world of "fake naturality," where women are encouraged to use artificial means to look natural and flawless – French manicure, nude make-up, light cosmetic treatments like Botox – burlesque encourages an artificially constructed appearance that harks back to a golden age of Hollywood glamour. Burlesque women take inspiration from icons like Marilyn Monroe and Mae West, who represent the retro-feminine ideal of constructed voluptuousness. Dita von Teese's transformation from an ordinary blond girl with freckles to a glamorous, raven-haired reincarnation of pin-ups of yore illustrates both the pull of the past and its production in the present.

This neo-nostalgic outlook is likewise expressed in the costumes and accoutrements of burlesque members. Footwear and hosiery are central to the community's sense of self (Belk 2003), stockings, garters and stilettos especially. Lipstick too is integral to burlesque's retro aesthetic. In many ways, indeed, it is the signature emblem of the subculture. Despite individual differences, all burlesque looks combine bright red lips with pale powdered skin, often framed by appropriately old-fashioned hairstyles, such as the classic Victory Roll of post-war pin-ups (Weldon 2010). The vocabulary of body movement is no less nostalgic (e.g. bump 'n' grind), as are key components of stage costumes (fans, fishnets, pasties, nippies, etc.) as are grooming rituals (elaborate application of fresh lipstick) as are annual ceremonies (such as Tease-O-Rama) as are the pseudonyms adopted by burlesque dancers, which often evoke the fun-filled spirit of childhood replete with sweet treats and candy kisses (Sugar da Moore, Bambi Freckles, Lady Strawberry, Barbie I Doll, Mlle. Sweet Candy, Sucre d'Orge).

Another, rather more transgressive, throwback is the tattoo. Almost every woman encountered or interviewed had a tattoo. Their tattoos, however, tend to be the antithesis of those traditionally associated with male virility. Not only are they retro in style and imagery, but frequently depict flowers, fruits and birds as symbols of femininity and freedom. In France, lilies are an especially popular motif, a clear reference to the 15<sup>th</sup> and 16<sup>th</sup> centuries when prostitutes were marked on their skin with fleurs-de-lis (Caruchet 1981).

The retro-mindedness of community members varies considerably, admittedly. Stage performers and retro-style designers have highest status membership within the subculture. They inspire and feed groups of women who share a commitment to retro-fashions and retro activities more generally. Members at lower levels of the hierarchy do not adhere fully to the retro lifestyle on a daily basis. What they do share, though, is a rejection of contemporary consumer culture which they call the McFashion or Kleenex economy. As a rule, they prefer to invest in quality goods with historical heft. One vintage retailer explained how she got sick of Zara and H&M types of clothes and decided to invest instead in good cut, high quality, ethically produced items:

*I was going to professional exhibitions and I was sick, season after season, to see more or less always the same stuff. The stuff the client washes maximum 5 times, and put in the garbage. One day, I discovered a stand with vintage pieces. I ordered for my boutique and it worked well. From there I extended the range. I sell authentic vintage as well as collections with a respect for both the style (vintage) and the spirit (ethical) such as for instance Brigitte Bardot line of clothes (Chantal, in her 50's, Vintage Retailer and Designer)*

Burlesque women, by and large, exit mass market consumption through nostalgic acquisitions and the celebration of authenticity (Beverland and Farrelly 2010): that is, genuine products popular in prior historical periods (Cervellon, Carey, and Harms 2012). In the burlesque world, which is regarded by some as superficial and fabricated, the genuine has special status. Community members are educated to choose vintage pieces, or make them by themselves when they are not available. They collect passionately but, unlike the typical collector, they collect in order to use. Products evocative of the "good old days" – including furniture, clothes and accessories – are used every day rather than placed on a pedestal. Women shop for vintage in specialized markets, are loyal to specialized stores, and import vintage pieces from the US through specialized websites. They replicate the look of iconic historical epochs (the 20's, the 50's, etc.) down to the finest detail in clothing, make-up and hair-styles.

Another manifestation of yester-yearning is found in the community's "home-made" or "Do-It-Yourself" ethic. Accessories and attire that cannot be purchased or borrowed from the relevant period of history are hand-made, based on original drawings. Real vintage lingerie pieces are very rare because people are reluctant to purchase second-hand underwear. For this reason, lingerie pieces tend to be sown by hand from classic patterns. Other important accessories worn in private are the pasties or nippies which hide the nipples. Again, these items are home-made. Do-it-Yourself approaches also apply to cosmetics, where mixing powders into bespoke shades is commonplace. Burlesque is the DIY of beauty and fashion. Women do their costumes themselves. Traditional crafts such as knitting and weaving are reborn. As Ferreday (2007, p.57) notes "Whereas mainstream femininity is positioned as empty consumption, and as a source of anxiety, burlesque is aligned with recycling, thrift shopping, and the revival of traditional crafts."

#### *Burlesque's Resistant Attitude*

Ferreday (2007) further notes how burlesque emerged as a subculture that promotes the construction of multiple and elaborate feminine identities. Some performers "show the girl", by placing glamour and girly attitudes at the center of their performances (e.g. Dita von Teese), meantime many other performers "burlesque the girl", emphasizing the second degree and the comic in their routines (e.g. Dirty Martini). Whatever approach is adopted, it has to be a personal and individual sense of performing femininity.

Throughout this process of "becoming a woman," burlesque resists the conventional emphasis on understatement (natural make-up, healthy tan, clothes that do not celebrate the body, et al.). It liberates from normative versions of womanhood which consider shameful the overt and excessive use of feminine artifacts. Women committed to a burlesque lifestyle embrace the glamour of Hollywood stars of the 50's, many of whom refused to exchange their stockings for new-fangled pantyhose. Burlesque women wear stockings and garters every day, as casual outfits, and set great store by bright red lipstick, noted above.

In addition to resisting oppression, burlesque women *learn* femininity. At the heart of the burlesque ethos, the dominant idea is that femininity is both *produced* and *performed*. Classes teach women how to construct their feminine self: sitting on a chair with elegance, walking on heels with allure, seducing with one eyes, moving one's hands with grace and, ultimately, undressing in a sensual manner. Femininity is always glamorous and elegant, never vulgar or nondescript. In burlesque, it must be emphasized, the "performance of femininity" is not directed at men. The vast majority of audiences at burlesque shows are female (Ferreday 2007). Attendees also tend to be well educated and independent financially. They are in a process of defining femininity (and sexuality) in a very intimate

way, regardless of male-constructed stereotypes. In this process, they subvert society's insistence on fitting in and adhering to socially-constructed roles. Implicitly, burlesquers condemn an intolerant and masculine society.

The ironic and parodic style of many burlesque performers is equally empowering. Throughout history, humor has been an instrument of resistance by the oppressed over their oppressors (e.g. Lipman 1991). It is a "survival device" (Caliskan 1995), one of the reasons why women use humor in the workplace (Martin 2004) or when engaging in male activities such as riding a motorbike (Martin, Schouten, and McAlexander, 2006). Such actions invert gender inequalities. Alongside humor, history contains many examples of women resisting forms of oppression through nudity. For instance, young Egyptian and Iranian activists post naked photos on their blogs in the name of freedom of expression. Women are willing to undress in thought-provoking ways. The burlesque community is likewise defined by nakedness, through its stress on strip-tease performance. Stripping is an individual act, going beyond one's sexual boundaries, as much as a collective defiance against a male constructed discourse of deviance (see Ronai and Cross 1998).

For many women, undressing in front of an audience is an exhibitionist act. All informants mention the thrill of going out of the boundaries of their (ordinary) sexuality through exhibiting their bodies. They consider themselves as having an anti-conformist and liberal perspective on sexuality. That said, the strip in burlesque is about sexiness and sexuality. It is not about sex, as such. During a burlesque show, participants never disrobe totally; they strip down to nipples and G-strings. They stress the tease rather than the strip in striptease. The process is more important than the outcome.

The burlesque community's resistance isn't total, however. Recent years have seen the co-option of its imagery by the luxury, fashion, beauty and beverage industries. Several haute couture houses have launched vintage inspired collections (Louis Vuitton, Miu-Miu) or recycled vintage materials and designs (YSL, Dior's revived New Look). Ralph Lauren sells vintage pieces in his London and Paris flagships along with his own creations. NARS lipstick names evoke golden age Hollywood movies (Blonde Venus, Shanghai Express) and Benefit cosmetics uses vintage and pin-up imagery on its packaging. Even Chanel embraced burlesque when Karl Lagerfeld featured Dirty Martini, one of the most famous and overweight new burlesque performers, in a photo-shoot at the iconic entrance to the brand's flagship store on rue Cambon (Sterzemien 2010). Although some purists within the community are offended by the fashion industry's exploitation of their subversive subculture – or its imagery at least – most of our informants consider this a tribute to the burlesque community's creativity and artistic accomplishments. They recognize that it provides a vehicle for conveying their ideas to a much wider public and womanhood as a whole:

*The purists do not accept this usage of the burlesque imagery. For instance, they find insulting that women would ape their style (make-up and hair styling) and that brands would be marketed retro. I consider that we cannot live in isolation. I find positive that our ideas and creations would be put forward and inspire the marketplace (Krystie Red Sugar, 45, Hair and Make Up Artist)*

## DISCUSSION AND CONCLUSION

Although consumer research studies devoted to the specifics of retro are comparatively few in number, they reveal that the nostalgia-steeped products, services and promotional activities of marketing practitioners often trigger resistance from interested parties (Brown

et al. 2003). The new Beetle, for instance, was rejected out of hand by many Love Bug lovers of old. The revived *Star Wars* franchise was castigated by movie enthusiasts who found it hard to see past the glory days of Carrie Fisher, Mark Hamill and Harrison Ford. The resisters are themselves resisted, admittedly, but just as empirical studies of nostalgia show that the bittersweet emotion is sweet for some yet bitter for others, so too retro is revered to the point of rejoicing and reviled to the point of resistance. Our ethnographic study of the Burlesque community reveals that retro can be a form of resistance in itself. By retreating into an idealized past, like the replica Mountain Men of Colorado (Belk and Costa 1998) or the stressed-out Microserfs at Burning Man (Kozinets 2002) or the old-American-mind-ed riders of vintage Harley-Davidsons (Schouten and McAlexander 1995), many consumers resist and reject all that is trite and tawdry about today. Retro, in sum, isn't always a return to the hidebound past, it's also a rejection of the reactionary and a potentially revolutionary dance step into a future of postmodern ironic nostalgia.

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# Norms as Standards vs. Self-Descriptions: How Dynamic Information Shifts Interpretation of Normative Messages

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## ABSTRACT

Social norms are widely used to promote both personally and societally beneficial behaviors. Many normative messages seek to influence the audience by presenting static information—information about the frequency, incidence, or prevalence of some behavior or condition among members of a population. For example, a *New York Times* headline “America’s Diet: Too Sweet by the Spoonful” presents the norm for nutrition in static terms (Brody 2009). However, normative messages can also convey dynamic information—information about how the frequency, incidence, or prevalence of some behavior has been changing in a given population. For example, the headline, “Americans’ Eating Habits Take a Healthier Turn, Study Finds,” presents the norm for nutrition in dynamic terms (Beck and Schatz 2014). Although a substantial body of research has explored the mechanisms by which social norms influence behavior, this literature mainly focuses only on normative messages presenting static information (Goldstein et al., 2008; Schultz et al., 2007). The present research departs from prior work by investigating the effects of dynamic information in normative messages about exercise, a context of particular importance given a national surge in efforts to battle obesity and obesity-related illnesses.

The notion that people tend to align their behavior to social norms is well-documented in behavioral research (Bearden and Etzel 1982; Venkatesan 1966). These descriptive norms (i.e., what most people are doing) influence consumers by highlighting a potentially successful, or at least acceptable, course of action—“If everyone is doing it, it must be a sensible thing to do” (Cialdini et al. 1990, 1015). Moreover, adhering to norms often increases social approval (Fisher and Ackerman 1998; White and Simpson 2013). Thus, norms can serve as a standard to which people assimilate. However, this conclusion is predicated on research that largely examines normative messages presenting static information. What remains unknown is how people respond when normative messages also present dynamic information—specifically, information suggesting improvement.

Extant research has found that people have a general preference for improving trajectories over more stable ones (Hsee and Abelson 1991; Hsee, Abelson, and Salovey 1991; Kahneman and Tversky 1979). Furthermore, individuals tend to perceive improvement in themselves even where it has not occurred (Wilson and Ross 2001). Accordingly, we propose that when a normative message conveys improvement, the message will be aligned with people’s self-views, increasing the likelihood that they interpret the message as a self-description (vs. a standard). Thus, a low (vs. high) exercise norm will be self-threatening and increase consumers’ fitness intentions (Gao, Wheeler, and Shiv 2008; Taylor, Neter, and Wayment 1995). This constitutes a reversal of the effect of normative messages that only present static information.

Two experiments explore the proposed effects and examine the moderating role of implicit theories to shed light on the underlying process. Prior research on implicit theories has found that entity theorists tend to make trait attributions for their performance (Burnette 2010; Hong et al. 1999), and thus they should be most susceptible to the self-descriptive interpretation of norms fostered by dynamic information. Consistent with this, we demonstrate that the proposed reversal of effects is most pronounced for those who strongly endorse

entity theories of fitness. In doing so, this research makes three contributions. First, the experiments reported here enrich the literature on social norms by providing an initial investigation of the influence of dynamic information in normative messages. Second, the preponderance of work on implicit theories and self-regulation suggests that incremental theories are more effective in promoting self-improving and self-beneficial behaviors (Burnette 2010; Burnette et al. 2013). In contrast, we demonstrate a situation in which entity theories can promote self-regulatory behavior. Lastly, this research makes a practical contribution to health marketing. Specifically, we shed light on when dynamic information in normative appeals will be effective in motivating healthy behavior and when it is likely to backfire.

## SOCIAL NORMS AND STATIC INFORMATION: NORMS AS STANDARDS

Research from a variety of disciplines has demonstrated the influence of norms in numerous domains, including environmental consciousness (Goldstein, Cialdini, and Griskevicius 2008; Schultz et al., 2007; White and Simpson 2013), charitable giving (Croson, Handy, and Shang 2009; Croson and Shang 2008), volunteerism (Fisher and Ackerman 1998), and physical fitness (Christakis and Fowler 2007). Across these disparate contexts, considerable evidence suggests that individuals assimilate to salient social norms—i.e., what they believe most others are doing—for better or for worse. For example, Cialdini and colleagues (1990) found that when the norm for littering is low and salient, people reduce their littering; on the other hand, when the norm for littering is high and salient, people increase their tendency to litter. In later work, Schultz et al. (2007) demonstrated a similar effect in the context of household energy consumption. Specifically, households decreased their energy consumption when they received a message informing them that they used more electricity than the norm, and increased their consumption when they were informed the opposite. More related to the context of our study, medical research on the spread of obesity has invoked a similar norms-assimilation process to explain the spread of obesity throughout social networks (Christakis and Fowler 2007). Specifically, Christakis and Fowler suggested that close relationships with obese individuals color perceptions of fitness norms, ultimately increasing the likelihood of personal weight gain. Thus it appears that social norms are generally used as standards for behavior.

In most of the prior norms research, whether the focal norms are explicitly stated (e.g., Schultz et al. 2007; White and Simpson 2013) or merely implied (e.g., Cialdini et al. 1990; Reno, Cialdini, and Kallgren 1993), they primarily provide static information describing what others are doing presently. For example, in their research on how norms influence sustainable consumer behaviors, White and Simpson (2013) show some participants a normative message that reads, “Your neighbors are grasscycling.” This norm presents static information—at this cross-section of time, people in a relevant reference group are engaging in a particular behavior—that should motivate other members of the reference group to follow suit. However, a similar normative message could have read “Your neighbors are grasscycling more than before,” providing dynamic information about how sustainable behaviors have been changing.



Although it is clear that normative message conveying static information should promote behavioral assimilation, extant research is silent on what happens when these messages conveying dynamic information. Outwardly, both normative messages provide essentially the same information, as far as suggesting what other people are doing. However, for reasons delineated in the following section, we do not expect these two types of normative messages to influence consumers in the same manner.

### SOCIAL NORMS AND DYNAMIC INFORMATION: NORMS AS SELF-DESCRIPTIONS

A long tradition of behavioral research has suggested that people are more sensitive to change than absolute states (Kahneman and Tversky 1979). Furthermore, research on satisfaction judgments has found that people generally prefer improvement to stability, deriving greater satisfaction from the same outcome when it has resulted from improvement than when it has not (Hsee and Abelson 1991; Hsee, Abelson, and Salovey 1991). Thus, it is likely that normative messages presenting dynamic information will have different effects from those presenting static information; however, the nature of this difference is not immediately clear.

Consistent with the general preference for improving trajectories, previous work on temporal comparisons has found that people tend to believe that they have been improving over time, and these perceptions are upheld whether or not there is any objective evidence (Wilson and Ross 2001). Across a variety of dimensions, Wilson and Ross found that people evaluated their current selves much more favorably than their past selves, and this held for students, parents, and university staff alike. Given this predilection for improvement, we propose that normative messages presenting dynamic information about improvement will be consistent with consumers' self-views. Therefore, consumers will interpret these norms as self-descriptions rather than standards for behavior. When these self-descriptions are threatening (i.e., when the norm for exercise is improving but still low), this should motivate behaviors that bolster the threatened aspect of the self (Gao, Wheeler, and Shiv 2008; Taylor et al. 1995). Thus, norms communicating dynamic information about improvement can ultimately have the opposite effect from norms that only convey static information.

Insofar as normative messages conveying improvement are interpreted as self-descriptions, the motivating effect of a low (vs. high) norm should be stronger among individuals who are more likely to be threatened by unfavorable self-descriptions. Implicit theories—whether one tends to view traits as more malleable (incremental theory) or fixed (entity theory)—have been shown to influence proneness to self-threat. Specifically, entity theorists are more likely to make trait attributions for performance and are primarily concerned with demonstrating their high level of positive attributes (Burnette 2010; Hong et al. 1999). Thus, they should be more threatened by a low norm that's interpreted as a self-description. Accordingly, we posit that when the norm for exercise is low but improving, entity (vs. incremental) theorists will be more threatened by the low norm, which to them is an unflattering self-description. Thus, rather than conforming to the low norm, entity theorists will be more likely to pursue self-beneficial behaviors to counter the threat. Moreover, this effect should be attenuated for incremental theorists, who are less likely to be threatened by negative self-descriptions and consequently less motivated to take remedial action. Importantly, this prediction opposes one based on the notion that incremental theorists believe that they can improve their fitness and thus should be more motivated by the dynamic norm than entity theorists.

### STUDY 1

The goal of study 1 was to test the prediction that consumers will assimilate to fitness norms conveying static information, but this effect will be reversed when then norm also presents dynamic information about improvement. Accordingly, we manipulate the level of the static information (i.e., high vs. low exercise norm) as well as the presence of dynamic information (i.e., exercise has been increasing or control).

### Design and Procedure

116 participants from Amazon's Mechanical Turk online panel completed this study for \$.40. Participants were randomly assigned to one of four conditions in a 2 (static information: low vs. high) x 2 (dynamic information: increasing vs. control) design. Under the guise of a survey on fitness, participants answered filler questions about their weight and exercise tendencies. While the system supposedly recorded their responses and prepared the next portion of the survey, participants were shown a normative fitness message in which the critical manipulations were embedded. In all conditions this fitness message specified that the average American adult exercises 2 hours a week. However, to manipulate whether this was perceived as a low or high amount of exercise (i.e., static information), we described 2 hours as "an unimpressive (impressive) 20 minutes every day." Moreover, to manipulate dynamic information, the message in the increasing condition specified that Americans' weekly exercise time had increased over the past 3 years. The control condition message did not mention any changes in weekly exercise.

The dependent measures were as follows: All participants rated their anxiety about their future health (*concerned, worried, anxious*,  $\alpha = .97$ ) on 1 (not at all) to 7 (very much) scales and their perceived need for improvement ("I need to take better care of my body," "I need to improve my fitness," "I need to devote more time to exercising,"  $\alpha = .92$ ) on a 1 to 7 Likert scale. Next, as part of a supposedly unrelated product evaluation task, participants viewed a series of advertisements for gym memberships. After viewing each ad, they rated their intentions of joining the gym (*improbable-probable, impossible-possible, unlikely-likely*,  $\alpha = .96$ ) on 7-point scales, as well as their willingness to pay for a gym membership in U.S. dollars. Finally, participants completed a manipulation check in which they rated how much exercise American adults get on a 1 (*small amount*) to 7 (*large amount*) scale and provided basic demographic information.

### Results and Discussion

A 2 (static information) x 2 (dynamic information) ANOVA on the manipulation check revealed only a main effect of static information. As expected, those in the high exercise condition ( $M = 2.74$ ) perceived American adults to exercise more than those in the low exercise condition ( $M = 1.83$ ,  $F(1, 112) = 19.39$ ,  $p < .001$ ).

Moreover, a 2 x 2 ANOVA on anxiety about future health revealed the predicted interaction ( $F(1, 112) = 4.49$ ,  $p < .05$ ). Simple contrasts revealed that, in the control condition, those in the high (vs. low) exercise condition had directionally but not significantly higher anxiety ( $M = 4.41$  vs.  $3.74$ ,  $F(1, 112) = 1.90$ ,  $p = .17$ ). However, when the norm for exercise was improving, those in the high (vs. low) exercise condition had directionally but not significantly lower anxiety ( $M = 3.30$  vs.  $4.06$ ,  $F(1, 112) = 2.64$ ,  $p = .11$ ). Moreover, when the weekly exercise norm was high, anxiety was lower for those in the improving condition than the control condition ( $M = 3.30$  vs.  $4.41$ ,  $F(1, 112) = 5.35$ ,  $p < .05$ ).

For perceived need for improvement, a 2 x 2 ANOVA yielded a significant interaction ( $F(1, 112) = 9.79$ ,  $p < .01$ ). In the control con-

dition, those in the high (vs. low) exercise condition reported a marginally higher need for improvement ( $M = 6.08$  vs.  $5.38$ ,  $F(1,112) = 3.26$ ,  $p < .10$ ); however, in the improvement condition, those in the high (vs. low) condition reported a lower need for improvement ( $M = 4.77$  vs.  $5.76$ ,  $F(1,112) = 6.95$ ,  $p = .01$ ). Again, when the norm was high, need for improvement was lower for those in the improving condition than the control condition ( $M = 4.77$  vs.  $6.08$ ,  $F(1,112) = 11.48$ ,  $p = .001$ ).

Consistently, a 2 x 2 ANOVA on gym membership intentions revealed a significant interaction ( $F(1, 112) = 8.61$ ,  $p < .01$ ), such that in the control condition intentions were directionally (but not significantly) higher when weekly exercise was high (vs. low) ( $M = 3.81$  vs.  $3.23$ ,  $F(1,112) = 1.45$ , NS); however, the opposite occurred in the improvement condition ( $M = 2.35$  vs.  $3.72$ ,  $F(1,112) = 8.87$ ,  $p < .01$ ). When the weekly exercise norm was high, intentions were lower for those in the improving condition than the control condition ( $M = 2.35$  vs.  $3.81$ ,  $F(1,112) = 9.50$ ,  $p < .01$ ). Lastly, a 2 x 2 ANOVA on willingness-to-pay (WTP) for a gym membership revealed the predicted interaction ( $F(1,112) = 5.91$ ,  $p < .05$ ). In the control condition, those in the high (vs. low) exercise condition reported a marginally higher WTP ( $M = \$25.56$  vs.  $\$18.12$ ,  $F(1,112) = 3.04$ ,  $p < .10$ ); however, in the improvement condition, this was reversed ( $M = \$14.04$  vs.  $\$21.00$ ,  $F(1,112) = 2.86$ ,  $p < .10$ ). Moreover, when the weekly exercise norm was high, intentions were lower for those in the improving condition than the control condition ( $M = \$14.04$  vs.  $\$25.56$ ,  $F(1,112) = 7.40$ ,  $p < .01$ ).

Study 1 provided initial evidence that individuals interpret norms as standards when they present static information, but as self-descriptions when they present dynamic information. Whereas consumers generally were more interested in fitness (as evidenced by self-reported need for improvement, intentions to join a gym, and willingness to pay for a gym membership) when the norm for weekly exercise time was higher, this relationship reversed when the norm was also improving. Furthermore, it appears that when the norm was higher, informing people that it had been improving had a licensing effect on their fitness intentions. Importantly, the fact that anxiety was higher in the control condition than the improvement condition for those who saw the high exercise norm suggest that the effects on WTP are not due to any self-efficacy concerns. Conceivably, consumers might disengage from fitness goals if they believe that they are too far behind others to ever catch up. However, given that those in the high exercise/improving condition actually had the lowest level of anxiety, it is unlikely that threatened self-efficacy can account for our effects. In study 2, we seek stronger evidence of the proposed process by examining the moderating role of implicit theories. Specifically, we expect the interactions obtained in study 1 to arise for those who endorse entity theories of fitness, but not for those who endorse incremental theories of fitness.

## STUDY 2

### Design and Procedure

101 participants from Amazon's Mechanical Turk online panel completed this study for \$.40. Study 2 followed the same basic procedures from study 1 with the following changes: First, to shorten the procedure, we omitted the anxiety and need for improvement measures. Second, participants viewed both gym advertisements and advertisements about fitness-related mobile apps and reported their willingness to pay. Third, after completing the product evaluations we included a measure of implicit theories of fitness (Burnette 2010) to test the underlying process. Specifically, we predicted that the interaction obtained in study 1 would hold for entity theorists, but

not incremental theorists. Finally, we also included measures of their general interest in mobile applications and general interest in fitness centers to use as covariates.

### Results and Discussion

A 2 (static information) x 2 (dynamic information) ANOVA on the manipulation check revealed only a main effect of static information. As expected, those in the high exercise condition ( $M = 2.98$ ) perceived American adults to exercise more than those in the low exercise condition ( $M = 2.02$ ,  $F(1, 112) = 14.88$ ,  $p < .001$ ).

To test the predicted three-way interaction on product evaluations, we regressed WTP for the fitness apps on a static information dummy variable (0 = low, 1 = high), dynamic information dummy variable (0 = control, 1 = improvement), standardized implicit theory, the interactions of these three variables, and general interest in mobile apps. This regression revealed main effects of general interest in mobile apps ( $b = .59$ ,  $t = 5.35$ ,  $p < .001$ ) and static information ( $b = 1.77$ ,  $t = 3.21$ ,  $p < .01$ ); significant two-way interactions between static information and dynamic information ( $b = -2.35$ ,  $t = -2.99$ ,  $p < .01$ ) and dynamic information and implicit theory ( $b = -1.93$ ,  $t = -2.29$ ,  $p < .05$ ); and the hypothesized three-way static x dynamic x implicit theory interaction ( $b = 1.93$ ,  $t = 2.05$ ,  $p < .05$ ). To explore the three-way interaction, we examined the two-way static x dynamic interactions at one standard deviation above and below the mean of implicit theory (with lower scores corresponding to stronger entity theories). As predicted, the two-way interaction was significant at one standard deviation below the mean ( $b = -4.37$ ,  $t = -3.35$ ,  $p < .01$ ), but not at one standard deviation above the mean of implicit theories ( $b = -.46$ ,  $t = -.40$ , NS). Furthermore, at -1 SD (i.e., entity theorists), the slope of static information was significant and positive for those in the control condition ( $b = 1.92$ ,  $t = 2.60$ ,  $p < .05$ ), and significant and negative for those in the increasing condition ( $b = -2.45$ ,  $t = -2.28$ ,  $p < .05$ ). At +1 SD, the slopes of static information were positive, and only reached significance for those in the control condition (control:  $b = 1.63$ ,  $t = 2.11$ ,  $p < .05$ ; increasing:  $b = 1.17$ ,  $t = 1.31$ , NS).

The same regression analyses were conducted on WTP for a gym membership, and they revealed a marginally significant three-way interaction ( $b = 16.25$ ,  $t = 1.77$ ,  $p < .10$ ). Again, the static x dynamic interaction was significant at -1 SD of implicit theories ( $b = -32.00$ ,  $t = -2.60$ ,  $p < .05$ ), but not at +1 SD ( $b = -.02$ ,  $t = -.002$ , NS). Furthermore, at -1 SD (i.e., entity theorists), the slope of static information was significant and positive for those in the control condition ( $b = 14.92$ ,  $t = 2.14$ ,  $p < .05$ ), and marginally significant and negative for those in the increasing condition ( $b = -17.07$ ,  $t = -1.68$ ,  $p < .10$ ). At +1 SD, the slopes of static information were positive, but not significant (control:  $b = 11.75$ ,  $t = 1.62$ , NS; increasing:  $b = 11.72$ ,  $t = 1.40$ , NS).

In line with our hypothesis, implicit theories moderated the interactive effect of static and dynamic information on fitness-related behavioral intentions. Whereas the static x dynamic interaction obtained in study 1 persisted for entity theorists, who are more prone to interpreting feedback through a self-descriptive lens, this interaction was attenuated for incremental theorists.

### GENERAL DISCUSSION

Across two experiments, we explore the effects of dynamic information about improvement on consumers' response to normative messages. Whereas consumers generally conformed to normative fitness messages conveying static information, the opposite occurred when these messages also included dynamic information about improvement. Furthermore, evidence suggests that this effect was

driven by differences in the interpretation of social norms presenting static versus dynamic information. While norms presenting only static information were generally interpreted as a standard, norms presenting dynamic information about improvement were interpreted as self-descriptions. Accordingly, in the absence of dynamic information, individuals were more interested in fitness-related products and services when the weekly exercise norm was framed as high (vs. low). However, when the weekly exercise norm was also improving, individuals were less interested in fitness-related products and services when the weekly exercise norm was framed as high (vs. low). Providing evidence of the underlying process, in study 2, we found that this interactive effect arose for individuals who strongly endorsed entity theories of fitness—i.e., those individuals who were more likely to be threatened by an unfavorable self-description—but did not arise for those who endorsed incremental theories of fitness.

In demonstrating these effects, we contribute to the literature on social norms by providing an initial investigation of the influence of normative messages that provide dynamic information. Despite the commonness of such messages, to the best of our knowledge, no research has investigated how their influence on behavior differs from that of more static normative messages. Here, we demonstrated that dynamic information can actually reverse the typical effects of social norms. Additionally, we contribute to research on implicit theories and self-regulatory behaviors. Previous research has suggested that entity theories tend to undermine effective self-regulation (Burnette et al. 2013; Job, Dweck, and Walton 2010; Mukhopadhyay and Johar 2005). However, our results demonstrate a situation in which entity theories will actually lead to the most adaptive responses. Indeed, in study 2, entity theorists were the only ones motivated by improving fitness norms.

Beyond these theoretical contributions, our research has practical implications for the use of normative messages. Although broadcasting a population's improvement may seem like a favorable thing to do, it can ultimately have negative consequences. Rather than motivating individuals to improve, such messages can ultimately license message recipients to disengage from the positive behaviors, to the extent that they interpret the message as self-descriptive. However, such messages can have the desired positive effects if they also highlight some shortcoming that threatens the recipient. Indeed, prior research has demonstrated how favorable self-relevant information can increase the adaptive responses to negative feedback (Sherman and Cohen 2006; Trope and Neter 1994). Thus, marketers and the media alike should exercise caution in communicating normative messages about improvement, as this might not always be as innocuous as it seems.

Although this research elucidates the process by which dynamic information about improvement alters the interpretation of normative messages, we do not explore the effects of information about decline. Based on our theorizing, these messages should not be interpreted as self-descriptions, given that people do not tend to see themselves as getting worse (Wilson and Ross 2001). Therefore, rather than reversing the effects of static information in normative messages, unfavorable dynamic information might ultimately mirror the effects of static information. We plan to explore this possibility in future research.

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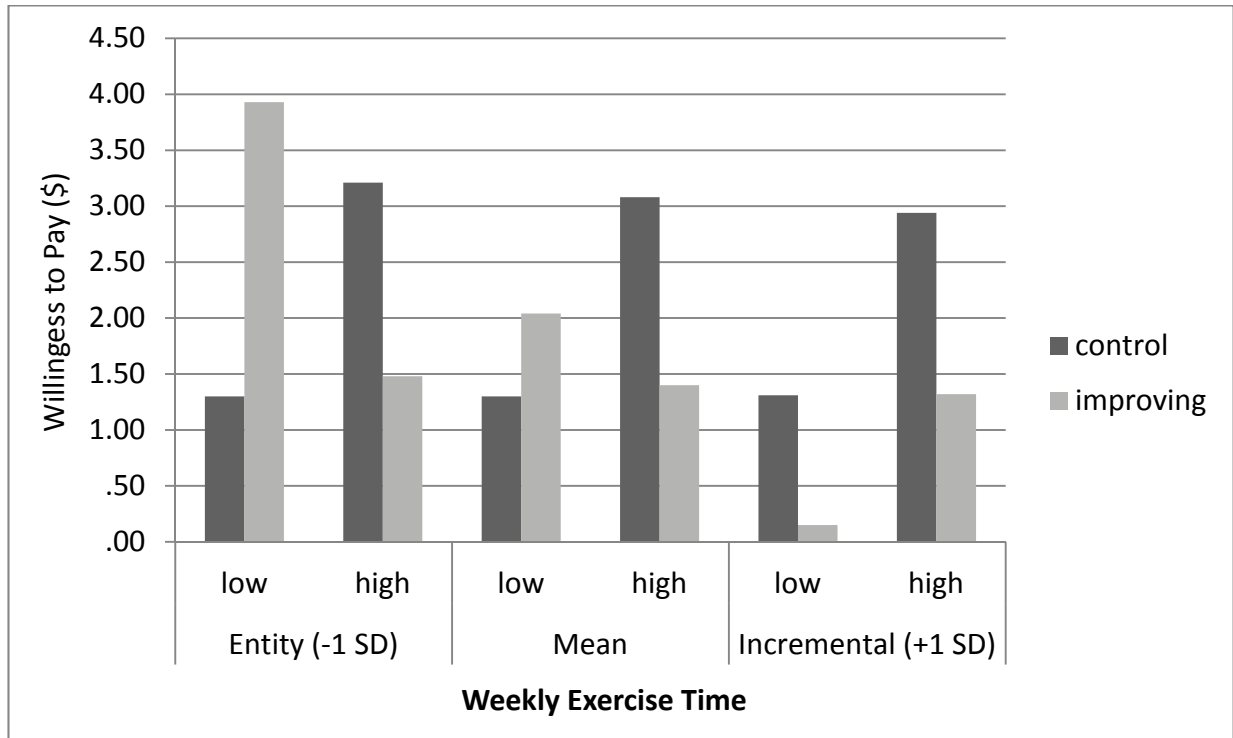
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**Table 1: Summary of Empirical Results Across Studies**

Study	Summary of Empirical Results
Study 1	<p>2 (static information) x 2 (dynamic information) interaction on need for improvement (<math>F(1, 112) = 9.79, p &lt; .01</math>).</p> <p><b>Simple Contrasts:</b>                      Control condition, low (vs. high) norm: (<math>M = 5.38</math> vs. <math>6.08, F(1,112) = 3.26, p &lt; .10</math>);                      Improvement condition, low (vs. high) norm: (<math>M = 5.76</math> vs. <math>4.77, F(1,112) = 6.95, p = .01</math>).</p> <p>2-way interaction on gym membership intentions (<math>F(1, 112) = 8.61, p &lt; .01</math>).</p> <p><b>Simple Contrasts:</b>                      Control condition, low (vs. high) norm: (<math>M = 3.23</math> vs. <math>3.81, F(1,112) = 1.45, NS</math>)                      Improvement condition, low (vs. high) norm: (<math>M = 3.72</math> vs. <math>2.35, F(1,112) = 8.87, p &lt; .01</math>).</p> <p>2-way interaction on gym membership WTP (<math>F(1,112) = 5.91, p &lt; .05</math>).</p> <p><b>Simple Contrasts:</b>                      Control condition, low (vs. high) norm: (<math>M = \\$18.12</math> vs. <math>\\$25.56, F(1,112) = 3.04, p &lt; .10</math>)                      Improvement condition, low (vs. high) norm: (<math>M = \\$21.00</math> vs. <math>\\$14.04, F(1,112) = 2.86, p &lt; .10</math>).</p>
Study 2	<p>Static x Dynamic x Implicit Theory interaction on fitness app WTP (<math>b = 1.93, t = 2.05, p &lt; .05</math>).</p> <p><b>Simple Interactions and Simple-Simple Effects:</b>  <i>At mean -1 SD (entity theorists):</i>                      2-way interaction (<math>b = -4.37, t = -3.35, p &lt; .01</math>); slope of static information in control condition (<math>b = 1.92, t = 2.60, p &lt; .05</math>); Slope of static information in improving condition (<math>b = -2.45, t = -2.28, p &lt; .05</math>)  <i>At mean +1 SD (incremental theorists):</i>                      2-way interaction (<math>b = -.46, t = -.40, NS</math>)</p> <p>3-way interaction on gym membership WTP (<math>b = 16.25, t = 1.77, p &lt; .10</math>).</p> <p><b>Simple Interactions and Simple-Simple Effects:</b>  <i>At mean -1 SD (entity theorists):</i>                      2-way interaction (<math>b = -32.00, t = -2.60, p &lt; .05</math>); slope of static information in control condition (<math>b = 14.92, t = 2.14, p &lt; .05</math>); Slope of static information in improving condition (<math>b = -17.07, t = -1.68, p &lt; .10</math>)  <i>At mean +1 SD (incremental theorists):</i>                      2-way interaction (<math>b = -.02, t = -.002, NS</math>)</p>

Figure 1: Fitness App WTP (Study 2)



**Honor Code Statement**

The authors declare that the presenting author does not plan to present in more than one other special session or competitive paper submission, the submission has not been sent into multiple tracks, the submission has not been presented previously at ACR, and the submission has not been published in any journal.

# Networked Kids and the Formation of Contemporary Consumer Identities

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## ABSTRACT

Identity building has a key role to play in understanding consumer relationships with the marketplace. As technology comes to define new terrains of identity building, it is of increasing importance to understand how media such as social media and the internet come to inform new kinds of engagements and identities. While research has paid attention to concepts of the digital self and on-line personae (Belk 2013; Shau and Gilly 2003), the question of when these identities begin to evolve and at point in their lives people become aware of their personal agency in the marketplace as a result of these technologies is less clear. In this paper, it is suggested that terms such as consumer, end-user and audience, while sharing a common focus on the act of appropriating commodities and their accompanying marketing discourses, embody distinct meanings to young people or “kids” who use them to anchor their own consumption identities (Steinfeld, Ellison, and Lampe 2008) and assume power in the marketplace (Acuff and Reiher 1997). Equally, this paper argues that these meanings link to a larger interpretation of the marketplace and consumer agency by the first generation of kids who have grown up with multi-platform technology such as the web and social media (Chester and Montgomery 2008). Therefore the central question this paper seeks to answer is *at what point do these terms gain resonance for kids who appropriate the market through multiple channels and network their consumption experiences via technology?* A stronger understanding of how increasingly technologically informed young consumers see themselves through these culturally embedded terms and the consequent impact on consumption practices sheds light on when (and how) market-based identities begin to form as these terms provide a roadmap or a “way in” to understanding identity formation and network building (Blais, Craig, Pepler and Connolly 2008). In doing so, this paper seeks to contribute to the increasingly nuanced dialogue in consumer research on how people, and in this context specifically young people, see themselves in relation to marketing discourse, the emerging stream of literature on web-based technology and its impact on consumption habits (Schau and Gilly, 2003; Ward and Ostram, 2006).

## CONCEPTUAL FRAMEWORK

The terms consumer, end-user and audience draw from different cultural and historical trajectories. The term consumer appears primarily in Marx (1990 [1867]) and the consumer as actor in the production/consumption binary. Foregrounded by the middle classes of the late nineteenth-century (Veblen, 1990 [1899]), the consumer culture of the post-war era established the primacy of the consumer as a key element of contemporary Western society (Tadajewski and Jones, 2008). As the rich opus of consumer research indicates (Arnould and Thompson, 2005), consumers tailored their consumption habits into sophisticated identity and meaning making acts (McCracken, 1986). In this respect, the word consumer is intrinsically linked to a cultural and social positioning as well as the focus for marketing practice. This theme of consumer as animator of consumption experiences emphasises the consumer’s agentic capacity for creativity (Burroughs and Mick, 2004; Hirschman, 1980) that begins at an early age. Consumer research has captured consumer experiences and identities through such lenses as fantastical (Belk and Costa, 1998; Holbrook and Hirschman, 1982), magical (Arnould and Price, 1993), emancipatory (Firat and Venkatesh, 1995), tribal (Cova and Cova, 2002; Cova et al, 2007), subcultural (Kates, 2002;

Kozinets, 2001; Moisio and Beruchashvili, 2010) but also as resistant (Kozinets, 2002; Kozinets and Handelman, 2004; Murray and Ozanne, 1991) and ethical (Borgmann 2000; Cherrier 2004, 2005). All of these terms implicitly acknowledge the consumer’s power to negotiate market discourses.

The term end-user enjoys a somewhat shorter heritage (Sewell and Teitelbaum, 1986). Hailing from product design and development (particularly in computing), this term accompanied the twentieth century rise of technological innovation, the realisation that products needed to meet practical requirements for people and a sense that products were only as good as their uptake (Doll and Torkzadeh, 1988). Linked to consumers (since consumers are also end-users), the term end-user not only points to the tactile use of products and services but also draws in questions of loyalty (Spiteri and Dion, 2004) both to company and brand, co-created value (Allee 2000; Banks 2009) and the positioning of people as participants in, and drivers of, innovation (von Hippel 2006; Banks 2009).

Finally, the term audience follows its own distinct heritage. Drawing from the significant body of work in audience theory (McQuail, 2010; Schröder, 2000, reception theory (Bennett 1997; Hall 1973; Holub 1984) and media planning (Webster et al, 2005), this term has particular resonance for the advertising sphere. Unlike end-user and consumer, audience more specifically directs us to the engagement with spectacle or visual content. While “spectacle” became laden with its own meanings in the work of the Situationists (Debord, 1995), in more contemporary contexts spectacles are endemic to an increasingly visual culture. As the following discussion demonstrates, these three terms (and the histories from which they hail) give rise to distinct interpretations and specific meanings.

## METHOD

Two data sets were acquired for the basis for analysis. First, a focus group of twenty young people was conducted (Morgan, 1988; Stewart, and Shamdasani, 1990) in Australia. The age range was between eighteen and twenty years of age with an even gender split. The focus group was conducted at a University campus in familiar surroundings. The focus discussion lasted for three and a half hours. The discussion was semi-structured. The facilitator posed some initiating questions but free discussion was allowed to develop. Once discussion had evolved, the facilitator then posed specific questions. The discussion was audio-recorded with additional notes taken post hoc by the facilitator. Second, further phenomenological interviews (McCracken, 1988; Thompson et al, 1990) lasting between one and two hours interviews were conducted with ten additional participants to better explore the themes established through the focus group discussion. This interview method was selected in order to garner rich insight using participants’ own language and expression and was loosely structured around the topics and questions raised during the focus group. The focus group data and the interview data were transcribed, triangulated for thematic consistency and a discourse analysis was conducted (Caruana et al, 2008; Elliot, 1996; Hackley, 2002; Mitussis and Elliot, 1999; Parsons, 2010) enabling the examination of the powers, practices and discourses to which these terms refer for young people. Table 1 offers a summary of the analysis findings

Table 1 Summary of characteristics

	Consumer	End-User	Audience
<b>Characteristics</b>			
Level of product/service engagement	High	High	Moderate
Level of brand engagement	Moderate	High	Moderate
Level of brand loyalty	Moderate	High	Moderate
Level of political consciousness	High	High	Low
Level of ethical consciousness	High	High	Low
Level of perceived market agency	High	High	Low

**FINDINGS AND DISCUSSION**

The findings confirm existing literature that suggests kids engage the marketplace for their own identity-making (Steinfeld, Ellison, and Lampe 2008), and indeed wield increasing power (Acuff and Reiher 1997) but further elucidates how this consciously occur and what potential forms it takes. The dominant interpretation of the term consumer resided in its implied meaning as a force for power in the marketplace. Generally, participants agreed that they became conscious of their roles as “consumers” as children – some mentioned as early as seven or eight years. This theme of early awareness suggests that exposure to markets through technology has the effect of accelerating the formation of multiple consumer identities which have been more understood as emerging through early adulthood. The term also referenced a source of empowerment (Shaw, Newholm and Dickinson 2006) and means of assuming agentic power in the marketplace (Denegri-Knott, Zwick and Schroeder 2006). For instance, several participants spoke of their “rights as a consumer” and demonstrated their knowledge of local consumer laws in relation to product quality and service:

*P1: When I buy something, I expect it to be good, you know... I don't just want something that's going to break or whatever. So, if I get something and it's bad, they're [the company] gonna hear about it for sure. That usually works and I get a refund but if it doesn't then I get the fair trading thing involved...*

*P2: Yep, me too.*

*P3: Yep, same. [Most participants nodded their heads in agreement]*

*P2: 'Cos everything's so expensive and like we work and everything so when you buy something...*

*P4: You sort of feel like the company should be good to you.*

*Facilitator: So you feel like you have the right to question companies as consumers?*

*P4: Absolutely [Collective agreement]*

*Facilitator: When did you start to feel this way?*

*P5: For ages, even when I was young... I remember as little kid I got this toy where it was “magic sand” and you could build things under water. But when you put in the water, it just collapsed. I went to my Mum and complained that it didn't work*

*and we should take it back. We went back to the shop and told them and I remember telling the woman there that the toy was bad and that they shouldn't sell it. I was probably only eleven or twelve. [Collective laughter] I was really pumped up!*

Their positionality as consumer enabled them to mobilise an assertive position in relation to the market, demanding accountability and responsiveness through a legal frame. Several participants spoke of their experiences with the office of fair trade after receiving faulty goods, using their empowered status as consumers to rectify the situation.

*I4: Like, I'm not afraid to go to a company and say “hey, your product is crap”. I've never been scared to do that. If they want my money then they have to do the right thing. If they don't then I'm going to do something about it because they have to do something to make it right. I've always been like that and just because I'm only one person doesn't mean they don't have to do anything. It doesn't always work the way I want but I will give it a go.*

By assuming their consumer status, these participants exerted their power in their marketplace as equal agents. Interview participants nuanced this sense of power even more as some of them commented on their emerging participation on blogs, consumer community sites and online information sharing networks (Pitt, Berthon, Watson and Zinkhan 2002) to verify company credibility and product reliability.

The phrase “as a consumer” also prefaced several other statements about how these young consumers “kept companies honest” by demanding a certain level of service or after-sales responsiveness and thus flagging an ethical consumption orientation (Borgmann, 2000; Cherrier 2004):

*P18: I bought a CD player ages ago. I was probably around twelve or thirteen. It was ok but after a while it stopped spinning so we took it back to the shop. They said it was something I had done like because I was young I must have broken it... Dad and I had this big thing with the shop assistant because it was still in warranty and they had to fix it. Finally, they did and it was ok but we really had to argue. But, you know, companies have to do this. If they're going to sell you something and then not look after you then you have to think about that company and whether you should buy more from them.*

*Facilitator: Have you bought more products from that company?*

*P18: No [laughter]*

*P3: You have to keep companies honest. They make all this money off us and then when there's a problem they don't care. So, you definitely have to make them be honest.*

This also flowed through to a sense of choice in relation to brands, products and alternatives such as anti-consumption (Cherrier, 2009, 2005; Penalozza and Price, 2003; Zavestoski, 2002) where to be a consumer meant to be a highly knowledgeable, active participant in the ethics and mores of the marketplace. For instance, two interviewees mentioned that they held companies to account, suggesting they “definitely wouldn’t buy from an unethical company” and that “everyone knows if a company is a bit shonky” because the internet provides that information. Again, the web had a significant role to play in networking individuals, organising them into consumption communities where information was co-opted.

*Facilitator: So if you want to find out about products where do you look for information?*

*Several participants: The web [Collective agreement]*

*Facilitator: What sort of sites?*

*Several participants: Company ones but also blogs and user sites*

*Facilitator: Do you ask other people?*

*Several participants: Friends as well*

*P6: I have usually asked friends because they're the same age as me and they use things for the same reasons so they look for the same things as me. We facebook about it and share information. It's really helpful.*

*Facilitator: When did you start using the web and friends for information?*

*P6: For as long as I can remember. [Collective agreement]*

Several participants spoke of their decision as consumers to buy eco products or to buy from “good” companies after talking online with other kids.

*P11: When I was growing up, it was the whole Apple versus PC thing. I was a PC girl just because that's what we used in school and all that. But when I went online and heard about how good Apple was I changed. I realised that Microsoft was not a great company and that their computers weren't as reliable. The feedback from other kids my age definitely helped me go from PC to Mac.*

Others spoke of their choices to change brands for product or service preference reasons. In all of these cases, the underlying empowerment derived from the status, and thus language, of the consumer identity enabled them to act as their own agents buoyed by backdrop information and networked consumer input.

The term end-user was strongly attached to a self-positioning as a participant in the production of innovation (Cova, Dalli and Zwick 2011). Collectively, the focus group agreed that they became con-

scious of their roles as “end-users” as older children around the age of twelve or thirteen on average when their command of technology became quite sophisticated.

*P9: I have always been a computer nut even as a kid. I mean we've grown up with computers haven't we? [Collective agreement]*

*It's great keeping up with all the technology and with social media you can share all that knowledge with friends.*

Unlike the term consumer, which was strongly linked to a sense of identity within the larger marketplace, end-user appears to reference a more intimate connection between a particular company’s offerings and the use-value derived by the individual. The company Apple was discussed at length as a prime example of a company perceived as innovative for the purposes of meeting the needs of the end-user several and participants had been “talking about them” online for several years.

*P9: I'm loyal to Apple. I think their products are awesome... so much better than Microsoft. It's like they really think about how we are going to use their products and it's sort of more for us.*

*Facilitator: By “us” you mean?*

*P9: Us as in younger users*

Underlying this dynamic was a focus on the self as a valuable entity, a driver of innovation by constantly demanding new products that work. In this respect, there was a sense of empowerment but of a more benevolent nature.

*Facilitator: Do you give companies feedback?*

*P9: I definitely follow certain companies and give them feedback. I like different companies on Facebook and send them messages about their products all the time.*

*P11: Me too*

*P9: I'm fairly into P2P gaming and all the companies who do stuff for that really look for feedback from us. We're all on user sites and blogs and facebook and all that. They know that they have a certain community that have good ideas and they should talk to them... and they do. Our feedback makes their stuff better and so, as end-users, we're happy because we are getting the kind of innovations we want. It also means that we stay more loyal and we want to support the company because they're supporting us.*

Unlike the power derived from being a consumer, the empowerment of end-user flowed from a feeling of helping favoured companies become “even better”. Being an end-user meant offering support through purchasing followed up by feedback in order to “help” the company as one would a friend. Unlike the often-assertive identity assumed by being a consumer, the end-user identity meant being a positive force for companies and a driver of innovation (Banks 2009). Again, this connection as an end-user was established from childhood and worked via technology such as online consumer feedback sites, brand community sites and blogs.

Unlike the other two terms, audience connected more with passive visual spectatorship. Participants agreed that they became conscious of their roles as “audience” as children – some mentioned



as early as seven or eight years although this was nuanced by their acknowledgement that “audience” as children meant to watch a lot of television thereby suggesting more a passive visual spectator.

*P7: I mean when you think about it we've been an audience forever. TV has always been around and when I was really little I watched cartoons and all that so yeah we've been audience for all our lives ..*

*P13: But it's still pretty boring... like most TV and even stuff you see on YouTube and that is pretty boring. So, even though you're all audience it doesn't really make it interesting. [Collective agreement]*

*P7: I hate ads.*

The perception of advertising as spectacle (Debord 1995), a form of entertainment rather than a form of product or service information, was prevalent among all participants where the persuasive effects of advertising were undermined by the general perception that advertising, whether online or on TV, had limited appeal. The topic of poor advertising was covered at length where it became clear that “boring” or irrelevant advertising content was dismissed and “fun” or engaging content was regarded favourably. In a contemporary media landscape where advertising is endemic to all forms of engagement, whether it be on social media, online surfing or traditional media, these young people had developed effective self-filtering mechanisms against intrusive advertising. When asked to consider what being an audience meant to them, participants largely agreed that the term meant being passive or inert recipients of visual spectacle. Interview participants echoed this perception. When certain ads were discussed, it was clear that (as reception theory suggests) advertising content was not passively received nor did it remain uninterpreted. However, an emphasis on “not having to think too much” and just being “entertained” was the dominant element underlying one’s identity as an audience member.

*When I come home from school or uni or whatever I just want to lie on the couch and watch TV or surf the web. I don't want to have to think about stuff or be really focused. I just want to watch something that's easy and entertaining...*

In a world saturated by numerous media channels and content, having to consciously think about content was perceived as “too hard”. Instead being an audience member meant assuming the luxury of being passive, laid back and entertained from afar.

## CONCLUSION AND FUTURE RESEARCH DIRECTIONS

The present paper extends current understandings of marketing discourse by showing the extent to which kids increasingly engage the marketplace at a young age, network information to interpret marketing discourse and self-position accordingly as a consumer-agent, user or recipient of entertainment. Just as the term consumer has drawn from a long political, economic and marketing frame, these young consumers also see this term as underpinned by agentic power situated within a broader legal and economic context. Likewise, as the term end-user has emerged in parallel with an era of technological innovation, these consumers also link this term to their status as drivers of innovation – seen in largely technological arenas. Additionally, the connection between audience and spectacle has been long established. In this respect, the historical forces that frame

these terms continue to influence people as they construct their identities in relation to the marketplace.

Another contribution to emerge is the impact of technology on how kids discover information, operate in a networked context and use multiple information channels to navigate the marketplace. As technology use accelerates and, as we see from this first generation of kids who have grown up with the net, social media etc., and greater access to personal feedback, formal data and general information becomes the norm, the sense of agentic power among kids will increase. Equally, the earlier acquisition of knowledge and engagement with the global marketplace will also enable kids to form clearer identities (such as end-user, audience, consumer) at earlier stages in their lives.

The findings presented here suggest that technology is having a radical effect not just on communication but on how early kids now assume their own identity in the market and, to this extent, marketing must re-consider the traditional view of young consumers. They are not just influencers, they are information-seekers and decision-makers in their own right who have the capacity to influence a wide audience of similarly engaged kids. From a marketing perspective, this forces a thoughtful consideration of how to communicate with such a connected audience who are willing to critique firms, develop brand loyalties based on the strength of their own relationship with the brand or product and forge powerful personal identities. This study drew upon a comparatively small number of participants and, as such, its findings need further confirmation to ascertain whether the outcomes indicated here are broadly reflective of the attitudes of young people both within and beyond the Australian context. Equally, given the work done on the impact of technology on the market, a study of young kids and their current market identities would further consolidate the emerging picture described here. Nonetheless, the findings presented here suggest a fruitful path forward for expanding knowledge of how kids appropriate technology and the market for their identity and agency assuming practices.

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# How Immigrants Travel with their Home Brands: Brand Relationships and Acculturation

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## ABSTRACT

I don't know if I can explain properly how I feel about Skenderbeu or what it means to me. What I know is that it makes me feel at home, back in my old house, in Tirana. It reminds me of my parents, who are not alive anymore. It reminds me when I was young ... I don't know if it makes any sense to you, but I am trying to tell you how it makes me feel, even just looking at the bottle. (Iilir)

Iilir is a 49-year-old Albanian immigrant living in Germany. He left Tirana 15 years ago and has very nostalgic memories about his country. Skenderbeu, an Albanian cognac, is present in Iilir's memories of his past in Albania as well as his present time in Germany. This research seeks to understand the relationship immigrants develop with their home brands when they migrate to another country. In the case of our participants, Skenderbeu is not simply one of their home brands, but to their knowledge is the only brand produced in Albania under the former communist regime. Thus, the relationship Albanian immigrants have with this brand is unique and surprisingly understudied.

In looking at the relationships immigrants develop with Skenderbeu, this paper seeks to understand the role of home brands during immigrants' process of acculturation, examining the discourses, practices, feelings and meanings consumers develop in relation to their home brand while living in a new cultural context. It also looks at the role of such discourses, feelings and meaning in participants' acculturation process. Interpretive consumer research has looked at the roles of objects and consumption practices in the consumer acculturation process (Luedicke, 2011; Oswald, 1999; Penaloza, 1994), but surprisingly, very little has been said about the role of home brands (although see Rahman and Cherrier, 2010). Understanding how consumers relate to their home brands while living abroad is important for several reasons. Firstly, it helps in understanding the role of home brands in consumers' acculturation process. In particular it clarifies if (and if so, how) consuming home brands impacts on consumers' acculturation outcomes. Secondly, it helps in understanding how home brands travel with consumers, and if (and if so, how) consumers change their relations with such brands while living in a new cultural context.

## ACCULTURATION IN CONSUMER RESEARCH

In consumer research studies acculturation is understood as a process in which people "socialized in one (minority) culture migrate and so come into continuous first-hand contact with a new (dominant) culture" (Ustuner and Holt, 2007: 41). Consumer research studies have been influenced by the seminal work of Berry (1980; 1997; 2001; 2008) highlighting how acculturation is a multimodal process combining immigrants' willingness to maintain their ethnic identity and their participation in the host culture. Following Berry, acculturation results in four different outcomes, including assimilation (immigrants do not wish to maintain their home cultural identity and seek daily interaction with the host culture), integration (immigrants wish to maintain their original culture while engaging with the host culture), separation (immigrants hold on to their original culture and interact with the host culture), and marginalisation (immigrants

have little possibility of, or interest in, cultural maintenance and little interest in having relations with the host culture).

Consumer research studies have shown how acculturation outcomes are not stable as originally conceptualised by Berry (Luedicke, 2011). Penaloza (1994) shows how Mexican immigrants in the US adopt some American consumption practices while maintaining some Mexican ones. In fact in public settings they consume American objects, including cars and clothes, to show their integration with American culture; while at home, food and media consumption remain typically Mexican, testifying to the maintenance of their ethnic identity. Oswald's work (1999) on upper-middle-class Haitians in the USA shows how acculturation outcomes are not fixed, and consumers swap between cultural identities depending on the consumption contexts. More recently Askegaard *et al.* (2005) show how immigrants move between different acculturation outcomes integrating home, host and global cultural consumption references. In short, these three studies show that immigrants consume objects brought from home in order to solve identity challenges and tensions arising in the new context. They also show how these objects gain new meanings, symbolising home and cultural continuity in a new context.

Positivist studies have shown how immigrants' willingness to consume some brands reflects their level of acculturation. In fact immigrants with a monocultural identity avoid brands that do not reflect consumers' distinct culture (Josiasen, 2011) and immigrants with a multicultural identity select brands which reflect the multi-cultures they have internalised (Luna and Peracchio, 2005). Although these studies offer useful insights into immigrants' decisions to purchase home or host brands, they do not unpack in depth the relationships consumers develop with such brands and with their home brands in particular. If positivist studies offer a limited understanding of the way immigrants consume their home brands, interpretive consumer research has been surprisingly silent about the role of these brands in the acculturation process (Rahman and Cherrier, 2010). An exception is the study by Rahman and Cherrier (2010) showing how international students living in Australia navigate between global, home and host country brands in an attempt to make sense of the new cultural context and maintain their consumption habits. However, as the paper claims to look at how "people who move to a new country react to the unfamiliar brandscape in general" (Rahman and Cherrier, 2010: 420), it does not fully unpack immigrants' relations with their home brands. Another exception is the work of Bengtsson *et al.* (2010) on American students visiting China and consuming American global brands. As this paper provides useful insights into the literature on brand meanings it will be referred to more fully in the next section.

## BRAND MEANINGS IN INTERPRETIVE CONSUMER RESEARCH

Managerial marketing literature assumes that brand meanings are established by the brand management side and then simply transferred to the consumer side (Keller, 2003). Adopting a cultural branding approach (Cayla and Arnould, 2008), interpretive consumer research challenged this assumption, showing that the "experiential categories that consumers create for brands are not necessarily the same as the categories imposed by the marketers in charge of brand management" (Fournier, 1998: 367). In looking at how consumers

relate to their brands Fournier shows that they develop relationships with anthropomorphic traits. In fact consumers establish relationships resembling arranged marriages, casual friendship, committed partnerships, enmities and secret affairs. Others highlight how, in establishing relationships with brands, consumers “uncover and activate their own brand meanings”, by reshaping meanings existing in the marketplace and creating new ones (Brown *et al.*, 2003: 29).

Interpretive research has been particularly interested in understanding how consumers attribute meanings to global brands in their local consumption contexts. Dong and Tian (2009) show how global brands in China attract enthusiastic and critical responses, since they are perceived as liberators, instruments of democracy and economic progress but also as oppressors and instruments of Western domination over China. Bengtsson *et al.* (2010) look at consumers' relations with global brands while travelling across national borders. Their findings show how American students travelling to China attribute different meanings to global brands previously consumed at home. If in the US these brands were regarded as symbols of American

imperialism and cultural homogenisation, in China the perceived brand consistency makes them synonymous with “comfort, predictability, safety, as well as national pride for home-country consumers” (Bengtsson *et al.*, 2010: 533). From these studies we understand how global brands have different meanings in relation to the context of consumption. We also understand how they are very important for travelling consumers since they symbolise safety and home in a challenging new context. What we do not know is how consumers travel with their home, non-global brands and the role of such brands in making sense of the new cultural context.

## RESEARCH METHODS

Given the exploratory nature of the study, semi-structured interview were used to reveal participants' experiences, feelings and understandings of their brands in a new country. Participants were recruited through a non-probability sampling combining purposive and snowball sampling techniques (Silverman, 2006). They consist of 14 Albanians living abroad and 3 Albanians who after a long period of living abroad have now returned to their home country (see Table 1).

**Table 1. Participants' profile**

Name	Gender	Age	Family composition	Current Occupation	Country of Residence (abroad)	Years Residing Abroad
Adela	F	29	Single	Logistics specialist	Switzerland	1998-Present
Agim	M	63	Married to Albanian	Unemployed	Switzerland	1998-Present
Agron	M	56	Married to Albanian	Builder	France	2001-Present
Aida	F	59	Married to Albanian	Shop assistant	U.S.A	2001-Present
Andi	M	28	Single	Auditing	Italy	2003-2008
Anila	F	47	Married to Albanian	Receptionist	France	2001-Present
Besa	F	25	Single	Assistant Brand manager	Canada	1999-Present
Besnik	M	53	Married to Albanian	Self-employed	Greece	1993-Present
Eva	F	34	Married to American	Event Manager	U.S.A	2004-Present
Genta	F	29	Married to Italian	Account Manager	Italy	2001-Present
Ilir	M	49	Divorced	Construction worker	Germany	1998-Present
Mirela	F	50	Married to Albanian	Office manager	Canada	2002-Present
Mona	F	49	Married to Albanian	Unemployed	Greece	1994-Present
Nevila	F	51	Married to Albanian	Entrepreneur	Hungary	1991-1994
Sokol	M	55	Married to Albanian	Entrepreneur	Hungary	1991-1994
Tana	F	57	Married to Albanian	Shop assistant	Switzerland	1998-Present
Zana	F	60	Married to Albanian	Unemployed	Italy	1993-Present

Semi-structured interviews were conducted in Albanian by the first author during summer 2012. With participants' permission interviews were recorded, transcribed verbatim and translated into English. Participants were informed of the purpose of the research and their participation was entirely voluntary. They could withdraw at any time during the interview. In order to guarantee participants' anonymity pseudonyms are used in this paper. Interviews covered themes such as the reasons for leaving Albania and the challenges of living abroad. Participants were asked to describe their everyday routine in the new cultural context, including their consumption patterns and their consumption of Skenderbeu. Interviewees were encouraged to share their memories, ideas and feelings related to Skenderbeu. Interview transcriptions were analysed thematically following the guidelines of interpretive consumer research (Silver-

man, 2006; Spiggle, 1994). The final interpretation of the data results from a continuous back and forth between authors' interpretations and a continuous back and forth between the literature and the data analysis (Thompson *et al.*, 1994).

## FINDINGS

Participants' narratives reveal how Skenderbeu is embedded in the ordinary and extraordinary events of people's lives. Indeed this brand is embedded in intimate routines as well as annual family gatherings and parties with Albanian and non-Albanian guests. In looking at these consumption occasions, we identified three different types of brand relations, each with a distinct brand meaning. These have also implications for participants' acculturation outcomes. Findings described below are summarised in the following table.

Table 2: Findings

Brand relationships	Brand meanings	Context of consumption	Acculturation outcomes
Friend from home	-Utopian past -Nostalgic memories of youth and family life -Individual memories	- Intimate home consumption with nuclear family members -Ordinary and everyday domestic consumption	Separation from the host culture
Family member	-Authenticity -Collective family memories -Domestic traditions	-Consumption with extended family -Extraordinary consumption occasions and celebrations	Maintenance of home culture
Ambassador of home culture	-Authenticity -National identity	-Gatherings with host fellow consumers and international consumers	Integration between home and host culture

### 1. Skenderbeu: an old friend from home

Most of our participants remember the hardship of settling in a new country. Common are anecdotes illustrating feelings of conflict, stress and misunderstanding in approaching a new culture. As Nevila says:

*In Hungary everything was different. People were different, they looked so cold ... which in fact they weren't. They seemed cold to us because they were minding their own business mostly, rather than dealing with other's life, like we do in Albania. But it was not only about people, it was also about food, family relationships ... I don't know ... It was a totally different culture where I thought I don't fit in, and never would fit in.*

Nevila's description reminds of the experiential tension characterising immigrants' cultural shock in experiencing a new environment wherein they cannot relate to their home culture norms and conventions (Rahman and Cherrier, 2010; Winkelman, 1994). The acculturation process that Nevila and the other participants experienced is often described as 'hard work', characterised by the "emotional work involved in establishing new social networks, the stresses of learning how to be a consumer in the new locale, and small pleasures of established routines as well as familiar surroundings and products" (Thompson and Thambyah, 1999: 221). In such a transitional phase familiar objects brought from home become memory in motion (Miller 2001: 69), since they help consumers deal with the sense of displacement experienced in the new and alien context.

During the intense work of making sense of a new culture, participants describe Skenderbeu as a friend from home. For example, in describing her father's relationship with the brand, Besa points out that "Every time I see my father drinking it I tell him: So, you

are with your friend again". Similarly, Anila describes the intimate relationship she and her husband developed with the brand:

*Well, sometimes we find ourselves remembering our youth, our friends ... especially when the kids are not at home [referring to their two children]. France is a beautiful country of course and I am not trying to say that Albania is better; however sometimes you just miss home for the memories you have there you know. Albania reminds us that we were young once ... . So every time we drink Skenderbeu we think of home and vice versa. When we feel nostalgic about home and the years spent there we turn to Skenderbeu. At times maybe we are over-nostalgic.*

From Anila's words we understand that Skenderbeu is seen as a friend from Albania with whom nostalgic moments and intimate life can be shared. As with the American students in Bengtsson *et al.* (2010), our participants see in this familiar brand a link with their life left behind. However, for Anila and her husband, Skenderbeu has nostalgic connotations since it allows them to reconnect with their home country and their youth. This process of special and temporal reconnection is activated through the consumption of Skenderbeu, a brand they "turn to" as though a friend (Fournier, 1998) with whom they might share nostalgic moments. The brand is associated with memories of a longed-for past (Davis, 1979) from which any negative elements have been removed (Goulding, 1999). Interestingly, the nostalgic consumption of the brand is not orchestrated by brand management, but rather it is activated by immigrants' individual nostalgic memories (Davis, 1979) and a longing for their personal past (Wildschut *et al.*, 2006).

*I remember Skenderbeu was always present in our festive tables. When I say festive, you have to think of occasions that are im-*

portant for us Albanians of course, such as ... New Year's Eve ... birthdays and so on. For example ... in occasions of New Year's Eves the dining table was full of family members and relatives whom we only met occasionally throughout the year. I remember my aunt and her family always spent the New Year's Eve at our house. For me it was something extraordinary, as I loved her children, but unfortunately I could only meet them rarely; they lived in Shkoder. So ... yes, Skenderbeu brings beautiful memories to me as in days like these bottles of it were always on the table. (Aida)

As this quotation shows, the brand is commonly associated with a Utopian individual past characterised by extraordinary family occasions. Interestingly, the collective (and maybe not so joyful) experiences of the collapse of the Communist regime in the early nineties and the subsequent mass migration have never been mentioned by participants. In reconnecting participants to such a selective, Utopian and individual past, the brand also disconnects them from their present (and challenging) time in their host context. Therefore their nostalgic consumption of Skenderbeu allows participants not simply to reconnect with their past and their home country but also to disconnect from their present in the host country.

## 2. Skenderbeu: an authentic Albanian family member

Skenderbeu is not simply a brand with nostalgic meanings able to disconnect participants from the present time in their host country. It is in fact a brand participants associate with collective consumption experiences wherein their family identity and their Albanian identity are celebrated. Such collective consumption experience takes the form of family gatherings where Albanian food is prepared and shared with the extended family.

*We celebrate traditional Albanian holidays in family, like we used to do back in Albania ... New Year's Eve for example. For these occasions I cook traditional [Albanian] food which my mother used to cook for us, and like we used to do in those years, we always start the evening with some Skenderbeu, which the others drink while I'm preparing the table. I would want this tradition to continue even in my children's families. It is a good way to remind you who you are, where you come from and what your traditions are. (Tana)*

*For my sons' birthdays, Christmas or similar occasions I always invite my parents and sister's family over. I was grown up with this tradition of uniting the whole family for special occasions and now I don't want to part from it. I like to cook Albanian food and we always have some Raki<sup>1</sup> or Skenderbeu. Actually, the drinks are the only authentic ingredient, because I cannot find any other Albanian food in the market. So yes, I like to think that I am keeping the family tradition alive ... thank God my husband doesn't mind it. He actually likes our [Albanian] food and our traditional drinks as well (Eva)*

During these occasions where Albanian identity is celebrated in a new context Skenderbeu helps consumers to re-establish and perpetuate norms and conventions (i.e. festivities, but also meal conventions). Given that the local marketplaces do not provide consumers with opportunities to acquire Albanian products, Skenderbeu seems to be the only Albanian product present in these family celebrations. Skenderbeu is considered an authentic Albanian brand not simply

for its clear geographical origins, but for the personal memories participants have of its consumption in Albania (see Beverland and Farrelly, 2010). Consuming such an authentic brand in the new environment allows participants to re-establish a sense of continuity with their home country maintaining a link with their own family traditions and conventions. Skenderbeu serves to maintain a collective and commonly shared Albanian identity as well as to reinforce personal bonds and a sense of family. In establishing this link with participants' previous life in Albania, Skenderbeu allows them to keep their ethnic and family identity alive as well as to communicate them to other family members who are non-Albanian (Eva's husband) and to the younger generation who have never lived in Albania (Eva's children).

## 3. Skenderbeu: an ambassador from home

Skenderbeu is not simply a presence in Albanian celebrations and family gatherings. It is also an ambassador of Albanian culture to other consumers in the host country. For example, Sokol explains how Skenderbeu helps him to interact with Hungarians and overcome the feeling of isolation during his first months in Hungary:

*We started having Hungarian friends obviously as we were living there and one of them knew about Skenderbeu cognac. Actually that was the only thing he knew about Albania, the cognac. During communism we used to export it, that's why he knew of course. For us it was something extraordinary to know that there was one thing after all that they knew about us, about Albania ... and what is more important they even liked it. So the first time my brother came to visit us, after almost one year that we were living there, he brought Skenderbeu with him. I think something like 3–4 bottles. I only kept one for us and I gave the remaining bottles to my friend. He was delighted I can still remember.*

Similarly Nevila remembers taking Skenderbeu as a present when invited to some parties and offering it to guests invited for dinner. Identified as a product of Albanian culture appreciated outside their country, participants use it as a way to introduce themselves and their culture to their fellow consumers and hosts. Andi, for example, remembers using Skenderbeu as an 'ambassador' of Albanian culture. He still remembers the sense of pride in bringing to a party an Albanian product that could be appreciated by other international students. As he says:

*It was a good feeling to bring something authentic Albanian. It makes you feel good, like you belong somewhere. Like your country is not just a spot on the big world map, you understand? It gave me a sense of pride. (Andi)*

From Andi and Sokol we understand that Skenderbeu was used – during the first months of adaptation in a new socio-cultural (and geographic) environment – as a representative of their country, identity and culture. Becoming a consumption experience commonly shared amongst Albanians and non-Albanians, Skenderbeu was a bridge between the two (or more than two) cultures. It represents a medium through which the 'other' could be encountered, and a starting point for interacting with the host environment. Interestingly Nevila, Sokol and Andi have now returned to Albania and none of them consumes Skenderbeu anymore. This supports the literature which suggests that brands acquire different meanings when consumers cross national borders (Bengtsson *et al.*, 2010). During the time the interviewees lived abroad, Skenderbeu was a way of reminding themselves and people around them of their ethnic identity.

<sup>1</sup> An alcoholic drink popular in Turkey, Greece, and in the Balkan countries

Once returned to Albania they did not feel the need to make visible their ethnic identity through the assiduous consumption of Albanian brands. This is an interesting point, reminding us that often immigrants become 'hyper-immigrants', adhering to 'home' practices with more enthusiasm than non-immigrants at 'home' (Askegaard *et al.*, 2005).

### DISCUSSION AND CONCLUSIONS

This paper sought to understand immigrants' relations with their home brands in a new cultural context. It contributes to the acculturation literature and the branding literature in the following ways.

In looking at the relationship consumers establish with their home brands it emerges that they establish more than one. If previous research highlights how consumers consider brands a living entity with which to establish relationships (Fournier, 1998; Shroeder and Salzer-Morling, 2006), this study confirms and extends the literature, showing how such relationships change depending on the context of consumption. Findings show that relations are not monolithic and stable, but change significantly depending on when, with whom, and how the brand is consumed. In fact, Skenderbeu is considered a friend with whom to share intimate and nostalgic memories of past times in Albania. It becomes an important guest at family celebrations and is considered a tool for authenticating family gatherings as truly Albanian. It is also important for perpetuating Albanian collective (national) and family traditions outside Albania, particularly for the younger generation who have never experienced the country directly. The brand becomes an ambassador for Albanian culture beyond the family setting. Consumed with non-Albanians the brand becomes a common terrain of interaction between immigrants and host-country consumers.

This study confirms the previous literature showing how consumers attach different meanings to brands depending on the context of consumption (Bengtsson *et al.*, 2010; Ger and Belk, 1996; Hollenbeck and Zinkhan, 2010). In fact it shows how Skenderbeu has different meanings according to the context of consumption including a nostalgic individual past, family identity and traditions, and a collective ethnic identity. It also extends the literature, showing how brand meanings change over time. Although this is not a longitudinal study, and hence we cannot claim to have found a pattern showing how brand meanings evolve over time, it shows that some meanings seem to be more prominent in the initial stage of the acculturation process and others seem to be constant over time. As participants point out, Skenderbeu becomes synonymous with national and ethnic pride and thus is proudly used in interacting with non-Albanians. Also, in an unfamiliar and challenging new cultural context, home brands become synonymous with home and comfort, with strong nostalgic overtones. Over the years it becomes synonymous with family traditions and 'authentic' ethnic identity to be maintained and perpetuated amongst family members and future generations.

Finally, this study contributes to the acculturation debate by demonstrating the central role played by home brands in consumers' acculturation process. In looking at the relationship immigrants develop with their home brand, and the meanings they impute to it, this study confirms how acculturation is a fluid process and how its outcomes are not unchanging and stable (Askegaard *et al.*, 2005). It also extends existing knowledge on acculturation, showing how Skenderbeu's polysemic brand meanings help consumers to navigate amongst different acculturation outcomes. Indeed the brand helps consumers to isolate themselves from the alienating and challenging present, and hence to disconnect from the host culture. Also, the brand allows consumers to maintain their ethnic identity by perpetu-

ating family traditions in the host environment. Finally the brand helps consumers in integrating themselves with the new cultural context. In showing how the brand allows consumers to navigate amongst the various acculturation outcomes (maintaining their identity, integrating themselves into the new environment but at the same time disconnecting themselves from it), this study does not support positivist works claiming that consumers selection of home or host brands simply echoes stable acculturation outcomes (Luna and Peracchio, 2005). Indeed it shows how the polysemic nature of brand meanings and brand relations allows immigrants to consume a home brand for different purposes and to navigate amongst different acculturation outcomes.

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# A Context-Dependent View of Anchoring: The Effect of Consumer Adaptation of Incidental Environmental Anchors on Willingness to Pay

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## ABSTRACT

A fairly common form of managing consumer price expectations is when companies use numbers in their marketing communications (e.g., product model numbers, numbers in product or place names, and numbers on license plates). In some cases, increasing numbers reflect better items. In others, they do not. For instance, a Canon A530 is not superior to an A460 digital camera. Likewise, Nokia 6110 is inferior to Nokia 6102. Though an average consumer is not knowledgeable about those numbers and how they are assigned to specific models (Gunasti and Ross Jr. 2010), we argue that they are there to serve a strategic mission. Those numbers potentially act as attempts at price guidance.

Consider BMW that uses car images with a European license plate displayed prominently in its print ads in Europe where the licenses are all in the format “L LL XXXX” where Ls are letters and Xs are numbers. There is clearly a correlation between the numbers in the license plates and the price of the cars. Specifically, if a zero is added to the number on the plate, the resulting number seems to be generally higher than the price for low and mid-priced models and generally lower than the price for high priced models. It is almost as if there is a not so subtle attempt at price guidance in the choice of numbers for the license plates.

This paper explores the effect of seemingly random numbers in marketing communications on consumers’ willingness to pay (WTP). More specifically, we examine the differential effect of incidental environmental anchors (IEA) on consumers’ WTP as a function of the product category. We suggest that although consumers are not aware of the link between the numbers and the price of the product, not only do they base their WTP on the random number but also adjust the numbers to resemble acceptable prices for a given product category. Taking a context-dependent view of anchoring, we suggest that consumers alter and adapt the anchors to fit them into appropriate value range and that range changes from context to another. In a series of experimental studies, we test and demonstrate that individuals’ price expectations, thus their WTPs, are affected by those ‘adapted’ incidental numbers.

## CONCEPTUAL FRAMEWORK

### Incidental Environmental Anchoring

The idea that use of numbers as anchors to manage individuals’ numerical estimates is not new. We have known for some time that when participants are given a number as an anchor and then asked to provide estimates, they are influenced by the random initial value (Tversky and Kahneman 1974). Selective accessibility framework argues that anchoring occurs in such cases because when individuals are asked a comparative question (e.g., whether the Mississippi river is shorter or longer than 70 miles), they take it as a hypothesis (Is the Mississippi river 70 miles long ?) and seek for anchor-consistent information (Mochon and Frederick 2013). Therefore, estimates are assimilated toward the anchor. Even in cases when the numerical value is not supplied by the experimenter but rather exists in the environment, numbers seem to influence judgments. For example, Krishna et al. (2006) show that consumers’ price estimates are higher for a camera if they are exposed to an extreme-priced product in the

catalog. Their results suggest that one extreme cue can affect the reservation price for many related items and many product categories.

In the above examples, either the experimenter or the context supplies anchors that affect subsequent judgments. If a number is provided when there is a need to make numerical judgments, consumers retrieve anchor-consistent knowledge from memory, making the estimates close to the anchor. While a substantial body of research suggests that consumers’ numeric decisions are affected by experimenter or context-induced numbers that are activated before the decision is made, relatively less attention has been devoted to understanding when and how totally incidental numbers impact valuations. A recent exception is research by Critcher and Gilovich (2008) who show that even jersey numbers on football players affect the probability estimates of sacking the quarterback. Participants who saw the player wearing number 94 estimated his probability of sacking the quarterback in his next game higher than those who saw him wearing number 54. Numerical priming essentially suggests that *any* number in the environment at the moment of judgment may serve as an anchor. *A minimal amount of attention to incidental numbers is sufficient to anchor numerical answers to unrelated questions* (Wilson, Houston, Etling and Brekke 1996). Although Critcher and Gilovich (2008) provide important insights as to how incidental environmental anchoring (IEA) operates, their research does not discuss the potential anchor values that should be employed for different product categories to get intended reactions. The present research tries to fill this gap in the literature. Central to our hypothesis is that a consumer’s WTP is affected by incidental numbers that are in no way related to the price of the product. We posit and demonstrate that anchors exert context-specific effects in consumer-generated anchors.

### Context-dependent Effects on Consumer Valuations

Individuals’ judgments are affected by the context of concomitant stimuli. Past research has shown that numerical values may take different meanings depending on the context and that the same number may lead to different evaluations (Parducci 1965). For instance, numerical values can be represented in alternative units and the type of unit used may impact consumers’ perceptions and judgments (Pandelaere, Briers, and Lembregts 2011; Zhang and Schwarz 2012). The unit effect postulates that when individuals come across unfamiliar units (e.g., temperatures in the unfamiliar Celsius scale for Americans); they tend to translate those units into a familiar unit (e.g., Fahrenheit) to be able to make sense of the numbers. Since this conversion is rather difficult, consumers are likely to guesstimate rather than calculate the exact values. Pandelaere, Briers, and Lembregts (2011) argue that this imprecise conversion may render consumers vulnerable to anchoring effects. For instance, consumers tend to spend less in a foreign country if the value of that currency is lower than the value of their own currency (Raghubir and Srivastava 2002).

Frederick and Mochon (2012) have also alluded that context has a big impact on the ways in which anchoring operates. If individuals are to make estimates on two different items employing the same response scale, they tend to change the use of the scale to reflect the change in the items. Therefore, in a way, anchoring effects are due to the distortion of a particular response scale. For instance, when a 70 mile anchor is presented, estimates of the length of the Mississippi

river are lower because individuals use a different number on the miles scale. In a similar vein, respondents who were first asked to estimate the weight of a wolf later judged '1000 lbs' as bigger, pointing out larger animals when asked to specify an animal that weighs around 1000 lbs. The scale distortion theory of anchoring contends that numeric anchors do not affect the beliefs about the stimulus; rather the use of the scale is altered and adapted to fit the context.

Following this logic, we argue that anchoring effect is context-dependent and taking previous research on context and unit effects a step further suggest that individuals not only change the use of the scale to fit the context but alter the numbers altogether to fit into new domains. That is, the same numerical value may serve as a lower bound for item X whereas it is taken as an upper bound for item Y. Hence, a customer may interpret 20 as an upper bound when evaluated in ounces for drinks but as a lower bound when evaluated in gallons for water tanks. The range of acceptable prices for a given product category determines the way in which the anchor value is used by the individual. Consumers adapt and distort these values to reflect a good enough anchor to base their judgments on. Though the relation between the incidental numbers and the price of the product is unknown by the consumer; when consumers' WTP is asked, they use the readily available random numbers in their environment to make estimates. However, their use of such numbers is not straightforward. These anchors are malleable. Consumers unconsciously change these values to reflect possible acceptable prices for a given product category. Thus, we formally hypothesize that

*Hypothesis 1: When acceptable prices for an expensive product are used as anchors, a lower value serves as a lower (an upper) bound for an expensive (a less expensive) product. A higher value serves as an upper (a lower) bound for an expensive (a less expensive) product.*

*Hypothesis 2: When acceptable prices for a less expensive product are used as anchors, a lower value serves as an upper (a lower) bound for an expensive (a less expensive) product. A higher value serves as a lower (an upper) bound for an expensive (a less expensive) product.*

## METHOD

### Study 1a and b

Study 1 a and b test H1 and H2, respectively. H1 and H2 suggest that consumers' WTP is affected by incidental numbers. Moreover, individuals interpret such values to resemble acceptable prices for different product categories. Past research has argued that the mere presence of a number is *not* sufficient to result in anchoring effects (Mussweiler and Strack 2001), especially for items with strong internal reference points (IRP) (Dogerlioglu-Demir and Koças forthcoming). Dogerlioglu-Demir and Koças (forthcoming) begin the investigation by demonstrating that consumers' WTP is affected by totally random numbers in the environment for weak IRP items. However, they note that numbers should be part of identity (e.g., product name) for IEA to work for products with stronger IRPs. Higher frequency and recency of purchases result in more focused, stronger IRPs (Mazumdar et al. 2005). Thus, it is more difficult to manage consumers' price expectations by unobvious numerical cues in the environment. Dogerlioglu-Demir and Koças (forthcoming) demonstrate that for a product with a strong IRP (e.g., a hamburger

meal), the IEA effect is weaker than for a product with a weak IRP (e.g., an average meal at a restaurant). When two separate numbers are used as anchors, while there is a significant difference in WTP for an average meal, there is no difference in WTP across conditions for a hamburger. The authors argue and show that numbers used as part of the product identity enhance IEA effectiveness for products with strong IRPs.

In study 1 a and b, we utilized numbers 17 and 97 as anchor values. These numbers were used in Critcher and Gilovich (2008) to represent appropriate values for an average meal at an expensive restaurant. Therefore, we expect that while 17 will pull the WTP down and 97 will pull WTP up for the meal, 17 will pull the WTP up and 97 will pull WTP down for the burger.

### Study 1a

#### Method

Drawing 59 participants from Amazon Mturk, we had half of the respondents report their WTP for an average meal at an expensive restaurant named Studio 17 and had the other half state their WTP for an average meal at Studio 97 ("How much would you be willing to pay for your own meal at this restaurant").

#### Results and discussion

As hypothesized, we found a significant difference in WTP for an average meal at Studio 17 versus Studio 97 ( $M_{\text{Studio17\_meal}} = 24.17$ ,  $SD = 10.32$ ;  $M_{\text{Studio97\_meal}} = 33.43$ ,  $SD = 21.94$ ;  $t(57) = -.26$ ,  $p < 0.01$ ). When individuals see a restaurant named 'Studio 17', their expectations of price for an average meal is significantly lower than when they see a restaurant name 'Studio 97'. Though the numbers are utilized as part of the restaurant name and there is no obvious price connection, anchoring effect holds.

### Study 1b

#### Method

Since consumers' WTP for a product with a strong IRP is affected by different anchor values only if the number is part of the product identity (Dogerlioglu-Demir and Koças forthcoming), we used numbers as part of the product name for the hamburger (the 17 vs. the 97 burger). We used 2 conditions (17 vs. 97) to test the effect of different anchors in the product names on consumers' WTP for a product with a strong IRP. We recruited 80 participants from the United States using Amazon MTurk. This time, we used a hamburger meal ad and a slogan that read "Introducing the 17 (97) burger." We specifically mentioned that "we used a random character generator to come up with such a name" to ensure that participants perceived the numbers as product names, not prices.

#### Results and discussion

We found a significant difference in WTP for the 17 burger versus the 97 burger ( $M_{17\text{burger}} = 8.40$ ,  $SD = 3.62$ ;  $M_{97\text{burger}} = 6.24$ ,  $SD = 3.78$ ;  $t(78) = 2.59$ ,  $p < .01$ ). As expected, whereas consumers interpret the number 17 as \$17, they view the number 97 as \$0.97 when operating in the burger domain. Therefore, 17 pulls WTP up and 97 pulls it down. As argued above, consumers tend to distort the numbers to make them look more like acceptable prices for a certain product category.

### Study 2a and b

In study 1a and b, we found that the same numbers are interpreted differently depending on the context. To test whether this effect is due to the choice of numbers 17 and 97, which are more applicable to a meal than a hamburger, we conducted study 2 employing anchor

values more applicable to a hamburger meal. Dogerlioglu-Demir and Koçaş (forthcoming) show that 98% of the prices quoted as average, lower bound, or upper bound for a hamburger meal fell in the 0.99 to 19.99 range. Therefore, in study 2, we employed 099 and 1999 as anchor values. We expect that while 099 will pull the WTP down and 1999 will pull WTP up for the burger, 099 will pull the WTP up and 1999 will pull WTP down for the meal.

**Study 2a**

*Method*

We drew 44 participants from the United States using Amazon MTurk and used a 2 condition (099 and 1999) between-subjects design to test the effect of different anchors on consumers’ WTP for an average meal at an expensive restaurant using the same as in Study 1a. We asked our participants “How much would you be willing to pay for your own meal at Studio 099 vs. 1999?”

*Results and discussion*

We found a marginal significant difference in WTP for an average meal at Studio 099 versus Studio 1999 ( $M_{Studio099\_meal} = 41.15$ ,  $SD = 35.71$ ;  $M_{Studio1999\_meal} = 28.08$ ,  $SD = 10.96$ ;  $t(42) = 1.70$ ,  $p < 0.09$ ). As

hypothesized, while consumers interpret the number 1999 as \$19.99, they view the number 099 as \$99 when they are operating in the meal domain. Therefore, while 099 pulls WTP up, 1999 pulls it down, demonstrating the context-dependent nature of anchoring.

**Study 2b**

*Method*

We drew 72 participants from the United States using Amazon MTurk and used a 2 condition (099 and 1999) between-subjects design to test the effect of different anchors on consumers’ WTP for a hamburger meal employing the same scenario as study 1b. We asked respondents “How much would you be willing to pay for the 099 burger vs. the 1999 burger?”

*Results and discussion*

We found a significant difference in WTP for the 099 burger versus the 1999 burger ( $M_{099burger} = 5.33$ ,  $SD = 2.94$ ;  $M_{1999burger} = 6.56$ ,  $SD = 2.00$ ;  $t(70) = -1.96$ ,  $p < .01$ ). As proposed, while 099 pulls WTP down, 1999 pulls it down, showing that consumers take 099 as the lower bound and 1999 as the upper bound when it comes to burger prices (see table 1 for results of study 1 and 2).

**Table 1 Results of Study 1 and 2**

Meal Domain (17&97)							
	Anchor 17		Anchor 97		Statistics		
	Mean WTP	SD WTP	Mean WTP	SD WTP	N	t	p
<b>Meal (1a)</b>	24.17	10.32	33.43	21.94	59	-0.26	0.01
<b>Burger (1b)</b>	8.40	3.62	6.24	3.78	80	2.59	0.01
Hamburger Domain (099&1999)							
	Anchor 099		Anchor 1999		Statistics		
	Mean WTP	SD WTP	Mean WTP	SD WTP	N	t	p
<b>Meal (2a)</b>	41.15	35.71	28.08	10.96	44	1.70	0.09
<b>Burger (2b)</b>	5.33	2.94	6.56	2.00	72	-1.96	0.01

**CONCLUSION**

Taken together, the results from this study along with previous studies provide strong support for our theorizing and hypothesized effects. Importantly, we find that consumers employ random numbers in their environment to make numerical valuations. The same numbers, however, may refer to different values depending on the context. Though unconsciously, consumers tend to alter, distort and finally adapt these numbers to make them reasonable prices for a given product category.

These findings have several important managerial implications. First, right numbers must be selected to create intended anchoring effects. Consumers have ranges of acceptable numbers especially when it comes to product prices with which they have some familiarity, and only numbers within this range are potential right numbers. Second, it is highly likely that an intended anchor may change unit in the customer’s perception, and end up working as an anchor in the undesired direction. As our empirical work demonstrates, 17 is a better anchor for profit maximization than 97 in a burger domain whereas the reverse is true in a meal domain. Similarly, 099 is a better anchor for profit maximization than 1999 in a meal domain whereas the reverse is true in a burger domain. That is, WTP is higher when 1999 rather than 099 is used.

To build on this example further, we also carried out an exploratory study which we report here briefly where we consider anchors 1999, 2999, 3999 and 4999 in a burger domain (N=329) as in Study

2b. Although the numbers 1999, 2999, 3999 and 4999 are increasing nominally, these numbers are consecutively further away from the acceptable range of prices. Hence, our findings in the previous studies suggest that the larger numbers are more likely to operate as less than \$10 compared to more than \$10 in an anchoring context. Hence, 4999 is more likely to be perceived as \$4.99 rather than \$49.99, especially when compared to 3999 (\$3.99 vs. \$39.99) or 2999 (\$2.99 vs. \$29.99). Our empirical study lends some support for this prediction. Although the differences are marginally significant, there seems to be a trend in the expected direction. The mean (and SD) of WTP for anchors 1999, 2999, 3999 and 4999 are 7.70 (2.83), 7.17 (3.37), 7.23 (5.81) and 6.83 (4.01). Hence, although 2999 to 4999 may seem like better anchors for profit maximization, consumers’ adaption of context-dependent prices in the range of \$2.99 to \$4.99 lead to a decrease in reported WTP. To conclude, we can claim that there are potentially worse anchors in the right direction that practitioners must watch for when choosing numbers to be used in marketing activities.

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# When Size Matters: Exploring Perceptions And Justifications Of Deviant Consumer Behavior

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## INTRODUCTION

Deviant consumer behavior (DCB)— that which is against the law, a regulation, or violates the generally accepted norms of conduct (Fullerton and Punj 1993; Moschis and Cox 1989) – is an ongoing problem in marketplaces around the globe. Deviant consumers can cause financial, physical, or emotional harm to an organization, employees, and other consumers. While there is a growing body of research exploring *what* constitutes DCB, research investigating *why* consumers engage in DCB is sparse (Daunt and Harris 2012). This lack of understanding is reflected in the “one size fits all” approach to deterrence strategies that focus on emphasizing the need to uphold the law and/or the penalty that would apply.

This paper answers the research question *how does the size of harm caused and the size of the victim influence perceptions of DCB?* In this paper, the focus is on harm to the organization. We designed two studies to further our understanding of the complexities of DCB, to inform the development of more effective deterrence strategies. Study 1 explored how the size of harm and victim informed consumer perceptions of DCB and the neutralization techniques individuals use to rationalize DCB. Study 2 measured and examined differences in perceptions of DCB where the size of the harm and the size of the victim were manipulated. These two factors – size of harm and size of victim – have been identified as potentially significant factors influencing the perceived acceptability of consumer actions (Neale and Fullerton 2010).

## LITERATURE REVIEW

Organizations largely rely on traditional deterrence strategies whereby all consumers are treated the same, and receive the same deterrence message. Deterrence theory is grounded in the classical school of criminology and the “rational choice view of human behavior” (Pratt et al. 2006, 367). It assumes that individuals weigh up the costs and benefits of a situation, and then make rational decisions based on increasing their pleasure (e.g. benefits) and decreasing their pain or harm (e.g. risk/costs) (Pratt et al. 2006). The effectiveness of this approach to understanding human behavior has been criticized, with suggestions that there are underlying psychological factors that influence human behavior beyond the rational approach (Akers 1990; Garoupa, 2003; Mazar, Amir and Ariely 2008; Mazar and Ariely 2006). Acknowledging the differences in perceptions of DCB means organizations will need to consider more tailored approaches to deterrence strategies. Perceived size of harm and size of the victim are two dimensions commonly suggested as conceptual dimensions that individuals use to distinguish between right and wrong behaviors (e.g. Fullerton and Punj 2004; Hunt and Vitell 1986; Jones 1991; Muncy and Vitell 1992; Vitell 2003). The recommendations made in this paper are the need to develop strategies tailored to deter behaviors based on the perceived size of harm caused, and the size of the victim.

Size of harm refers to how much harm the consumer perceives their DCB will cause to the organization involved. In a review of over 30 consumer ethics studies spanning from 1990 to 2003, Vitell (2003) suggested that individuals’ ethical judgements were informed by the *degree of harm involved* in the behavior, alongside *how passive or active the consumer was in the act*, and whether the behavior was *perceived as legal*. These three conceptual dimensions largely

reflect those originally suggested in Muncy and Vitell’s (1992) Consumer Ethics Scale. Only one study known to the authors has tested the role of these conceptual dimensions in DCB. Mitchell and Chan (2002) found that severity of consequence (harm caused) played a role in the enactment of DCB. The greater the perceived size of harm, the less likely the individual would engage in DCB (Mitchell and Chan 2002). Similar conceptualisations of the size of harm dimension have been found in a number of other frameworks including Fullerton and Punj’s (2004) typology of DCB, which suggests behaviors could be perceived as distinct based on *the type and degree of disruption* caused. Moreover, Hunt and Vitell’s (1986) General Theory of Marketing Ethics, proposes the ethicality of a behavior reflects the *perceived consequences of each behavior alternative* and the *(un)desirability of the consequence incurred by those involved*. These two dimensions from Hunt and Vitell (1986) suggest the behavior with the greatest degree of harm to the greatest number of people would be the most unethical. In Jones’ (1991) moral intensity framework of ethical decision making, the *magnitude of consequences* also provides support for the ‘size of harm’ dimension in that the more harm the behavior causes, the more deviant the behavior is perceived to be.

Size of victim refers to who the victim is of the DCB. In the scope of this paper, the victim considered is a small organization or a large organization. Social distance theory posits that the greater the perceived social distance between the organization and the consumer, the greater the likelihood of DCB occurring (Houston and Gassenheimer 1987). The greater the organization’s size, the greater the perceptions of impersonality, and thus the greater the probability of DCB because the consumer does not feel they are harming the organization (Fullerton and Punj 2004). DCB towards a large organization can be perceived as a ‘faceless crime’ (Cox, Cox and Moschis 1990). If the DCB is directed towards a more identifiable victim, the victim has a greater ability to engender empathy from the individual committing the deviant act, reducing the instances of deviance (Jenni and Loewenstein 1997). Drawing on Jones’ (1991) *concentration of effect* dimension of the moral intensity framework, a small organization could be perceived as a more identifiable victim than a large organization, because the concentration of effect of DCB on a small organization is greater than it would be on a large organization. Based on the conceptual dimensions identified in the literature, the following hypotheses are made:

*Hypothesis 1: The greater the size of harm, the more unacceptable the DCB will be perceived.*

*Hypothesis 2: The smaller the size of the victim, the more unacceptable the DCB will be perceived.*

## METHOD

Two empirical studies were conducted to examine the role of the perceived size of harm and size of victim in consumer perceptions of varying types of DCB. Study 1 involved 29 semi-structured in-depth interviews with a card sort activity. The topics covered during the interview were; defining acceptable, questionable, and unacceptable behavior, exploring contradictions between categorisation of a behavior in the card sort activity and consumer perceptions of

right and wrong, and neutralization techniques employed to justify questionable and unacceptable behaviors. The sample included males and females over 18 years of age, living in Australia, who were recruited using a non-probability sampling technique of convenience and snowballing. Interviews were conducted until theoretical saturation was reached (Strauss and Corbin 1998). The interview transcripts were analyzed in Nvivo 9.2 via thematic analysis (Braun and Clarke 2006). Study 2 comprised of 815 participants recruited through an online panel in the United States. The sample contained a 50:50 gender split, and respondents offered their perceptions of the acceptability of DCB using third person scenarios and rating them on a six point Likert scale (1 = unacceptable, 6 = acceptable). Respondents did not require experience committing the DCBs given they were asked only to rate the acceptability of the actions of a third party acquaintance. The data were analyzed via four two-way ANOVAs comparing differences in the effect of size of harm and size of victim on the four DCBs examined.

### STUDY 1 RESULTS

Evidence of the size of harm and size of victim constructs were identified in the qualitative data.

#### Size Of Harm

Size of harm referred to how much harm the consumer perceived the behavior would cause to the victim (large or small organization). The greater the perceived harm, the more likely the respondent would perceive the behavior as unacceptable. When discussing a range of behaviors, respondents reflect on various degrees of harm and how that influences how they distinguish between right and wrong behaviors:

*If somebody [the waitress] has miscalculated [the bill] by a few dollars, you might not worry about it. If it was a substantial amount, say if the other bill was \$100 and they charged \$50, okay then, you probably would worry about it. (#6)*

*Yeah well, you know, [drinking a soda in the grocery store and not paying for it] a can of soda it's about three bucks so you deprive the supermarket of three dollars and it's not that big of a deal. Depending on the [public transport] fare, it could be two or three dollars as well, so that's not that big of a theft... Then you've got this dress or a power tool, and I don't know about power tools or dresses but from my understanding dresses are at least a hundred dollars and power tools same [that's unacceptable]. (#3)*

Size of harm was associated with Sykes and Matza's (1957) neutralization technique of 'denial of injury', which argues that no one is being hurt by the consumer's actions:

*Trying to get in to see the Mona Lisa and the Louvre or something like that if I can save a couple of bucks by claiming that she's a little bit younger [than she really is] then it wasn't going to be any skin off anybody's nose particularly with thousands of people there a day. (#11)*

Respondents had arbitrary definitions for what constituted 'enough harm' to classify a behavior as unacceptable. The variability in what respondents perceived as an acceptable level of harm reflects their varying points of individual tolerance for DCB:

*If you're going to a movie, um and that's only a \$5 thing...but then if you're going to lie to save like \$200 to go to a theme*

*park, then it's like maybe...I shouldn't even be considering that activity, I should just be doing something else, rather than trying to lie to do it. (#10)*

*It would depend on how much we're talking about. If we're talking about, the value of a main course meal at \$25 bucks, and I've realised, in an appropriate time frame, when we can easily point that out [the miscalculation]... I probably wouldn't be rushing back in to point out that we were supposed to pay them another \$2.50. (#7)*

The arbitrary definitions for what constituted 'enough harm' means organizations need to develop strategies that persuade consumers that \$5 harm is just as unacceptable as \$100 harm.

#### Size Of Victim

In the scope of this paper, DCB can be directed towards a small or large organization. When exploring insurance fraud and fraudulent returns, respondents reflect on the distinction between the two types of organizational victims:

*I'd be really tempted to kind of, "yeah, just do it [commit insurance fraud]." Insurance company, they take too much money anyway...this is a chance to get something back from the money that you've paid... it's not that big of a deal...if it was like a small family based, not a multinational, high profit company then I'd probably go, "oh I don't think it's right, you know, the insurance company's owned by this family and, you know, they really need the money to be competitive...I don't think you should do that." (#24)*

*[Lying about why you're returning an item] I guess if it was somewhere like X or Y [two large national chain department stores]...it's not really going to hurt them as opposed to obviously returning it to like a boutique store...I mean these small businesses are trying to make a profit like they don't, it's not like a big company where they can afford to maybe, oh, someone's doing that, okay well let's hope it doesn't happen again, let's not lose out that much but it's obviously a much more smaller business would notice that as opposed to a larger business. (#13)*

The quotes above highlight consumer willingness to victimise large rather than small organizations, on the basis that large organizations can financially tolerate DCB better than small organizations. In other words, the concentration of the effect of DCB on a small organization is higher than on a large organization. Another respondent expresses a similar sentiment:

*Using stolen credit cards to order goods over the internet...if it's a small business, they can't necessarily afford it, and the credit card companies don't necessarily reimburse those businesses for the losses...I've had direct experience with them in the past where we sold stuff to someone in the US and it turned out to be a stolen credit card and Visa never refunded the money to the company, they said that's just a business risk that you take on. (#18)*

Using another perspective, a respondent reflects that DCBs directed towards a large organization is more acceptable than directing harm at a small organization because the victim is less identifiable:

*If you break something or use something at a supermarket without telling someone, changing price tags, evading fares on pub-*

lic transport, these are all things that hurt a larger entity so it's not as personal. (#5)

Sykes and Matza's (1957) neutralization technique 'denial of victim' was evident under the size of victim theme:

*Well look at the size of the store, look what they're charging, look at the profits, excessive profits they're making, possibly like X and Y [two large grocery chain stores] are doing it in a way that's unacceptable as a duopoly so people will convince themselves that it's acceptable to hit back. (#1)*

The 'denial of victim' argument above is suggesting that the large organization's behavior is unacceptable, thus the organization deserves the harm caused by the DCB. The absence of dissonance

associated with performing a DCB makes it easier for the consumer to perform the behavior and maintain a positive self-image.

To quantify the effects of size of harm and victim on perceptions of DCB, Study 2 was conducted.

**STUDY 2 RESULTS**

Study 2 asked respondents to rate the acceptability of four DCBs: returning used goods for a refund, lying about age in order to get a lower price, not saying anything when you buy a mispriced item, and insurance fraud. In the scenarios presented to the respondent, the size of the victim organization was large (national chain) or small (corner store/independent), and the size of the harm was also large or small in dollar amounts. A summary of the empirical results (2x2 ANOVA and means) is found in table 1.

**Table 1. Summary of empirical results**

ANOVA (significance)			Victim small Harm small	Victim small Harm large	Victim large Harm small	Victim large Harm large
Behavior	Harm	Victim	Mean	Mean	Mean	Mean
Fraudulent returns	<i>ns</i>	<i>ns</i>	2.17	2.08	2.01	1.97
Lying about age	.001	<i>ns</i>	2	2.28	2.13	2.36
Buying mispriced item	.000	.001	3.4	2.67	3.7	2.03
Insurance fraud	.000	<i>ns</i>	1.39	2.7	2.57	1.33
		N=815	N=205	N=203	N=205	N=202

Consumer perceptions of fraudulent returns were not significantly influenced by size of harm or size of victim. Consumer perceptions of lying about age to get a lower price was influenced by the size of harm,  $F(1, 815) = 11.535, p = .001$ . The size of harm also influenced consumer perceptions of insurance fraud,  $F(1, 815) = 332.056, p = .00$ . Finally, consumer perceptions of buying a mispriced item was influenced by both the size of harm,  $F(1, 815) = 45.747, p = .000$ , and by the size of the victim,  $F(1, 815) = 10.417, p = .001$ .

Manipulating the size of the harm and victim also reveals that given certain circumstances (small victim, large harm), blatantly illegal actions such as insurance fraud (2.70) was rated as slightly but not significantly more acceptable than the miscalculated bill (2.67) which is an unintentional and unplanned windfall. The data partially supports H1 and H2.

Analyzing the means reveals some interesting and contrasting results. When the victim was small, increasing the harm was perceived as *less acceptable* for fraudulent returns and buying a mispriced item, but *more acceptable* for lying about age and insurance fraud. When the victim was large, increasing the harm was perceived as *less acceptable* for fraudulent returns, buying a mispriced item, and insurance fraud, but *more acceptable* for lying about age. The variability in the outcomes suggests complexity in how underlying psychological factors and situational factors influence perceptions of DCB.

**DISCUSSION**

The findings of both studies illustrate that the perceived size of harm and size of victim can influence a consumer's perceptions of DCB. These dimensions can also be used as justifications to enable DCB to occur, through the 'denial of injury' and 'denial of victim' neutralization techniques. To effectively deter DCB, strategies need to challenge these neutralization techniques. Specifically, marketers should consider the need to humanise their organization. Humanizing the organization seeks to reduce the social distance between the consumer committing the deviant act and the organization being harmed, thereby reducing DCB (Cox et al. 1990; Jenni and Loewenstein 1997). Putting a 'face' to an organization makes it more difficult for the consumer to justify performing DCB at the expense of the organization because it leverages the identifiable victim effect. Identifiable victims engender a greater empathic response, making an individual more willing to engage in behavior that will reduce the harm inflicted on the victim (Jenni and Loewenstein 1997; Kogut and Ritov 2005). DCB is reduced when the individual performing the behavior can see the harm they are causing a specified victim (Small and Loewenstein 2003). Humanizing the organization may be a difficult strategy for very large, profitable organizations as the perceived social distance between the consumer and the organization is quite large.

To attempt to overcome this issue for large organizations, the humanizing recommendation would need to be used in conjunction with another deterrence recommendation such as highlighting the



negative consequences caused by the consumer's behavior. Consumers who are more likely to engage in DCB are focused on the benefit they gain from performing the behavior, as opposed to acknowledging the negative outcome incurred by others as a result of their actions (Schlenker and Forsyth 1977). Therefore, there is a need for organizations to increase awareness of the outcomes DCB causes to the victim. Implementing information campaigns that go alongside the humanization strategy could more clearly highlight the harm caused by the consumer committing the DCB.

A future research opportunity would be to develop and test interventions that reflect these recommendations to examine their effectiveness in reducing DCB. Taking a more tailored approach to deterrence strategies would overcome the limitations of deterrence theory. Humanization may also be an issue of salience as organizations increasingly implement self-serve technologies to interact with customers in order to reduce costs and attract new customers. Future researchers should explore consumer perceptions of organizational technology use from an ethical perspective.

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# Becoming Iconic: David Bowie from Man to Icon

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## ABSTRACT

*From Nelson Mandela to Ronald Reagan, from Steve Jobs to Sam Walton, from Oprah Winfrey to Martha Stewart, from Michael Jordan to Muhammad Ali, from Andy Warhol to Bruce Springsteen, from John Wayne to Woody Allen, cultural icons dominate our world. (Holt, 2004, p.1)*

The opening of Holt's work on brands as icons highlights two important assumptions. First, that people can be icons. Second, icons are somehow different to celebrities, even though many of the people identified by Holt as icons have been studied as part of celebrity cultural studies (Crowley, 1999; Grano, 2009; Illouz, 2003) and the emerging area of human branding (Davis and Halligan, 2002; Kerrigan et al., 2011; Schroeder, 2005; Thomson, 2006). This overlapping between people who are both celebrities and icons suggests that there is a lack of theoretical distinction between these concepts. Beyond elitist judgments of celebrity as empty reproduction and icons as legitimate symbols (Alexander, 2010) there is a need to understand when a person becomes a celebrity and an icon. Such conceptual distinctions are required when developing the concept of human brands beyond its current focus on celebrities. In particular, there is a need to consider if human brand icons operate at a larger macro level than current branding and endorsement literature has considered. Using structuration theory we consider how consumers form relationships and attachments not just with the celebrity (Gabriel, 1997; Parmentier, 2010; Thomson, 2006) but also how icons become representative symbols of complex sets of societal ideas and values (Holt, 2004).

## LEGITIMIZING CELEBRITIES AS ICONS

Celebrities and icons have a troubled and contentious relationship. Rojek (2001) claims that a person becomes a celebrity when media interest in their activities transfers from the reporting of their public-self to investigating their private-self. This separation of the public- and private-self is one of the distinguishing features of celebrity discourse. Icons, in contrast, represent a person or thing that is regarded as a "compelling symbol of a set of ideas or values that a society deems important" (Holt, 2004, p.1). Celebrities and icons represent important cultural mythmaking and values, with celebrities deemed to represent the synthetic (Boorstin, 1964), the apparent (Debord, 2002), and the aspirational (Marshall, 1997). Consequently, the media and public's interest in the private lives of celebrities ensures that their fame precedes their achievements (Turner, 2004). Celebrities and icons, however, are people and objects that embody crucial cultural functions, whilst performing cultural identity myths that allow imagination, effectively repairing a damaged cultural fabric (Holt, 2004). Whether a person is considered a celebrity or an icon is often based on perceptions of greatness across time (Campbell, 1949), and whether the celebrity's cultural meaning and value is malleable to manage shifting cultural concerns (Brown et al., 2013).

Rojek's (2001) view that the celebrity represents a move from a public concern to a focus on the private self is disputed in this paper. Instead, we view celebrity as geotemporal process, where the celebrity is created through multiple associations, whether they be private or public achievements or roles (McCracken, 1989). These associations represent cultural concerns of a time period and as society shifts a celebrity's meanings may not transform. Power and fame may not

transfer then to new time periods or cultural contexts and concerns. Steve Guttenberg, a well known and popular actor in the 1980s with films such as 'Cocoon' and the 'Police Academy' series provides a good example. Despite his success in the 1980s his cultural meanings and social authority remain tied to this time period. In essence he embodies nostalgia for the 1980s rather than representing modern cultural meanings (Holbrook, 1993).

Celebrities become icons when their fame is enduring through the transformation of their cultural meaning and values that mirror changes in society (Holt, 2004). This ability to transmute their meanings, across time periods and cultural contexts, means that the person is no longer a known figure in a particular time setting (Boorstin, 1964), but rather they become an icon whose meaning is mythologised through imprecision, amorphousness and ambiguity (Brown et al., 2013). In this paper we use structuration theory to focus on how a person becomes a celebrity and an icon.

## STRUCTURATION THEORY AND HUMAN BRANDS

Structuration theory explains how social systems are created and reproduced through the engagement of structure and agents (Giddens, 1984). Structuration theory argues that neither structure nor agents have primacy, instead existing in varying levels of continuous engagement. Structure represents a society's social arrangements that emerge and determine an individual's, group or organization's behavior (hence forth called 'agents'). Agents exist and interact within a structure drawing upon rules and resources indicative of generalized procedures and methodologies that agents possess as knowledge. Hence, the structure of human brands (including how it manifests, is perpetuated and created) can be considered through the interactions and knowledge between the agents of the media, the market, the audience and the human brand. Without these agents the structure cannot exist, neither, we argue, would the concept of human brand. Consequently agents' behaviors are not only determined by the structure that they exist within but are also constantly recreated and adapted through differing time periods. Hence, agents ability to recreate differing meanings, over time, regarding a human brand's celebrity and iconicity further Rojek (2001), Turner (2004), and Holt's (2004) momentary perspective.

An agent's ability to influence the structure they exist within is reflective of their ability to mobilise power. Giddens argues this is not a resource in itself, but is indicative of ownership of material and organisational capabilities allowing agents to exercise power within the structure. Giddens offers some insights into this question by arguing that the rules and resources that form the structure are not static, but instead can be created, changed or combined in different ways by different agents over time. A celebrity at the height of their fame would then be associated with higher material and organisational capabilities allowing them to determine their own self image (Kerrigan et al., 2011; Schroeder, 2005).

Giddens' argument that differing agents, over time, can change the structure reflects the inter-relationship between structure and agency that forms social practices. Social practices represent the current actions of the various agents and are a direct consequence of agents' previous actions. The structure that agents interact within can exist externally to them (such as celebrity news) as well internally (such as the memories of the celebrity). This raises the questions of when people change their place in the structure to become a celeb-

ity and what structural changes occur when they become an icon? Structuration theory enables us to address these questions by considering what agents, within the market structure, influence the human brand's agency.

## METHOD

David Bowie's career, using a historical data focus, was analyzed to explore the themes around human brand celebrity and iconicity, agency and market structure. Bowie is a popular music artist who began recording in 1964 and is currently enjoying market resurgence after a ten year absence. Well known for his experimentation with different musical styles and flamboyant and dramatic alter-egos, such as Ziggy Stardust, he represents the embodiment of the music market. Bowie's career was analyzed using process data. An approach that explains how a sequence of multiple events over a period of time influences an entity (Van de Ven and Huber, 1990). Process data allows us to understand a phenomenon, like Bowie (Langley, 1999). Langley's (1999) criticism of data collection rarely going beyond surface description was addressed through following his suggested process data methodology. That is undertaking three stage sequential data collection: grounding, organizing and replicating.

Grounding strategies identify the data sources that can be used to develop the concepts for the subsequent strategies, informing the process data development of constructing agency and institutional narratives. An approach Langley (1999) equates with structuration theory. This paper, taking a deductive approach, used alternate templates to construct several differing interpretations of Bowie's career from 1972 to 2013. Interpretations based upon Bowie's relationship with other agents, including: the media, music industry and fan based materials. This highlighted potential tensions and subsequent gaps in these differing interpretations.

Data collection, using grounding theories, was achieved through a variety of media sources: social media (Bowie fan websites, YouTube, Facebook), media (over 400 articles analyzed from newspapers, magazines - reviews, television programs.), music industry (press releases) and materials produced involving David Bowie (interviews, his own website). This collection process ranged in materials dated from 1964 to 2014. No screening process was used to review the data, instead focusing on what was being communicated, by whom and when. Materials were read, notes made, and re-read to identify nuances and metaphors. Data was systematically coded according to the emergent themes, such as 'Ziggy', 'Paranoia' or 'Career decline'.

The second stage of the analysis – organizing strategies – organized the data gathered into a systematic form. This stage, using a narrative strategy, represented the initial development of theory. This data was then used to identify temporal brackets - each period reflecting a specific sense of continuity, which is not evident in other time periods. This approach allowed us to compare and contrast differing temporal brackets to review the inter-relationships between Bowie and other agents during and between time periods (Langley, 1999). The use of temporal brackets lends itself to Structuration Theory with its emphasis on institutions and agents influencing each other's behaviors over time. Temporal brackets aim to gather realistic tales (Van Maanen, 1995) showing linkages within the structure between Bowie and various agents. We followed Langley's (1999) suggestion to avoid excessive data reduction, instead focusing on the contextual data embedded in various narratives, highlighting differing perspectives. This was achieved through numerous reconstructions of temporal bracketing. Both the authors independently studied the data collected from stage 1, comparing and contrasting their find-

ings. Once the temporal bracketing was agreed upon, this output was then presented to five Bowie fans for their comments and review. This process achieved a wider sense of external validation to the proposed temporal bracketing. Feedback at this stage led to minor revisions regarding the differing agents' narratives.

The final stage of data theory development – replicating – aimed to gather the various data strands to construct a theory, which involved comparing the different processes that occurred over Bowie's career. This process moved the analysis onwards from stories linked to events to the identification of variables that represented the critical events (Langley, 1999), forming the basis for theory development.

## FINDINGS

The data analysis of Bowie identified four key transitions in Bowie's career representing his transformation from musician to celebrity to icon. This transformation was not a linear evolution with the elements of fame, achievement and cultural symbolism taking prominence during different time periods. The transition stages will be discussed, evidence is provided in Table 1.

### *Transition 1: from musician to celebrity*

1972 represented Bowie's long awaited career breakthrough appearance as Ziggy Stardust on BBC's Top of the Pops on 22<sup>nd</sup> January 1972. Of interest, from this period, is how Bowie presented his public life as a recording musician, with the media and fan's attention focused on his achievement as a producer of innovative music. Following his career breakthrough, his private life dominates his public achievements as the ambiguity of Ziggy Stardust is resolved by attempting to understand Bowie, the person. Central to this interest is Bowie's conflicting persona portrayal of a bi-sexual extraterrestrial alien, confronting and challenging British cultural values of heterosexual restraint. In an interview with NME (a music magazine), Bowie presented Ziggy as the antithesis of British society in industrial decline, fighting to keep its identity, morality and values. Interest in Ziggy Stardust's sexuality was enhanced by the conflict with Bowie's private life, where he was married with a son. In this transition the public's interest moves from Bowie the musician to a fascination with his public sexual ambivalence. An interest reflected in Bowie's commercial success, in 1975, in the US, a success that was greeted with trepidation. However, Ziggy's lack of private self (Rojek, 2001) allowed him to be an amorphous cultural symbol that became iconic, without becoming a celebrity first.

### *Transition 2: when fame dominates achievement*

Turner (2004) equates celebrity with the media and public's interest in the individual's private self as detracting from their public achievements. A danger of celebrity then is fame can outstrip an individual's actual achievements. This is important because celebrities are agentic manipulators of their self and image (Schroeder, 2005). They control and are also controlled by fame. In Bowie's case, there were two stages to his fame process: seeking fame and suffocating from it.

In seeking fame, Bowie deliberately chose to sacrifice his critically acclaimed, and consequently commercially unsuccessful, Hunky Dory album (released late 1971) to promote his new Ziggy Stardust persona. A persona embodied through various market offerings, including t-shirts, clothing and most importantly a new album (released early 1972). By seeking fame through his alter-ego Bowie sacrificed the potential commercial success of Hunky Dory, but, more importantly, his own human brand. Ziggy Stardust was a product to be sold, taking precedence over Bowie as an individual and as a musician.

Table 1 Summary of Findings

<b>Transition 1: from musician to celebrity</b>
Private life interest: <i>'I'm gay,' he says, 'and always have been, even when I was David Jones'</i> (Watts, 1972, January 22). Success trepidation: <i>'Dick Cavett show'</i> (1974, November 2): <i>"Rumors and questions have arisen about David, such as who is he, what is he, where did he come from, is he a creature from a foreign land, is he a creep, is he dangerous, is he smart, dumb, nice, are his parents real, crazy, sane, man, woman, robot, what is he?"</i>
<b>Transition 2: when fame dominates achievement</b>
Fame sought: Melody Maker (Watts, 1972, January 22) describes 'Hunky Dory' as <i>'...not only the best album Bowie has ever done, it's also the most inventive piece of song writing to have appeared on record for a considerable period of time'</i> . Ziggy, rather than Bowie, was a "product" to be sold (Taylor and Wall, 1976). As the British BBC television program 'Nationwide' (1973) captured his alien image as a man <i>"...who spends two hours before his show caressing his body with paint [as]...a high priest of pop"</i> . Yet Ziggy Stardust is also presented as a deviant, describing him as <i>"a self-constructed freak"</i> indicative of an immoral society – <i>"It is a sign of our times that a man with a painted face and carefully adjusted lipstick should inspire adulation from an audience of girls between 14-20."</i>
Fame suffocates: <i>'Oi, Bowie! No! That was one's first reaction to the rumour sweeping the Hanover Grand on Monday that David Bowie would follow his show with a drum &amp; bass set. Though he conducted some brave experiments with the genre on his current album, Earthling, there was something undignified about the idea of him trying to recreate adrenalised beats in front of a bemused crowd of people his own age.'</i> Guardian newspaper review (Sullivan, 1997).
<b>Transition 3: when icon emerges</b>
The Iconic Producer: <i>'Yeah, I'm not only doing it, I'm doing it on three platforms. I'm working with people on a film version and I'm working with people on a theater version that's completely different and I'll synthesize the two into a huge version of Internet hypertext - where we will find out about Ziggy's mum and things like that. &lt;snip&gt; It will be a bigger, grander, more blah, blah. But the three taken together is, I suppose, lazy post-modernism where the same story is told in different ways.'</i> (Phoenix, 1999)
The Iconic Private Self: An appearance on the ITV television show 'Russell Harty' (1973, January 22) Bowie / Ziggy contrasted his supposed innocence with discussion of his erotic fan mail: <i>'It's very sexy...I seem to draw out a lot of fantasies out of people and a lot of fan mail I get, a lot of it is awfully nice and say 'How's your baby' and 'How is your wife' and 'What's your mum's name?' and things like that...but some of them are worth framing...I [couldn't] really tell you about them, they really are quite heavy...'</i>
<b>Transition 4: when celebrity and icon converge</b>
Celebrity and Icon Interchangeability: <i>"Supermodel Kate Moss was into vintage Bowie tonight - as she wore one of his Ziggy Stardust outfits to collect a prize on his behalf at the Brit Awards. The catwalk star was on hand for the ceremony because David Bowie, 67, chose to stay at home in New York rather than attend the event to pick up his best British male award - his first Brit for 18 years."</i> (McConnell 2014)

In fame suffocating, Bowie appears unable to dictate his own celebrity narrative. Instead his public recognition and human brand outperforms his success as a musician. From the mid-1980s, following the hugely successful 1983 album 'Let's Dance' and global 'Serious Moonlight Tour', Bowie was considered mainstream. Something that older Bowie fans, from the data, report in shocked terms, as Bowie was always considered a niche musician. Becoming mainstream was evident in Bowie's next album— 'Tonight' - an album that received mixed critical reviews. A product that reflected Bowie's declining music sales up to the 1990s. During this time Bowie appears more known for his human brand as a bi-sexual alien, then he does for his musical releases. Bowie was later to admit that this period represented a time of musical confusion influenced by commercial needs. A need that produced a disconnect between his self and what his human brand represented to his audience. Attempts in the 1990s to regain relevance, involved releasing a drum and bass dance album, which was met with further fan and media critical disdain.

#### *Transition 3: when icon emerges*

In transition 3 the celebrity begins to evolve into an icon. Bowie's iconicity is an emergent process as his symbolic meanings evolve over various time periods from counter-culture musician and as a symbol of sexual ambiguity (1970s), to mainstream musician and aging rock star (80s and 90s), and finally into the merging of Bowie and Ziggy as a unified cultural icon (2000s). In achieving this unified symbolism, Bowie engages in two practices, becoming an iconic producer and using his ambiguous sexuality to establish an iconic private-self.

In becoming an iconic producer, during this period of musical and commercial confusion in the 1990s, Bowie re-engages with his Ziggy Stardust alter-ego, readily playing his music and talking about his relevance. In particular Bowie wanted to develop online, television and theatrical productions regarding various aspects of Ziggy Stardust's life, moving the symbolic meanings of Ziggy out of his 1970s roots and into a new cultural context. This inextricably linked Bowie's public-self, as a musician and creator, to the symbolic meanings of Ziggy by expanding, redefining and staking ownership (Rojek, 2001).

Second, by using ambiguous sexuality to establish an iconic private-self, Bowie presented his sexual ambiguity as a component of his public-self. His public declarations of being homosexual, heterosexual and bi-sexual had raised interest in his private-self, including questions about his relationship with his first wife, Angie, and his current wife, the supermodel Iman. Questions that led to Bowie's sexuality becoming iconic in its ambiguity. For example, in the British Russell Harty television show (1973) Bowie discussed a plethora of sexually oriented fan letters and fan fiction, see table 1. This iconic private-self become a cultural symbol of society's increasing tolerance towards sex and homosexuality.

#### *Transition 4: when celebrity and icon converge*

The convergence of the celebrity and the icon is a result of the culmination of the celebrity's self and image amalgamating into a cohesive whole with their cultural symbolism. For instance, during the mid-1970s to early 1980s Bowie resisted the cultural dominance that his alter-ego Ziggy held, dramatically demonstrated by killing

Ziggy, in 1973, prior to his US tour. Bowie's fame and achievements influenced his ability to control his public and private self and image, manifesting through a reconnection, in the 2000s with the symbolism attached to Ziggy Stardust. A process beginning in the 1980s where discourse and production outputs began a backwards reflection towards Ziggy Stardust, culminating in an interchangeability between Bowie and Ziggy Stardust as the musician, celebrity and icon. In 2013, after a 10 year absence, Bowie released his first album with no promotion or fore-warning, to huge success with rapid sales and internet buzz. Whilst the album made no reference to Ziggy, much of the media commentary focussed on his iconic Ziggy alter-ego. A focus that Bowie perhaps saw as inevitable, as a need to maintain his musical relevance. This is embodied in Bowie's 2014 award for 'Best British Male Artist' at the British Music Industry Awards. An award that was collected by the model Kate Moss wearing one of Ziggy Stardust's original costumes, against a photographic background of Ziggy Stardust wearing the same costume. Ziggy Stardust had become Bowie and Bowie had become Ziggy Stardust. Bowie, the market and his fans appeared to have reached a resolution of how they view celebrity and icons.

### DISCUSSION

Bowie's career indicates that celebrity and iconicity are an inter-related process. A process that transitions from producer, to celebrity, to icon for Bowie and from creation to icon for Ziggy. Our findings indicate that the concepts of celebrity and icons whilst different are inter-related through the notions of fame and achievement (Rojek, 2001; Turner, 2004), self and image (Schroeder, 2005), and symbolic representation (Holt, 2004). Human brand icons then are the consequence of the agentic actions of human brands to reconcile their public / private selves and images within an ever-changing and dynamic system of production, media and audience. A finding that challenges perspectives of the celebrity triumphing over an empty image (Baudrillard (1994 [1981]), the low class obsession with the private lives of public figures (Bourdieu, 1984 [1979]; Rojek, 2001) or icons being the legitimate symbols of cultural exceptionalism (Holt, 2004).

The key similarities between celebrities and icons are their public visibility and symbolic embodiment of cultural values. Celebrities visibility lies in their fame, with symbolic meaning deriving from their imagined private-self that dominates the achievements of their public-self (Rojek, 2001). Visibility is also prevalent in the achievements icons derived from their symbolic meanings (Boorstin, 1964). Our analysis of Bowie, however, challenges this similarity. Instead, we argue, the distinctions between icons as legitimate achievement and celebrities as fame over substance are a false distinction. Evident in Bowie's efforts to merge his public and private selves with his Ziggy Stardust alter-ego. A merger not only of the musician who could be gay/bi-sexual/heterosexual in his private life but also as the public embodiment of counter-culture and sexual ambiguity. Consequently, Bowie shifts his discourse away from a simple celebrity agenda of titillating the audience with stories of the weird and sexually liberal, to forming a complete public and private iconic self that represents larger cultural concerns. Concerns regarding counter-culture versus the mainstream and the cultural acceptance of sexually ambiguity.

When does an individual become a celebrity? We posit that this occurs when the public and private selves of the human brand converge to form a coherent symbol of larger cultural concerns. This raises the questions of when people change their place in the structure to become a celebrity and what structural changes occur when the celebrity becomes an icon? Our findings suggest that this transition is a complex interplay between fame, achievement and symbolic

convergence that the human brand can both influence in establishing their self and image (Schroeder, 2005). Yet this is beholden to wider cultural, media and production structures (Alexander, 2010).

These findings extend our understanding of human brands and the symbolic meanings celebrities and icons represent. A representation based upon endorsement (McCracken, 1989) or developing their human brand (Parmentier, 2010). While, celebrity human brands own the symbolic meanings associated with their private selves, more than their public selves, human brand icons own a convergence of public and private meanings of wider cultural concerns.

Limitations of this paper lie in focussing on one celebrity / icon in a particular industry. Future research is suggested to two areas. First, to determine whether celebrity and iconic human brands have differential effects as endorsers and as influencers of private, public and cultural values, and two, to explore other celebrity / icons, such as political figures like Ronald Reagan, to understand how the celebrity / icon process is manipulated by agents in the market.

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# Congruency Between Self as Communicated by Product Ensembles and Self as Perceived by Peers – Do the Two Match?

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## ABSTRACT

The use of products and brands to communicate aspects of the self has extensively been the subject of research (Escales & Bettman, 2005; Flynn et al., 2011; Grubb & Grathwohl, 1967). Empirical studies have examined the use of products and brands to communicate a range of aspects such as membership of reference groups or communities (White & Dahl, 2007); class, status, and lifestyle (O’Cass & McEwen, 2004); personality differences (Nevia & Pastna, 2014); ethnicity and culture (Jamal & Chapman, 2000). Studies have also addressed the notion of interpreting or decoding consumption symbolism (Arnould & Thompson, 2005; Belk et al. 1982; Grubb & Grathwohl, 1967; Paasovaara et al. 2012). These studies suggest that consumers make judgments or inferences about self-related characteristics of product users from the products that belong to the person. Such studies gather data employing projective techniques by asking participants to make judgments about, for example, the type of people who would use the products presented or described (see Boddy, 2005; Haire, 1950; Fram & Cibotti, 1991; Porr et al., 2011; Steinmann, 2009). In this regard, the decoding literature has studied a number of product categories such as food and grocery (Doherty and Nelson 2010), automobiles and housing (Belk et al., 1982; Desmet et al., 2000; Grubb & Stern, 1971), miscellaneous products (Belk, 2013) and cosmetics (Mick et al., 1992; Tantisenepong, 2012).

However, there is little specific research on whether senders’ intended self-related characteristics match with those received by audiences. Research on product choices in relation to the self has tended to be restricted to researcher-selected products or product categories and specific aspects of the self. Grubb and Stern (1971) had owners of two automobile brands rate perceptions of their selves, of automobile brands, and owners of each brand of automobile. The study finds both consumers and their significant others hold similar stereotypes of owners of automobile brands. Feinberg et al. (1992) asked female subjects to display an outfit that best reflected their personality and then rate their personality on a series of rating scales. An independent group of subjects was presented with the photographs of the chosen outfits and instructed to infer owner personalities utilizing the same rating scales. While the Grubb and Stern (1971) study involved no direct matching of self-related characteristics between consumers and their observers, both product and test item choices in the Feinberg et al. study (1992) were pre-determined by the researcher, thus being a limited investigation of whether senders’ intended self-related characteristics match with those received by audiences.

What remains outside the scope of such studies is the identification of consumers’ intended self-related characteristics in relation to their product choices, and the investigation of congruency between consumers’ intended self-related characteristics and those accorded by audiences. This study addresses this gap. It allows young adult consumers the autonomy to self-select a range of products that communicate self-related characteristics to peer audiences. The study identifies the self-related characteristics that consumers express through their product choices, and further investigates congruency between consumers’ product-related self-characteristics and observer selections. More specifically, the study examines the following questions:

1. How successful are young adult consumers in communicating aspects of their selves to peer audiences via their product ensemble choices?
2. Is there evidence of congruency between consumers’ (‘senders’) product ensemble self-related characteristics and observers’ (receivers’) inferences? If so, to what extent?

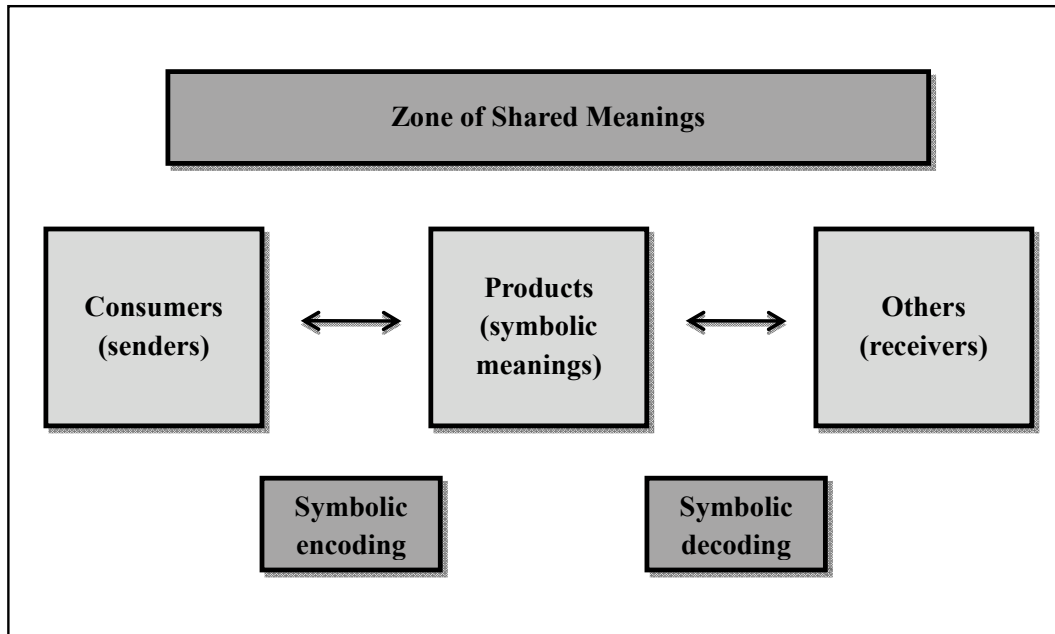
## COMMUNICATION OF THE SELF

The notion of congruency in an expressive or symbolic context refers to consumers’ choices of products and brands that are congruent with and express or symbolize aspects of the self to one’s own self and to others. A number of studies provide support for the idea that a person’s self is projected onto product choice and that consumers seek products with images congruent with their concept of self (Flynn, 2011; Grubb & Stern, 1971; Phau & Lau, 2001). Central to such choice is the issue of self-presentation or impression management. Impression management refers to the idea that individuals or senders establish and maintain impressions that are congruent with the perceptions they want to convey to their audience (Dhar & Wertenbroch, 2012; Leary & Kowalski, 1990; Schlenker, 1980, 1985). Senders encode meanings in the choices they make, and rely on receivers to suitably decode the same. Such notions recognize the value of congruency theories originally proposed by Rogers’ self-congruency theory (1951), Rokeach’ Belief Congruence theory (1960) and Heider’s Balance theory (1958). In essence, these theories suggest that consistency in understanding and shared meaning is integral to successful communication within social groups (Hummon & Doreian, 2003; Teichert & Schöntag 2010; Woodside 2004).

Within the consumer behaviour realm, congruency has been studied either in terms of product image-self image or product image and observer perceptions of product owners (Dhar & Wertenbroch, 2012; Hosany & Martin 2012; Teichert & Schöntag, 2010). The question of whether there is a discernible pattern of characteristics that are communicated and whether there are boundaries to congruency remains unaddressed. The intent of this study is to expand self-product congruency theory in accordance with Rokeach’ Belief Congruence theory (1960) and Heider’s Balance theory (1958), which propose that congruency should exist between the three entities - the self, perceived product symbolism, and the ‘other’ (the audience). Accordingly, our study proposes a model and investigates whether congruency of self-related characteristics associated with products exists between the self and the ‘other’ (the audience) (see Figure 1) and if so, to what extent.

## METHODOLOGY

This study focuses on young adult consumers between 18 and 21 years of age, a period most often associated with the transition from adolescence to full-fledged adulthood (Benson, 2014; Erikson, 1968; Johnson et al., 2007; Moschis & Churchill, 1978) and the symbolic use of products to construct and communicate the self (Galican, 2004; Piacentini and Mailer, 2004). The study employed auto-photography as a data collection technique (Belk & Kozinets, 2005; Noland, 2006; Wang, Burris & Ping, 1996; Ziller, 1990). The method involves giving participants a camera and asking them to take photographs of significant aspects in a given context, for example, as in

**Figure 1: Model of Encoding and Decoding Congruency for Product Meaning in Relation to the Self**

this study, products that express aspects of the self. Auto-photography allows consumers to express themselves fully and meaningfully, and enables a wider and detailed view from a researcher perspective. In Phase One, 28 young adults aged 18 to 21 years were voluntarily directed to photograph products that they considered said something about their self to their peers. Following which, each participant was invited to discuss what each of the photographs communicated about their-selves to their peers. Interviews were audio-recorded, transcribed and content analysed (Belk & Kozinets, 2005; Kolbe & Burnett, 1991; Krippendorff 2004) to generate a list of self-related characteristics spoken of by the 28 participants. These characteristics were defined as expressed aspects of the self associated with photographed products.

For the purposes of examining congruency, the photographs of products and brands taken by four of the 28 subjects formed the stimulus material for Phase Two of data gathering. The four individuals were chosen based on their ability to speak of their self-related characteristics in relation to selected products in sufficient depth in order to establish saliency of articulated self-related characteristics (Belk & Kozinets, 2005; Krippendorff, 2004; Wang, Burris & Ping, 1996). The study assumes that if this set of four participants could communicate self-related characteristics in relation to selected products, and was successful in doing so, so would be others. The self-related characteristics listed by all four participants - henceforth referred by pseudonyms of Kate, John, Abby, and Peter - were compiled to construct an initial list of characteristics.

In Phase Two, photographs selected by these four participants (senders) were presented as a photo collage to respondents (receivers) who comprised undergraduate students aged 18 to 21 years, from two universities in a large city in New Zealand. Data was collected using an online survey. Respondents were invited on a voluntary basis to view the four sets of photographs and subsequently directed to a list of characteristics and asked to select those that they associated with the photographs viewed. The extent to which respondents were able to successfully select the characteristics the four individuals intended to communicate was tested using probability theory (Black, 2009; Miller et al., 2010).

For Kate, the photo collage included a bag (Louis Vuitton), fruit, a pair of jeans (Ksubi), a pair of sunglasses (Gucci), perfumes (Lancome and Christian Dior) and a car (VW Golf). On interview, Kate revealed 15 characteristics of her self that her selection of possessions represented. For John, the photo collage included dance sports gear (dress, shirt, dance shoes, dance jacket), necklaces (with Maori symbols), a t-shirt (with Maori symbol), a bag (Billabong), a belt (QuickSilver), shorts (Mossimo), shampoo, deodorant, asthma and hay fever pills, scuba tank for diving, a fishing rod, vodka (Smirnoff) and beer (Tui), an iPod, computer and a mobile phone. John expressed 16 characteristics of his self in his selection of possessions. For Abby, the photo collage included a health care book, a pair of running shoes (Nike), alcohol (Lindauer and Malibu), cell-phones, a high-waisted skirt, a wall planner, a pair of sunglasses, an iPod, flyers, strawberries, and perfume (Yves Saint Laurent Baby Doll). Abby expressed 14 characteristics of her self in her selection of possessions. For Peter, the photo collage included perfume (Ralph Lauren), a t-shirt (Ralph Lauren), a belt (Bob Marley), a guitar, two cars (Holden Commodore and Honda), a school rugby jersey, the New Zealand flag, and alcohol (42 below). Peter expressed 16 characteristics of his self in his selection of possessions.

### Compilation of the Master List of Self-Related Characteristics

The characteristics for each of the four senders were compiled into a master list of 40 self-related characteristics. Ten further items that did not feature on any of the lists of selected profiles were included in the master list. The rationale for inclusion of these items was to make the checklist task more challenging for respondents (i.e., to select from a list of 50 which included ten items that described none of the four profiles), and thus enhance the robustness of the statistical testing. The additional ten items included were: does not like to waste money; humble; is rebellious; likes to spend time on their own; lacks self-confidence; physically big; likes to cooperate with others; sincere and caring of others; undisciplined and self-indulgent; unsympathetic and unfeeling. The final master list of characteristics for the rating task by respondents was thus produced (See Table 1 below).



**TABLE 1: RESULTS**

**Table 1.1: List of Self-Related Characteristics**

Aims High	Has a sense of humour	Pacific Islander
Busy	Has had a good upbringing	Physically big
Cares about their family	Humble	Politically aware and believes in democratic socialism
Cares about personal grooming	Intelligent and clever	Relaxed and Easy going
Catholic	Interested in the Arts	Respects culture and people
Confident	Is rebellious	Sincere and caring of others
Cool	Lacks self-confidence	Sociable and likes to have fun
Different from others	Likes music	Soft and cuddly
Does not like to waste money	Likes the best and posh	Talented
Dominant and determined personality	Likes to cooperate with others	Techno-smart
Enjoys drinking	Likes to fit in	Trendy and fashion conscious
Enjoys the outdoors	Likes to spend time on their own	Trend setter
Healthy, Fit and active (physically)	Lively and outgoing	Undisciplined and self-indulgent
Free spirited	Loves Rugby	University student
Friendly	Loves what they are studying	Unsympathetic and unfeeling
From New Zealand	Maori	Well-off financially
Happy	Organized	

**Table 1.2: Characteristics of Senders Correctly Identified (Hits) by 50 percent More of Receivers**

Kate	John	Abby	Peter
Aims High (56.5%)	Cares about personal grooming (59.6%)	Busy (56.9%)	Healthy, fit and active (73.9%)
Cares about personal grooming (79.1%)	Cool (55.2%)	Cares about personal grooming (63.0%)	From New Zealand (67.8%)
Confident (76.1%)	Enjoys drinking (85.2%)	Confident (56.5%)	Likes music (66.1%)
Enjoys the outdoors (57.4%)	Healthy, fit and active (76.9%)	Enjoys drinking (79.6%)	Loves Rugby (74.8%)
Healthy, fit and active (56.1%)	Lively and outgoing (61.7%)	Healthy, fit and active (59.1%)	
Likes the best and posh (65.2%)		Lively and outgoing (53.5%)	
Sociable and likes to have fun (66.9%)		Sociable and likes to have fun (62.6%)	
Trendy and fashion conscious (74.8%)		University student (53.5%)	

**Table 1.3: Characteristics Incorrectly Attributed (False Hits) to Senders by 50% or More of Receivers**

Kate	John	Abby	Peter
Cool (64.8%)	Busy (65.2%)	Cool (51.7%)	Cool (50.9%)
Well-off financially (73.8%);	Confident (69.1%)	Likes music (57.8%)	Confident (50.4%)
	Enjoys the outdoors (73.0%)	Likes to keep in touch with friends (59.6%)	Enjoys drinking (80.9%)
	Free-spirited (56.1%)		Physically big (67.8%)
	From New Zealand (59.6%)		
	Sociable and likes to have fun (57.8%)		

**Table 1.4 : Common Characteristics Selected by 50% or More of Receivers**

Characteristic	Kate	John	Abby	Peter
Cares about personal grooming	√	√	√	?
Healthy, fit and active	√	√	√	√
Sociable and likes to have fun	√	X	√	?
Cool	X	√	X	X
Confident	√	X	√	X
Enjoys drinking	=	√	√	X

√ = self-stated and identified  
 ? = self-stated but not identified  
 X = not self-stated but chosen  
 - = neither self-stated nor identified

Table 1.5: Self-Stated Characteristics Decoded by Fewer than 50% of Receivers

Kate	John	Abby	Peter
Different from others	Cares about their family	Different from others	Aims high
Dominant and determined personality	Different from others	Intelligent and clever	Cares about their family
Free spirited	Dominant and determined personality	Loves what they are studying	Cares about personal grooming
Happy	Enjoys the outdoors	Organized	Catholic
Has had a good upbringing	Has a sense of humour	Politically aware and believes in democratic socialism	Dominant and determined personality
Trend setter	Interested in the Arts	Trendy and fashion conscious	Friendly
University student	Likes the best and posh		Pacific Islander
	Likes to fit in		Relaxed and easy going
	Maori		Sociable and likes to have fun
	Respects culture and people		Soft and cuddly
	Techno-smart		Talented
			Well-off financially

## RESULTS

All senders and receivers were residents of a large city in New Zealand and between 18 to 21 years of age. A total of 230 receivers completed the Phase Two survey. The hypergeometric distribution was used as the basis for calculating probabilities. The receiver task of selecting 14 (or 15 or 16) characteristics of the sender from a checklist of 50 items is equivalent to the task of selecting a sample from a population, without replacement (Miller et al., 2010). The probability of selecting the correct 14 (or 15 or 16) items out of a population of 50 is modelled by the hypergeometric distribution (Black, 2009; Miller et al., 2010). For the task of correctly identifying 15 items out of 50, a receiver could choose up to 7 items purely by chance, with a likelihood greater than five percent. But the probability of selecting 8 or more items correctly is only  $p=0.019$ . In other words, any receiver who selects 8 or more of Kate's characteristics has successfully decoded the sender message at levels beyond chance occurrence; thus 8 is the *critical value* in this test of probability (Miller et al., 2010).

The same process was applied to calculate the critical value for the remaining three senders. John used 16 descriptors to describe himself. After viewing John's profile as presented in the collage of photographs, receivers were asked to choose exactly 16 items from the checklist of 50. The critical value for this task is 8 ( $p=0.047$ ). Abby used 14 characteristics to describe herself. After viewing Abby's profile as presented in the collage of photographs, receivers were asked to choose exactly 14 items from the checklist of 50. The critical value for this task is 7 ( $p=0.031$ ). Peter used 16 characteristics to describe himself. After viewing Peter's profile as presented in the collage of photographs, receivers were asked to choose exactly 16 items from the checklist of 50. The critical value for this task is 8 ( $p=0.047$ ).

Table 1.2 lists the characteristics of senders correctly identified ('hits') by 50% or more of receivers. Table 1.3 shows characteristics incorrectly attributed to senders by 50% or more of receivers ('false hits'). In other words, it displays those characteristics that senders did not use to describe themselves, yet are attributed to senders by receivers. Table 1.4 shows common characteristics (hits and false hits) selected by 50% or more receivers across senders. Table 1.5 shows self-attributed characteristics of senders not selected by 50% or more receivers.

As seen in Table 1.2, receivers correctly identify 8 out of 15 self-attributed characteristics for Kate, 5 out of 16 for John, 8 out of 14 for Abby, and 4 out of 16 for Peter. Senders are able to successfully communicate some self-related characteristics via their product

ensemble choices. An explanation for the successful communication of the selected self-related characteristics in Table 1.2 lies in the socially observable nature of these self-related characteristics. This suggests that self-related characteristics of these consumers that are externally oriented and socially observable had a better chance of being correctly decoded.

Table 1.3 shows characteristics not self-articulated by senders, yet identified by receivers from a master list of characteristics. In other words, receivers attribute these characteristics to senders from the photographs of products they see, even though senders do not use these characteristics to describe themselves. Even though senders do not consciously intend to communicate these aspects, or do not consider the selected self-related characteristics as salient to them, yet receivers attribute these characteristics to the sender based upon the products and brands displayed. In this, product ensembles have communicated more meaning than senders intended.

Table 1.4 shows commonly identified characteristics across senders. These young adults were more successful in communicating to others that they *care about personal grooming*, are *healthy*, *fit and active*, *sociable and like to have fun*, *cool*, *confident*, and *enjoy drinking*. Even though only one sender uses the word *cool*, and only two senders articulate that they are *confident*, yet both these words feature as common characteristics, picked up by 50% or more of receivers across all four senders. Conversely, some self-attributed characteristics of senders are decoded by fewer than 50% of receivers (see Table 1.5). Self-stated characteristics not decoded by receivers include 7 items for Kate; 11 for John; 6 for Abby; and 12 for Peter.

Two characteristics - *different from others* and *dominant and determined personality* - commonly expressed by three participants are not picked up at all. Other characteristics, such as *free spirited*, *happy*, *has a sense of humour*, *respects culture and people*, *politically aware and believes in democratic socialism*, *soft and cuddly*, *talented* are not perceived by receivers. This is likely owing to the internally-oriented, personal nature of these characteristics. This means even though consumers may assign internally-oriented characteristics to their selves and assume these are communicated to others, yet these very characteristics, if not sufficiently socially observable, are not readily decoded by an audience of peers.

## DISCUSSION AND CONCLUSIONS

The findings of this study suggest that young adult consumers are able to successfully communicate some characteristics of their selves. The study further suggests, self-related characteristics that

are successfully communicated tend to be socially-oriented and socially observable. On the other hand, young adult consumers are not especially successful in communicating self-related characteristics when these are personal, inwardly-oriented, or not socially observable. This means there is limited absolute congruency between self-related characteristics as communicated by consumers through their choice of products, and the self-related characteristics decoded by an audience of peers. Several reasons could explain this. As Arnould et al. (2006), Berger and Ward (2010) and Ratneshwar et al. (1997) suggest, both senders and receivers bring their physical, cultural and social operant resources such as specialised cultural capital, skills, and goals to encode and decode marketplace information. Such resources could account for differences not only in product choices but also in the messages being communicated and those being received.

The study makes a specific theoretical contribution. Typically, studies either examine the use of products to communicate aspects of respondent's self, or focus on examining the 'decoding' of meaning. The question of whether there is a match between intended self-related characteristics and those received by audiences has not been sufficiently examined so far. In this study, both aspects are examined as parts of a whole process. In doing so, this study is the first known study to investigate congruency of a range of self-related aspects in relation to self-selected product-ensembles between consumers (senders) and their peers (receivers).

The study extends congruency theory by including the self, the product, and the other within a single theoretical framework (see Figure 1). The theoretical model and findings suggest further avenues for future research, for example, auxiliary examination of specific aspects and processes associated with congruency of meaning. Also, whether senders and receivers select certain types of operant resources to communicate or decode self-related characteristics.

It may be worthwhile for marketing practitioners to investigate the symbolic aspects that most closely align with their products and brands, and establish shared meanings via various communication and promotional strategies. The study has a few limitations. The findings of the study are limited in scope to the sample of participants in this study at a specific time-period. Future research could examine the generalizability of the study findings to different age groups and in diverse socio-cultural contexts. Second, the study does not include the physical appearance of participants. It could be possible that physically discernible aspects such as facial expressions, gestures, grooming or ethnicity could have an impact on what a product means in relation to the participant. Third, the participants in Phase Two saw photographs of products with brief descriptions. It could be the case that presentation of products in tangible form could influence perceptions of self-related characteristics in some way. Factors such as individual operant resources and cultural contexts may also account for differentials in perceptions of senders and receivers. Further studies may focus on moderating roles of such resources in similar research contexts.

This study examined the nature and degree of success of young adult consumers in communicating aspects of their self via their product-ensemble choices. The study demonstrates a consensus amongst receivers on self-related characteristics that are externally oriented and socially observable in nature. However, there is little shared meaning on characteristics that are personal, inwardly oriented, and not sufficiently socially observable. The study demonstrates that the symbolic value of product ensembles tends to lie in socially oriented and/or socially observable self-related characteristics. Absolute congruency between owners' product-ensemble self-related characteristics and observer perceptions is, therefore, necessarily limited. To the extent meanings associated with products are

commonly understood within a social community, consumers rely on them to both communicate and infer self-related characteristics.

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# Deceived or Not Deceived: How Food Consumers Perceive Deception

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## INTRODUCTION

From misleading package sizes to photoshopped pictures of frozen food that do not look like the actual prepared food, use of deception in product packaging and advertising is quite widespread. For example, product names containing a region that does neither reflect where the product was manufactured nor the origin of its ingredients may mislead the consumer. Our study extends the prior literature by employing an experimental method to empirically determine the process by which advertising material (e.g., images on product packages or package inserts) may deceive the consumer. Since many types of misleading communication are not technically illegal, it is imperative to identify situations in which consumers are able to detect deception on their own. At a broader level, knowledge about consumers' vulnerability to deception can help to develop new public policy strategies to protect them wherever necessary. Moreover, a better understanding of consumer detection of deception and their reactions to it can provide marketers insights into how their communication can be designed in a truthful but favorable manner. Our research thus attempts to investigate the conditions under which consumers are able to detect deceptive claims in food marketing. Also, we aim to show the effects of deceptive claims once they have been uncovered compared with deceptive claims that go unnoticed.

## LITERATURE REVIEW

In the consumer behavior literature, two main types of objective deception are discussed: regulatory or legal deception and behavioral deception (Xie and Boush 2011). Our research is based on the behavioral aspect. The behavioral perspective focuses on the gap between fact and belief and thus on misleading aspects of communication (Russo, Metcalfe, and Stephens 1981). Most definitions of deception focus on false, marketer induced beliefs through advertisement (Gardner 1975; Olson and Dover 1978). We refer to 'marketing communication' instead of advertisements and thus cover various types of marketing techniques (advertisements, packaging, public relations, sponsorship etc.). Formally, we define "deception" as follows: Deception occurs when a marketer tries to deceive a consumer by setting or maintaining a wrong expectation (i.e. an expectation that the product or service cannot objectively fulfill) through marketing communication.

The extant literature has proposed various techniques that can be applied to determine deceptive advertising (rating by judges and experts, asking consumers on an advertisement's potential to mislead, or various techniques centering on consumer beliefs) (Grunert and Dedler 1985). Techniques focusing on consumer beliefs have been widely discussed (Gardner 1975; Jacoby and Small 1975) but rarely applied in consumer research (exceptions can be found in Grunert and Dedler (1985); Olson and Dover (1978); Russo et al. (1981)). This research adds to the literature on techniques focusing on consumer beliefs. It applies an experimental approach similar to the one in Olson and Dover (1978) to determine whether an advertising communication is deceptive. Following Olson and Dover's (1978) assumption, "... that deception in advertising can be experimentally created and measured..." (Olson and Dover 1978, 31), the first study should determine if an advertising material is deceptive. It is said to be so, if consumers confronted with it form different (e.g., more positive) expectations of a product's attribute than consumers who are confronted with non-deceptive communications.

Prior empirical studies have focused on the negative consequences of deception. More specifically, perceived deception leads to negative attitude toward the brand, and has a negative effect on purchase intention (Darke and Ritchie 2007; Newell and Goldsmith 1998). It also decreases trust and increases skepticism, and leads to generalized distrust (Darke and Ritchie 2007). However, other studies addressing deception did not find an effect on consumer attitudes toward the brand and purchase intention (Olson and Dover 1978). Consumer perception of deception may be one explaining factor for these mixed findings. Not every objective deception is necessarily detected. For this reason, drawing a distinction between objective deception and consumers' subjective feelings of perceived deception is crucial (Armstrong, Gurol, and Russ 1980). Perceived deception can be the result of a consumer's own feeling about the ad (Newell and Goldsmith 1998), or of what consumers have heard through media or other sources (Darke and Ritchie 2007). The various causal factors and measurement techniques of perceived deception can be a second explanation for the mixed findings. To improve reliability, our study thus compares two approaches to measure perceived deception: a scale and a projective technique. What is more, it focuses only on consumers' own ability to detect deception and not on cases in which deception is pointed out by other sources (the media, other consumers etc.). Research must draw a further distinction between the attribute types that characterize the deception. It can be assumed that the consumer will not detect misleading credence attributes, as the consumer cannot verify whether the information given about them is correct, at least not without considerable cost (Darby and Karni 1973). "For credence qualities, the perception of quality after purchase will still be based on making inferences from cues." (Grunert 2005, 379). For experience attributes, which can be assessed after having tried the product (Nelson 1970), consumers should be able to determine a deception. Thus:

*Hypothesis 1: For experience attributes, deceived consumers experience deception after having assessed the performance of the product, while non-deceived consumers will not. For credence attributes, there is no difference in the level of perceived deception for consumers who have been objectively deceived and those who haven't.*

It is evident that in the case of deception through advertising communication, not all consumers are equally likely to detect the deception. For this reason, research needs to identify the individual processes that underlie the detection of a deception (Craig et al. 2009). While potential moderators on the ability to detect advertising deception are often proposed in the literature, they are rarely the subject of empirical investigation. Educated consumers should generally have better critical thinking skills and thus be better able to detect advertising deception (Aditya 2001). Furthermore, domain-specific knowledge is proposed as a potential moderator for detecting objective deception (Newell and Goldsmith 1998). Consumers with more elaborate knowledge about the persuasion agent's goals and tactics should also be more capable of detecting a deception (Friestad and Wright 1994).

*Hypothesis 2: Education, domain-specific knowledge and persuasion knowledge have a positive effect on people's ability to detect a deception*

The literature assumes that it is crucial for consumers to detect deceptive advertising in order to protect themselves from deceptive persuasive attempts and activate defense mechanisms (Martin and Smith 2008). Public awareness of a marketer's deception has a negative financial impact on the firm (Tipton, Bharadwaj, and Robertson 2009). These findings suggest that there are only negative effects on the marketer if the consumer detects the deception. Deception thus does not have a direct effect on negative evaluation (Olson and Dover 1978), but an indirect effect through perceived deception. Clearly, this indirect effect only occurs when the deception is discovered. Since deception influences expectations, we draw on the existing literature and use dissatisfaction as a dependent variable (Oliver 1980)

*Hypothesis 3: Deceived consumers do not experience a higher level of dissatisfaction than their non-deceived counterparts. Even for experience attributes, dissatisfaction does not depend on the fact of being deceived, but solely on the subjective experience of being deceived.*

**STUDY 1**

Study 1 tested whether the manipulations were appropriate to change consumers' expectations, in addition to testing the applicability of Olson and Dover's (1978) claim of experimentally verifying the deceptiveness of an advertising material. In an online experiment, we displayed a picture of the front package of a fruit tea. We used packaging because it is a very influential communication tool for low-involvement goods (Underwood and Klein 2002). Since Grunert and Dedler (1985) called for using real product packaging, we used a tea packaging from a German discount supermarket, which

we modified based on our experimental conditions. We renamed the product and pretested knowledge of the product to make sure respondents were not familiar with it. We designed a 2 x 2 matrix (type of attribute: credence/experience; deception: yes/ no) between group design with a control group (no packaging, only a list of ingredients). The credence attribute was operationalized by the product's name which presumably leads to different expectations, concerning the non-verifiable country of origin of the product. The experience attribute was operationalized by the type of fruits displayed on the packaging, which presumably lead to different taste expectations. An overview of the different packages is given in figure 1. Consumer expectations were the primary dependent variable. From a sample (mean age 32 years, 60.7 % female), 147 participants were randomly assigned to one of the five groups, and were shown the front of the tea package and the list of ingredients. Five cases were eliminated because their answering times were either too long or too short. Other cases were eliminated due to contradictory (illogical) responses. For the deception treatment with the credence attribute (concerning country of origin), we used verbal deception (misleadingness due to semantic confusion Hastak and Mazis 2011) by naming the product "north German mixture". In the non-deceptive condition, we explained that "north German mixture" means that 20% of the fruits in the tea are from Germany. For the deception treatment with the experience attribute (taste), we manipulated the graphics. In the deceptive treatment, we used a package design that highlighted either red fruits or yellow fruits in a tea. The deceptive packaging showed more types of red fruits than were actually found in the ingredients. In the non-deceptive treatment, the packaging depicted the fruits in line with their actual percentage in the product. Thus yellow fruits like apple and hibiscus were prominent. Even though Hastak and Mazis (2011) only categorized deceptive verbal claims, the depiction of different fruits might lead to intra-attribute misleadingness (Hastak and Mazis 2011). In the control group, participants only saw the list of ingredients and the name of the product: "fruit mix" with-

**FIGURE 1**  
Experimental Manipulation for Deception (Yes/ No) and for Type of Attribute (Experience/Credence)



Control group

**Ingredients:** apple, hibiscus, blackberry leaves, adidifier: citric acid, flavor, (strawberry flavor, strawberry juice concentrate\*\*), black current concentrate, black current fibers (1%), blackberry flavor  
 \*\* strawberry juice concentrate 0,04% equals 0,31% strawberry juice

out the addition of “north German mixture”. After having seen the manipulation, participants were asked about their predictive expectations of the tea based on the following attributes: red color, berry flavor, apple smell and percentage of fruits from Germany (Oliver and Burke 1999), their attitude toward the packaging with four items (one liking item from the Aad scale from Derbaix 1995 and three additional items ( $\alpha=0.806$ )), and a measurement of perceived deception (following Maddox 1982 accurate/misleading, truthful/deceptive, factual/distorted) ( $\alpha=0.847$ ). All items were answered on a seven-point Likert scale or seven-point semantic differential scale. Additionally, perceived deception was measured more implicitly with a projective technique (a cartoon test) and coded by two trained raters according to deception (yes/no) (Soley 2006) ( $r=0.498^{**}$  with perceived deception).

**STUDY 1: RESULTS**

Consistent with Olson and Dover’s (1978) assumption participants in the deception condition had different expectations from the non-deceptive condition and from the control group (for berry taste:  $F(2, 139) = 44.8, p = 0.000, \omega = .62$ ; for percentage of German origin:  $F(2, 139) = 8.00, p = .001, \omega = .30$ ). Mean differences are shown in table 1. With an ANOVA analysis, planned contrasts revealed significant different expectations between the deceptive condition and the non-deceptive condition for the “taste” experience attribute ( $M_{\text{deceptive picture}} = 6.24$  vs.  $M_{\text{non-deceptive picture}} = 3.04; t(79) = -8.787; r = 0.70; p = .000$ ). Planned contrasts showed that the expectation of a berry flavor was significantly higher in participants who saw the deceptive packaging than in those who saw only the list of ingredients ( $M_{\text{control group}} = 5.14; t(82) = 3.908; r=0.4; p = .000$ ). Planned contrasts

indicated that for the credence attributes the expectation on the percentage of German origin of the fruits was significantly higher in the deceptive condition than in the non-deceptive group, which included an explanation of the name ( $M_{\text{deceptive naming}} = 46.60\%$  vs.  $M_{\text{non-deceptive naming (with explanation)}} = 31.12\% t(72) = -2.195; r = 0.25; p = .031$ ). The difference between the control group (list of ingredients without “German mixture”) and the deceptive condition was highly significant ( $M_{\text{control group}} = 22.48\%; t = (66) = 3.61; r = 0.40; p = .001$ ). Attitude towards the packaging was controlled as a possible confound and no significant difference between the packages was found ( $F(3, 80) = 1.163; p = 0.329; \omega = 0.076$ ).

**STUDY 2**

In the second study we conducted an offline experiment in which the manipulation was identical to that of Study 1, to examine whether consumers felt deceived after having tried the product. This time, consumers could actually see and touch the tea packaging. We added a control group in which participants did not see any packaging. In addition to presenting the tea packaging, participants tasted the same apple fruit tea in every experimental condition. After having tried the tea, 419 participants (non-student sample, mean age 39 years, 62.7 % female) obtained the questionnaire and a debriefing afterwards. The dataset used in this study contains only 311 cases, as we strictly eliminated cases with contradictory (illogical) responses, or where too many answers were missing. Participants were asked to rate their impression of the tea’s performance (red color, berry flavor, and apple smell), what they expected in terms of the percentage of fruits contained from Germany, their level of satisfaction (Tsiros and Mittal 2000) ( $\alpha=0.798$ ) and their buying intention. They were

**Table 1**  
Means of each experimental group

Dependent variable	Deceptive experience attribute		Non deceptive experience attribute		Control group	
	M	SD	M	SD	M	SD
Expectations of berry flavor <sup>1</sup>	6.24 <sub>a, c</sub>	1.32	3.04 <sub>b, c</sub>	2.00	5.14 <sub>a, b</sub>	1.38
Expectations of red color <sup>1</sup>	6.24	1.28	3.80 <sub>b</sub>	1.86	5.58 <sub>b</sub>	1.54
Attitude toward the packaging <sup>1</sup>	4.52	1.21	4.05	1.36	-	-
Perceived deception (scale)	4.60 <sub>c</sub>	1.74	3.61 <sub>c</sub>	1.60	-	-
Perceived deception (cartoon test)	0.35 <sub>c</sub>	0.48	0.14 <sub>c</sub>	0.35	-	-
Dependent variable	Deceptive credence attribute		Non deceptive credence attribute		Control group	
	M	SD	M	SD	M	SD
Expectation on percentage of fruits from Germany <sup>1</sup>	46.60 <sub>a, c</sub>	37.00	31.12 <sub>b, c</sub>	26.57	22.48 <sub>a, b</sub>	25.67
Attitude toward the packaging <sup>1</sup>	4.25	1.16	4.28	1.44	-	-
Perceived deception (scale) <sup>2</sup>	3.88	1.68	4.24	1.77	-	-
Perceived deception (cartoon test) <sup>2</sup>	0.19	0.40	0.2735	0.45	-	-

<sup>1</sup> Result from study 1; <sup>2</sup> Results from study 2

NOTE.—Planned contrast results for the same subscripts (a, b, c) indicating mean differences significant on the 5% level.

also asked to indicate their level of perceived deception (Maddox 1982) ( $\alpha=0.881$ ) and to fill out a scale for persuasion knowledge (Bearden, Hardesty, and Rose 2001) ( $\alpha=0.816$ ). Participants were given a nine-item test for nutritional knowledge (items derived from Dallongeville et al. 2001; Dickson-Spillmann, Siegrist, and Keller 2011; Parmenter and Wardle 1999). Participants were shown the cartoon from Study 1, and deceptive thoughts (yes/no) were coded by two independent raters ( $r=0.354^{**}$  with perceived deception).

## STUDY 2: RESULTS

An independent t-test confirmed hypothesis 1. Results revealed that for experience goods, consumers in the deceptive condition were more likely to perceive deception than in the non-deceptive condition ( $M_{\text{deceptive picture}} = 4.6$ ,  $SE = 0.16$  vs.  $M_{\text{non-deceptive picture}} = 3.61$ ,  $SE = 0.14$ ;  $t(247) = 4.657$ ;  $p = .000$ ;  $r = 0.28$ ,  $d = .59$ ). We confirmed these findings with the implicit measure of deceptive thoughts in the cartoon test. A t-test showed that in the deceptive condition deception was coded significantly more often than in the non-deceptive condition ( $t(172) = 3.557$ ;  $p = .000$ ;  $r = 0.26$ ,  $d = .5$ ). For the credence attribute "origin" we did not find differences in perceived deception between the deceptive conditions and the non-deceptive ( $M_{\text{deceptive naming}} = 3.88$ ,  $SE = 0.155$ ;  $M_{\text{non-deceptive naming (with explanation)}} = 4.24$ ,  $SE = 0.154$ ,  $t(247) = -1.633$ ,  $p = .104$ ;  $r = 0.10$ ,  $d = .21$ ). Moderation analysis using the Hayes' "Process" procedure (Model 1) did not support hypothesis 2. Education, persuasion knowledge and food knowledge did not interact with deception of experience attributes on perceived deception (interaction term for education:  $b = 0.1064$ ,  $SE = 0.2595$ ,  $t = 0.4101$ ,  $p = .6821$ , interaction term for persuasion knowledge  $b = 0.1393$ ,  $SE = 0.2140$ ,  $t = 0.6508$ ,  $p = .5158$ , interaction term for nutrition knowledge  $b = 0.0775$ ,  $SE = 0.1091$ ,  $t = 0.7102$ ,  $p = .4783$ ). For credence attributes, the potential moderators also showed non-significant interaction terms. To test hypothesis 3, we conducted a mediation analysis with Preacher and Hayes' "Process" procedure (Model 4) and controlled for perceived deception. Results, displayed in figure 2, showed no significant direct effect of deception of an experience attribute on satisfaction ( $b = 0.1187$ ,  $t(2) = 0.635$ ,  $p = .5251$ ). The direct effect of deception of an experience attribute on perceived deception was significant ( $b = 0.9855$ ,  $t(1) = 4.6566$ ,  $p = .000$ ). As proposed in hypothesis 3, the analysis revealed a significant indirect effect of deception of an experience attribute on satisfaction through perceived deception with 95% bootstrap confidence interval ( $b = -0.3333$ ;  $-0.5640$  and  $-0.1707$ ). The standardized  $\beta$  for the indirect effect is  $\kappa^2 = 0.111$ , 95% BCa CI [0.0569, 0.1808]. Furthermore, satisfaction significantly influences purchase intention ( $F(1, 309) = 66.05$ ;  $p = .000$ ;  $\beta = 0.42$ ).

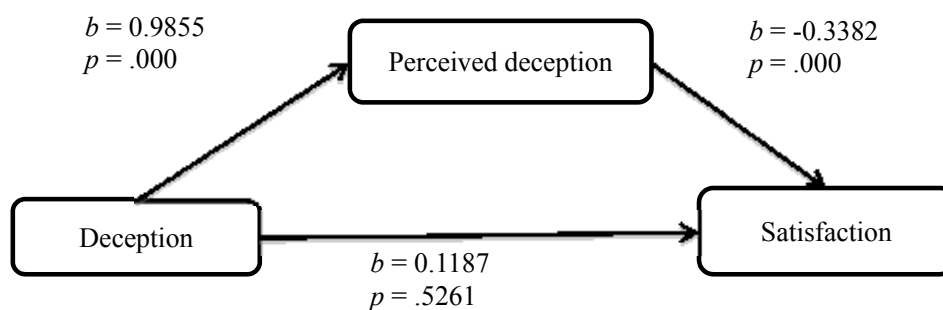
## DISCUSSION, IMPLICATION AND FUTURE RESEARCH

This research contributes to the literature by applying an experimental approach to determine whether an advertising communication is deceptive or not (similar to Olson and Dover 1978) based on its effect on consumer expectations. Until now, most studies have investigated verbal deception (Xie and Boush 2011, 307). The contribution of this study is to show that deception through graphical elements is possible as well. Our results reveal that the fruits displayed on a package influence the formation of consumer expectations for taste and color. Surprisingly, our results showed that taste expectations based on the list of ingredients ( $M = 5.14$ ) were more similar to the deceptive material ( $M = 6.24$ ), than to the realistic packaging ( $M = 3.04$ ) that displayed fruits according to the actual list of ingredients. The same was true for redness. It seems as if many consumers know that red fruits give the tea its taste and color even though the tea only contains a small amount of the former. Future research is needed to explain this connection.

Thus far, research has explained the consequences of deception. The differences between manipulating deceptions and perceived deception have not yet been shown. Our key finding in study 2 is as follows: If a consumer does not perceive the marketer's deception, there will be no negative consequences for the latter. Our study contributes to the existing literature in explaining perceived deception as a mediator between objective deception and dissatisfaction, which leads to lower purchase intention. The study adds to the existing literature by manipulating not only deception for experience attributes but also for credence attributes. Our results revealed that a deception was detected after product use for experience attributes but not for credence attributes. The fact that the detection of the deception does not depend on persuasion knowledge, nutrition knowledge or education is alarming. Even though it was stated by prior research, we were not able to identify this effect empirically. Future research should identify the moderators of this process. Strengthening those factors within the consumer would then increase his ability to detect a deception. One possible factor could be food literacy. It is a more global construct in the domain of food behavior and does not only involve nutritional knowledge but also food information processing and responsible and self-determined food choices (Held and Germelmann 2014).

Overall, consumers only perceive deceptions for experience attributes and not for credence attributes. Combined with the mediating effect of perceived deception on dissatisfaction, this implies that deception for credence attributes does not lead to negative behav-

FIGURE 2  
PERCEIVED DECEPTION AS MEDIATOR BETWEEN DECEPTION AND SATISFACTION



Indirect effect  $\beta = -0.3333$ ,  
95% CI [-0.5640, -0.1707]



ioral consequences for the marketer. Media reports and consumer complaints about deception thus become more and more relevant. Consumers are only capable of detecting deception for credence attributes through external sources. To determine whether those second-hand experiences have the same effects as self-detected deception is a promising area of research.

Due to the negative consequences of perceived deception, a firm's aim should be to avoid deception. With the methods applied in this research, marketers and public policy makers are now able to determine whether their advertising communication is deceptive from a behavioral point of deception. It is important to note that deception not only occurs verbally, but also graphically.

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# Conformity, Uniqueness and Social Class Mobility Consumer Self Identity in the Yard

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## ABSTRACT

The present study examines the conceptual and empirical links between two psychological traits – social conformity and the need for uniqueness – and the sociological constructs of social class and social mobility. Using depth interviews with consumers drawn from the working, lower middle, middle, upper middle and lower upper social classes about their yards, we learned that the need for uniqueness is not necessarily limited to persons having higher social status and that the motive of social conformity extends across the social class spectrum. Theoretical discussion invokes Veblen's historical notions of conspicuous consumption and status display to link the psychological and sociological aspects of symbolic consumption

## INTRODUCTION

One of the most fervently investigated aspects of consumer behavior is product symbolism. As early as 1959, Levy noted that people purchased products not only for what they *do*, but also for what they *mean*. In contemporary American culture, the products and services one chooses to consume form the basis of both private self-identity and one's public image (Aaker, Martina and Garolao 2001; Belk 1988; Dennis 2002; Hirschman 1985; McCracken 1988; Schor 1999). As a result, researchers have subjected a remarkably wide array of products and services to scrutiny, attempting to **determine** the meanings they hold for consumers. Among these are apparel (Jolson, Anderson and Leber 1981; Solomon and Anand 1985; Newell, Claiborne and Sirgy 1991; Phaum and Prendergast 2000), automobiles (Munson and Spivey 1981), motorcycles (Schouten and McAlexander 1996), home furnishings (McCracken 1988; Ulver-Sniestrup 2008), artwork and musical preferences (Halle 1993; Holbrook and Huber 1979), hairstyles (McAlexander and Schouten 1989), make-up usage (Miller and Cox 1982), and foods (Levy 1959).

In virtually all of these consumption areas, both psychological and social structural characteristics are found to guide consumer choices and usage patterns (Belk 1988; Frank 1999; McCracken 1986; Simmel 1957). For instance, psychological traits such as conformity, approval seeking, materialism, innovativeness, desire for uniqueness, and risk aversion have all been linked to symbolic product preferences (Aaker et al 2001; Simonson and Nowlis 2000; Nunes 2009; Bagwell 1996; Lynn and Harris 1997; Tian, Bearden and Hunter 2001; Frank 1999; Richins 1995). Concurrently, social structural variables such as social class, upward mobility, status striving, and social, economic and cultural capital have also been determined to underlie possession meaning and acquisition (Frank 1999; Holt 1998; Veblen 1899).

Our present purpose is to discuss the relationship between two of these psychological traits – conformity and the desire for uniqueness – and the sociological constructs of social class and social mobility. As will be discussed in the theoretical section below, there is some evidence that consumer conformity may be more common among the working and lower middle classes; while, conversely, the desire for uniqueness has been identified as a trait found more often among those in the upper social classes who possess high levels of cultural capital (see e.g., DiMaggio and Useem 1978; Fussell ; Peterson and DiMaggio 1975; Wilensky 1964).

To examine this potential relationship, we conducted depth interviews with a cross-section of American homeowners about the meanings of their yards. We chose yards as our focal consumption area, because they seemed *a priori* to be a site where social class membership, public self-consciousness and the desire to differentiate oneself from others could all be displayed. Remarkably, the yard -- a very socially conspicuous aspect of symbolic consumption -- remains unexplored by consumer behavior researchers (except as a peripheral cue, see e.g., Holt 1998), despite the fact that maintaining a lawn requires vast amounts of time, effort and money on the part of consumers. Lawn care is a \$30 billion annual business in the United States ([www.yardsandlandscapes.com](http://www.yardsandlandscapes.com)), with homeowners expending 150 hours per year, on average, mowing, trimming, weeding, fertilizing and seeding their yards. There are presently 24,000,000 acres of residential lawn in the U.S. – an area the size of the state of Indiana ([www.lawnsandlandscapes.com](http://www.lawnsandlandscapes.com)). Approximately 7 billion gallons of fresh water are used every year to irrigate American lawns; and lawn mowing machines consume 580,000,000 gallons of gasoline annually. Obviously, the household yard represents a substantial financial investment for the American family. Our study delves into the nature of consumers' psychological and sociological investments, as well.

## PSYCHOLOGICAL AND SOCIOLOGICAL PERSPECTIVES ON SYMBOLISM

From their inception in Europe, especially France and Britain, during the eighteenth century, formal gardens and lawns were used to announce the elevated social status and cultivated tastes of their owners. They are prominent among the examples of conspicuous consumption cited by Veblen (1899, p. 133) who concluded that the turn-of-the-century Victorian yard was a public display "requiring constant tending by gardeners employed by the affluent in England and the Eastern Seaboard of the U.S. in order to announce their rank in society." In other words, yards were, and are, examples of symbolic consumption.

Symbolic meanings have been invested in objects on a personal and social level within human populations since at least the foundation of city-states around 5,000 BCE; yet the systematic investigation of these meanings can probably be dated to Thorstein Veblen's (1899) sociological observations of the American upper class during the Gilded Age. Veblen's, and later Bourdieu's (1984), theories of consumption symbolism are premised upon the linked social motives of status competition and imitation of the successful. More recently, evolutionary psychologists, such as Richerson and Boyd (2005), have proposed the same paired set of motivations as underlying human social behaviors.

Analogously, Fussell (1992), a social class theorist, notes that "one of the unique anxieties [of the American consumer] is the constant struggle for individual self-respect based on social approval... Despite our public embrace of political... equality... we arrange things vertically and insist on crucial differences in personal and social value" ([www.pbs.org/peoplelikeus/resources/essays6.html](http://www.pbs.org/peoplelikeus/resources/essays6.html), p.4., accessed on 8/18/2011). Other observers have proposed that the upper class Victorian conformity noted by Veblen has now given way to a search for ways to publicly display individuality. For example,

Peterson (1997, p.1), writing in *Poetics*, argues that 'highbrow snobbery' as a status marker has now been replaced by a "system of cosmopolitan omnivorousness." Under this new system, one's exposure to the exotic, the rare, and the unusual represents the apex of social status. This would seem consistent with Holt's (1998) proposal that persons having high levels of cultural capital will expend greater effort on self-expression and creative pursuits in order to differentiate themselves from others.

Within the consumer behavior literature, social stratification has been consistently linked to the symbolic meanings attributed to products and services, with persons located along the social class continuum varying systematically in taste preferences. For instance, using depth interviews with respondents possessing high and low levels of cultural capital (see e.g., Bourdieu 1984), Holt (1998, p. 3) reports that "consumption continues to serve as a consequential site for class reproduction in the United States."

### Conformity and Uniqueness

Consumer psychologists have investigated two personality characteristics that are relevant to the present study: the need for approval that may undergird *social conformity* behaviors and the *need for uniqueness* that may motivate efforts at personal deviation from social norms (Tian, Bearden and Hunter 2001). Thus far, research in this area has focused on personality traits such as susceptibility to interpersonal influence (Bearden, Netemeyer and Teel 1989) and attention to social comparison information (Bearden and Rose 1990). Findings from these studies suggest that both the need for social conformity and the need for uniqueness may play important roles in consumer use of product symbolism. For example, the kinds of clothing or makeup worn (Jolson, Anderson and Leber 1981; Solomon and Schapler 1982), reference group judgments as to product and style appropriateness (Miniard and Cohen 1983), the potential for social approval or disapproval by relevant reference groups (Allen 1965), and expectations about how significant others might respond to particular consumer behaviors (Calder and Burnkrant 1977) have all been found linked to motivations for conformity or uniqueness. Thus, we anticipate that consumers' lawn care practices will be influenced by concerns about the opinions of others, especially neighbors, who are publicly able to view the lawn.

Conversely, others' expectations and social norms may also serve as a point of *differentiation* for those consumers who desire to create a distinct image for themselves. Tian, Bearden and Hunter (2001, p.1) report that "consumers acquire and display material possessions for the purpose of feeling differentiated from other people...Consumers' need for uniqueness is defined as an individual's pursuit of differentiation relative to others... achieved through the acquisition, utilization and disposition of consumer goods [in order to] develop and enhance one's personal and social identity."

Because household yards are publicly displayed possessions, we anticipate that some homeowners will be motivated to use their yards to differentiate themselves from others in the neighborhood, while others will use their yards to display conformity to community standards. Following Holt's (1998) propositions, we further anticipate that persons lower in social class status will display a higher level of conformity, while those higher in status will exhibit greater efforts to differentiate themselves from their neighbors.

### METHOD

Depth interviews were conducted with 26 homeowners in two states in the northeastern U.S. The socioeconomic status of the homeowners ranged from working class to lower upper class using standard categorization procedures (see e.g., Coleman 1983). In-

terviews were conducted on-site by trained graduate students. Each homeowner consented to the interview and also to photographs being taken of his/her yard. A semi-structured set of questions was used to guide the dialogue [Exhibit One], but interviewers were instructed to permit the respondents to diverge from the format to enable flexibility in responses.

#### Exhibit One: Yard Questionnaire

1. How long have you lived at this house?
2. What did the yard look like when you arrived here?
3. What changes have you made?
4. Are there things you would still like to do?
5. What is your favorite part of the yard?
6. What part of the yard do you like least?
7. If you could change your yard in any way, what would you do?
8. How are the seasons different in your yard?
9. What do you do during each season?

Interviews were either audio-taped or recorded in field notes. The transcripts were then examined by the two primary researchers, independently. After initial content categories had been identified by each researcher, a joint discussion followed during which further interpretation was used to compare the data set with pre-existing theorization on consumption symbolism, generally, and social class, conformity and desire for uniqueness, specifically.

### FINDINGS

The interview transcripts provide a much more intricate and nuanced view of social class status, conformity and uniqueness than is presently theorized. Indeed, the three phenomena appear to be intimately connected in many ways. First, we learned that social conformity and status competitiveness are often behavioral correlates. Frequently, homeowners would carefully observe what others in the area were doing in terms of landscaping their yards, and then mimic the accepted "look", while at the same time trying to "outdo" the neighbors by adding more expensive plants and trees and installing architectural details such as stone walkways, elaborate decks, swimming pools, ponds, waterfalls and gazebos. Significantly, this conformity-and-competition pattern was present *throughout* the social class spectrum.

#### Working to Lower Middle Class

We first discuss how this conformity/competitiveness pattern was enacted among working to lower middle class consumers. Ben, for example, is a Filipino registered nurse who lives in a lower-middle class housing development with his wife and three children. Because their house is governed by association rules regarding yard appearance, Ben feels pressure to conform to the neighborhood norms, which include having tidy, mulched flower beds and mulched trees surrounded by stone or brick borders. Ben states that although they live in a "cookie cutter" neighborhood, he strives to have "the best lawn" on his street.

The family is upwardly mobile, having recently moved to their present residence from an older, working class neighborhood. Ben has recently acquired a set of "good to excellent quality" lawn tools that he stores in a new shed. In order to make the shed "visually attractive" and conform to association rules, Ben planted evergreen shrubs around it. The family has not yet reached an income level that permits it to hire a professional lawn care service, so Ben and his wife mow and trim the yard themselves.

Upon arriving at their new home, Ben and his wife, Jess, purchased a “trophy” tree, a weeping Alaskan cedar, they had desired to own for several years. Both Ben and Jess also exhibit some signs of ‘status anxiety’ about the appearance of their yard. Ben is especially bothered by a “sink hole that does not drain properly” and he feels is “unattractive”. He tried planting a tree near the sink hole, but that effort was unsuccessful – the tree died. Jess states that she “feels bad” about a rock wall and area of red gravel at the front of their house which she believes are “ugly” and she is “embarrassed” for neighbors to “have to look at.” In these instances, we see concern about inadequate conformity being present, especially in the couple’s concerns that their yard is not “up to par” with the rest of the neighborhood, because of some unattractive features. The concern is strong enough to cause them to feel pressure to remedy the ‘unsightly’ aspects of the yard. Yet at the same time, they have prominently planted a rare and expensive tree in the front yard as a statement of their aesthetic taste and likely a gesture of cultural superiority. Notably, this action on their part is *counter* to Holt’s (1998) proposition that such gestures of individuation and uniqueness would be confined to the upper classes and/or those with high levels of cultural capital.

Another example is provided by Bhuban and her family, who immigrated to the U.S. from India, and now live in a lower middle class development which they also describe as “cookie cutter,” because “all the houses look so much the same.” They reported experiencing conformity pressure regarding the appearance of their lawn: “there are many expectations to uphold. What you do to your yard affects your neighbors who have adjoining yards. If you let weeds infect your lawn, then they can spread to your neighbor’s lawn, no matter how hard they might try to prevent it.”

Both a sense of community belongingness and competition were present in Bhuban’s transcript. She reported that she felt “a part of” the community and enjoyed that. But she also felt pressure to conform to her neighbors’ expectations. “What other lawns look like can set a standard that you strive to reach for your own lawn.” She also noted that “competition can arise between different families and households.”

Bhuban notes that she is “confident in the appearance” of her yard, however, because she “is the only one with a rose garden; often neighbors will knock on my door asking for a rose or two.” She does, however, feel some unhappiness and insecurity about the tree in their front yard. “Our tree was planted really late...in the winter time. So while the other trees on our street bloom a lot and are very voluminous, our tree is little and wimpy by comparison.” In this example, the tree represents an inadequacy in their efforts to conform to community standards, while the rose garden serves as both a point of uniqueness and a marker of superiority. Importantly, this consumer is at the lower end of the socio-economic continuum, a place where such strivings were previously believed to be absent.

### **Middle to Upper Middle Class**

Consumers in the middle to upper middle class exhibited the same intertwining of social class status, conformity, and competition as we found with the classes below them, but gave much stronger voice to aspirational possessions. Anne-Marie is a middle class homeowner who seeks to move upward to the upper middle class. She seems to have studied the landscaping norms prevailing in the upper middle class and desires to add them to her yard. When asked “How would you change your yard?” she responded, “I would tear up the entire deck and replace it with the new [non degradable] material. I would put in a huge hot tub and completely new backyard furniture...I would add an outdoor kitchen against the back wall... That would be so convenient when I’m serving people outside...I’ve

always wanted one of those outdoor fireplaces with couches, as well, and definitely a huge bar...perhaps connected to a built-in barbecue over there.” In this example, Anne-Marie sees one route to signaling her upward mobility to be the adding of higher cultural capital assets to her yard. But in naming the accoutrements she wishes to acquire, she is also displaying social conformity – that is, she is conforming to the norms she believes are present in the class above her present one.

A second middle class homeowner, Jeff, is also young and aspiring to become a member of the upper middle class. His list of desired yard acquisitions is in many respects similar to that of Anne-Marie and includes “a fancy brick barbecue area that is contoured and terraced with Italian block,...an in-ground pool, cabana, tennis courts and a stone-paved area ....” In both these cases, the upwardly mobile middle class consumers seem to have a relatively consistent set of yard acquisitions they feel are necessary to announce upper middle class status. We would argue that this, also, is a sign of implicit social conformity, even though it may be seen by the consumer as displaying individuality and uniqueness.

Thus, the interviews suggest that social class conformity norms may apply to one’s *aspirational* social class, as well as present social class. Those who see themselves as “on the way up” have a fairly consistent “shopping list” of the things they want to purchase for their yards when they arrive.

### **Upper-Middle to Lower-Upper Class**

The interviewed homeowners who were in the upper middle to lower upper class exhibited another aspect of conformity not found in the interviews with those in the classes below them. Specifically, they consistently described the use of *professional lawn care and landscaping services*. These services were usually initially hired when they moved into the neighborhood to “update” the yard with the “plantings” then in style. In no instance did we encounter an upper middle class or lower upper class homeowner who performed all of his/her yard work, especially the routine chores of mowing the grass or fertilizing the lawn. These repetitive and labor intensive tasks consistently were “hired out” to “a service”.

The homeowners at the highest end of the social class continuum were also much more active in restructuring the appearance of their yards. Instead of purchasing sapling trees, which required several years to grow to an appreciable size, medium and full size trees would be placed in the yard. Often the yard, itself, would be re-graded to smooth out overly sharp slopes or add curves and rises to a “too flat” yard. Robert, for example, “hired a professional landscaper within the first year of moving in to set-up his yard in an aesthetically pleasing manner.”

As evidenced above, within this social stratum a different *vocabulary* was used to describe the yard and its maintenance. Grass, flowers and shrubs are no longer referred to as “trimmed” or “cut”, but rather as “manicured” or “designed.” Homeowners in these social classes also seem to be keenly aware of shifts in the fashionableness of various plant species and décor elements such as swimming pool shapes and materials, lawn furniture brands, and the desirability of various types of stones used for walkways and patios. One homeowner had created a “courtyard area [which] mimics one in Greenwich Village in New York.” This and other aesthetic references reflected a *cosmopolitan sensibility* among these homeowners, much as Holt (1998) proposes. The reference groups used were not only the neighbors, but what the homeowners considered to be “tasteful” or “elegant” in other cultures, for example, Provencal France, the English Cotswolds, or even more exotic locales, such as Thailand.

## What Happened to Uniqueness?

As we have documented across all social strata studied, there are examples of social conformity, and concurrently, reports of efforts at being unique, of consumers desiring to differentiate themselves from others through their yards. Several families reported having a “special” tree, flower bed or item of décor that they felt ‘set them apart’ from others in the neighborhood. But as we propose, usually these were implicitly intended as efforts to set oneself “above” others; that is, they were intended as socially competitive gestures, not as personal statements of distinctiveness, *per se*. Most consistently, the theme conveyed in the interviews was an implicit, or occasionally explicit, acknowledgment that there was a social code governing what yards in “their neighborhood” *should* look like and a corresponding behavioral effort on the part of the homeowner to adhere to – or surpass – the basic requirements of that code. Indeed, many respondents expressed a fear of negative feedback from neighbors, if they failed to maintain the minimum standards of the code.

## DISCUSSION

We now turn to an effort to merge the perspectives on consumption symbolism in psychology and sociology using the findings from the present study. A foundational premise of this effort is that the construction of *self identity* is inherently and inescapably a *social project*. We become individuals through a lifelong process of interacting with others and receiving feedback from those with whom we have relationships (Solomon 1983). Thus, individual lives may be singularly lived, but they are socially enacted.

In considering the material from the present study, it becomes clear that consumers’ perceptions of their yards have simultaneously personal and social elements. The consumer may view his/her home and yard as being part of a “cookie cutter community” and him/herself as immersed in a conformity demanding culture. It is hard to differentiate the self in such a place. So, a special, rare tree may be purchased or a rose garden constructed in order to announce an identity separate from one’s neighbors.

Yet the consumer’s judgment of what is appropriate to set oneself “apart” is intimately connected to the surrounding social context; how can I establish the *appropriate level of differentiation* (Snyder and Fromkin 1980), one not so distinct as to appear to be a radical or misfit, yet not so similar as to go unnoticed by my neighbors? The countervailing motives of social conformity and individual uniqueness are calculated and satisfied by carefully gauging the possible responses of one’s social peers: what will they think of me? How do I appear to them? How will my behaviors be interpreted (Fromkin and Snyder 1985)? The psychology of self-identity is never free from the social context in which it is enacted.

In our view, it would seem very fruitful to consider whether status competition and the need for uniqueness may, *in practice*, be the same phenomenon. This provides a clue to a key interpretive conundrum of the present study: how are we to conceptually classify the behavioral descriptions of those respondents who used aspects of their yards to differentiate themselves from neighbors in ways that they believed established their yards as “better” or “superior”?

From Holts’ (1998) sociological perspective, such actions would be classified as evidence of possessing high cultural capital. As he states (p. 3), “Cultural capital consists of a set of socially rare and distinctive tastes, skills, knowledges, and practices...” High cultural capital is also consistently associated with membership in the upper classes, because only members of these classes have the necessary prerequisites of a challenging education, childhood exposure to a variety of intellectually stimulating experiences, an occupa-

tion requiring novel and analytical thought, and the financial capital enabling the pursuit of specific interests and creative ventures (Holt 1998; Bourdieu 1984).

This same proposal is made earlier by Kohn (1969; Kohn and Schooler 1983). Kohn’s (1969) study, for example, found that, “Men of higher class position, who have the opportunity to be self-directed in their work, want to be self-directed off the job, too, and come to think self direction [is] possible. Men of lower class position, who do not have the opportunity for self direction in their work, come to regard it as a matter of necessity to conform to authority, both on and off the job. (p. 12).” In their later study, Kohn and Schooler (1983, p. 167) found that “job conditions [related] not only to values and orientations, but also with cognitive functioning as evidenced in...the intellectuality of leisure time activities”. Consistent with this reasoning, Holt (1998, p. 4) states that “cultural capital is expressed through consuming via aesthetic interactional styles that fit with cultural elite sensibilities and that are socially scarce.”

Within this conceptualization, the individual consumer expresses his/her personal, distinctive taste to the fullest only within the upper social classes where economic capital coincides with social and cultural capital. For example, Holt (1998, p. 8) described his High Cultural Capital homeowner respondents as “[viewing] their homes as canvases upon which they express their aesthetic sensibilities... Decorating is a highly personalized activity.” The same group is described as “[emphasizing] cosmopolitanism, individuality and self-actualization.” (p. 12).

However, Holt (1998, p. 14, 16) then continues his description by stating, “They seek to avoid consumer behaviors that are perceived to be common, homogeneous or widely-accepted...HCC consumers explicitly disavow following a style that is widely adhered to and, instead, talk about how they mix and match to create their own personal look.” By contrast, low cultural capital consumers are said to possess a “subjectivity [that] depends upon community acknowledgment of particular taste and practices (Holt 1998, p. 16).”

Yet the data collected for the present study suggest a different interpretation. What we found was a conscious awareness of social norms operating *across the class structure* ranging from working class to lower upper class. Though the specific requirements of these norms varied from class to class, they were still consciously invoked by consumers at all levels in deciding how to decorate their yards. Further, a sense of competitiveness was also found at every social class level such that some individual homeowners would seek to ‘outperform’ their neighbors by not only meeting, but surpassing, the prevailing decorative code within their community. In short, we found evidence supporting the *simultaneous* presence of conformity and differentiation across all social strata studied. These strata ranged from working class to lower upper class, with only the lower class (whose members usually are not homeowners) and upper-upper stratum being omitted from our sample.

Finally, Holt’s (1998, p. 18) high cultural capital informants draw a distinction between the routine maintenance of the yard and the opportunity to be creative and differentiate themselves from others: “I like working in the yard. I find it creative,...[but] I don’t cut the grass. We have some guys that come and do that” However, in our view, this practice is also an exhibition of conformity, because *all* of the higher social class consumers we interviewed *reported the same pattern*; that is, routine maintenance was assigned to hired workers, while decorative choices and activities were performed by the homeowner. However, a comparison of photos of the upper class yard landscapes suggests a striking level of consistency across these yards, just as we see conformity within the other classes [see photos

above]. Thus, even though the upper classes may *claim* a high level of individual creativity in yard décor, the results obtained look remarkably alike. We suggest, therefore, that *implicit* conformity levels are as high among upper status consumers as they are among the rest of the social strata, although these consumers do seem to make a higher number of explicit claims of uniqueness and differentiation.

Writing in 1899, Veblen observed, “Wherever the institution of private property is found...the economic process bears the character of a struggle between men for the possession of goods (p. 24)... The motive that lies at the root of ownership is emulation...[and] the possession of wealth conveys honour; it is an invidious distinction (pp. 25 – 26)”. As noted at the outset to this study, notions of possession symbolism grounded in social status pervade virtually every category of good yet examined. Cogently, Veblen also detected the intertwining of the pressures of social conformity and social striving, which he identified as the source of the conspicuous consumption codes existing among the social strata of his day.

As he notes (p. 30), even among the working classes social standing requires at least a minimum display of public conformity: “A certain standard of wealth...is a necessary condition of respectability. Those members of the community who fall short of this...suffer in the esteem of their fellow men, and consequently they suffer also in their own self esteem, since the usual basis for self respect is the respect accorded by one’s neighbors”. This we witnessed among our working class homeowners who were overtly concerned with maintaining at least the minimum standard of conformity to neighborhood norms in the landscaping of their yards.

As one ascends the social strata, Veblen proposes that the requirements of ‘maintaining the code’ become more complex and demanding, “In our time there is [expected to be] knowledge of the dead languages,...of syntax and prosody; of the various forms of domestic music and other household art; of the latest proprieties of dress, furniture and equipage; of games, sports and fancy-bred animals, such as dogs and race horses (p. 45)”. This is what Bourdieu (1984) and Holt (1998) refer to as High Cultural Capital. But as we argue, consistent with Veblen’s interpretation, it is also a potent form of conformity pressure. Consumers in the upper middle class and the lower upper class must display competence in their mastery of this code in order to gain the approval of their neighbors and also to achieve an internal sense of self esteem. Competitiveness for social acclaim (and self-worth) in this realm requires becoming the most distinctive in ways that are viewed as enviable by one’s peers.

Because of this code and competitiveness, the landscaping we found in these homes is not ‘randomly’ distinctive; rather it is conformitively distinctive. There are shared rules of appearance for the yard in upper middle class and lower upper class neighborhoods which are adhered to with great consistency. As Veblen (p. 84) states: “The members of each stratum accept as their ideal of decency the scheme in vogue...They must conform to the accepted code”. Thus, as Snyder and Fromkin (1980) and others (see e.g., Lynn and Harris 1997a,b) propose, the desire for uniqueness, for distinctiveness, for differentiation, even among those with high cultural capital, is socially bounded. Indeed, efforts at differentiation would seem to be part and parcel of the conformity code of the upper social classes. One is *expected* to display individuality – but always *within reason*.

## CONCLUSIONS

The present study is intended to stimulate a greater degree of rapprochement between sociological and psychological theories relevant to consumer behavior and marketing. Perhaps too often research is cast within the confines of a specific personality trait, social psychology construct or sociological perspective. While the findings

resulting from such studies can be – and often have been – very useful, they also may not provide the field with the larger context in which phenomena are embedded. One of the benefits of studying marketing and consumer behavior is that the objects of research within these fields are inherently personal and social, taking place in the mind of the consumer and the social structure simultaneously. This provides us with a great opportunity for building theories that reside at multiple levels of abstraction and incorporate varied foci of interest.

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# Branding Masculinity: Tracing the Cultural Foundations of Brand Meaning

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## ABSTRACT

Perhaps the most significant task of contemporary marketers is to position and manage brand meaning. However, present practice dictates that this effort begin with a comparison of brands believed to share positioning in the minds of targeted consumers. We propose that a more appropriate procedure is to begin with culture and work upward toward the brand level of meaning. We illustrate the utility of this procedure using the cultural concept of masculinity.

## INTRODUCTION

As Twitchell (2004) points out, most of the 3000 business books published each year are about branding. The great majority of these books, as well as academic branding studies, focus their attention on one or more brands and then work outward from the brand to examine its competitive positioning, image in the minds of consumers, perceived attributes and benefits, and market share trajectory (e.g., Holt 2004). But should not brand meaning come from the marketplace, itself? Is not culture a brand's ultimate – and necessary – foundation (McCracken 1988)? In the present study, we begin with a key cultural construct – masculinity – upon which several current brands claim to be based, and work our way forward to identify which brands actually are seen by consumers as being masculine. In the process, we outline a new procedure for creating brand meaning, one that is anchored firmly in consumer culture.

### Masculinity in Cultural Context

Definitions and constructions of masculinity vary within popular culture and across the social sciences (see e.g., Kimmel, Mean and Connell, 2004). For example, Shaw and Watson (p.1, 2011) comment, "American popular culture in the new millennium exemplifies how varied, open, relative, contradictory and fluid masculinities can be." This instability in a core cultural construct can make positioning a brand as representing masculinity a difficult and ongoing task. And yet, there are cultural constancies underlying masculinity, as well. For example, Connell (2005) identifies the structural constant of white, heterosexual, western masculinity as *hegemony*, which asserts male gender superiority in society. This position is maintained through male control over *dominant societal institutions*, such as the military, government, and corporate organizations. White, heterosexual masculinity tends to marginalize other cultural forms of masculinity, such as those designated by race or sexual orientation (Kimmel 2012).

Kimmel (2012), like Connell (2005), also proposes that there are discernible constancies in the American cultural notion of masculinity – especially that embraced by white, middle and working class heterosexual males. These men often seem to attach their sense of self to that set of continuously circulating masculine stereotypes which have endured over time: e.g., GI Joe, the jock, the macho man, the knight in shining armor, action-hero man, the Marlboro Man, the cowboy, the outlaw (e.g., Holt and Thompson 2004; Mark and Pearson 2001; Reeser 2010, p.15). This is significant for marketers, because it reinforces the practicality of utilizing such iconic linkages to help create brand meaning (Mark and Pearson 2001).

**The Male Body.** There is general agreement within both popular culture and the social science literatures that while gender roles of masculinity (and femininity) are inculcated from an early age, the physical body (i.e., male, female) which one inhabits also exerts a large impact on being masculine or being feminine (Watson and

Shaw 2011). But the mind is a cultural mind and the body is a cultural body. That is, these stereotypes of masculinity are shaped by culture and differ across times and cultures. They are shaped by stories, media, and brands and reinforced by parents, teachers, and society. And they are encoded and expressed in the products and brands we buy, the clothes we wear, the cars we drive, and the foods we eat.

### The Branding of Masculinity

Social science and popular culture commentary might have remained comfortably beyond the direct interest of marketers, if it had not been for the sea change in the cultural expressions of masculinity which occurred during the 1990s. Several observers noted that it was in the decades of the 1990s and 2000s that masculinity became commoditized and marketed (Kimmel 2012). Enter masculine-branded products; with the traditional occupational anchors of masculinity eroded, the opportunity was ripe for masculinity to be packaged and promoted (Holt and Thompson 2005; Kimmel 2012), just as femininity had been for a longer period of time (de Grazia 1996; Forty 1986; Kirkham 1996; Sparke 1995). Marketers advertised that one now could *purchase* masculinity – in the form of their brand (Buerkle 2011). As Faludi (1999) noted early on, "men are surrounded by a culture that encourages them to play almost no functional public roles, only decorative or consumer ones...[Manhood] is now displayed, not demonstrated" (quoted in Boudreau, 2011, p. 37).

But what, exactly, is the cultural masculinity that brands are tying themselves to? It is not enough merely to state or claim that one's brand is masculine or to park it next to an archetypal cowboy; there must be a public perception of resonance and authenticity, if the brand-masculinity linkage is to be accepted as valid. Before male consumers seeking to "drape themselves in masculinity" will accept given brands as masculine, there must be cultural evidence that the linkage is genuine. Below we present the results of a research project designed to examine the cultural foundations of the masculinity concept as seen by individual men. Our focus is on white, heterosexual men in the 17 to 35 year old demographic – perhaps the most prominent target for marketers seeking to establish brand masculinity.

Using interviews with men in two regional areas, we introduce an inductive procedure that moves from the conceptual level to the brand level over a series of stages. By so doing, we are not only able to trace the beliefs consumers hold concerning masculinity, but also to follow these through sets of activities, objects, product categories and ultimately, brands, themselves. The result is a clarified sense of how important, or unimportant, specific brands are to men's sense of masculinity and the identification of the product categories in which these brands are located.

### Tracing Cultural Masculinity: Regional Realities

Because cultural conceptions of masculinity vary in different regions of the United States (Friend 2009; Watts 2008), data were collected over a two year period across two geographic areas: the urban Northeast and the rural Southeast. An interview guide was prepared and pre-tested in both areas (see Exhibit 1). Potential interviewees were identified through contacts at nearby businesses and through the university at which the lead investigator worked. The interviews were conducted by the lead investigator and a graduate student assistant in each area of the study.

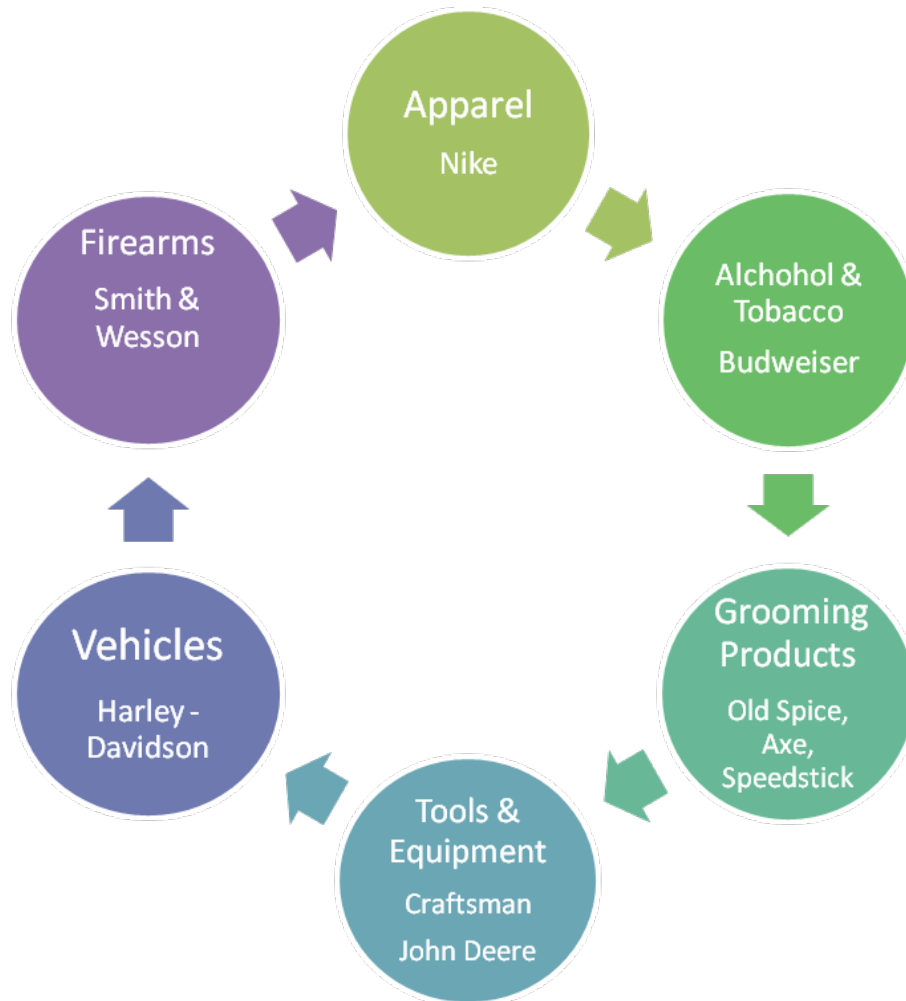
We used the *constant comparative method* advocated by Glaser (1978, 1992), Corbin and Strauss (1990, 2008) and others (see



**EXHIBIT 1**  
**Interview Guide**

1. What does masculinity mean to you?
2. What do you think masculinity means to your father?
3. What activities do you engage in that you think of as masculine?
4. What products do you think of as masculine?
5. What brands do you think of as masculine?

**EXHIBIT 2**  
**Branding Masculinity**  
**A Brand Constellation of Masculinity**



e.g., Birks and Mills 2011; Bowen 2008; Charmaz 2000; 2006). This meant that as interviews were conducted, each was read first as a unit and then compared to those already in-hand. This process continued until a stable set of concepts had emerged in response to each question. As initial concepts began to emerge, for example, moral characteristics such as ‘courage’ and ‘honor,’ these were then challenged using in-coming interviews and developed until a stable (i.e., saturated) set of meanings was arrived at. Conceptual structures were developed separately for the Northeast/Urban and Southeast/Rural

regions. In total, 36 interviews were conducted in the Southeast and 31 in the Northeast.

Interviews were either tape recorded and transcribed or recorded in field notes by the interviewer. While all respondents were promised anonymity, few actually requested it. The respondents were white, heterosexual males between the ages of 17 and 35 and ranged from high school students to professionals. In both regions, the socioeconomic status ranged from blue collar to professional; however the Northeast regional sample exhibited somewhat higher educational attainment and socioeconomic status, which is demo-

graphically characteristic of this region, generally (United States Census, 2010).

As can be seen from Exhibit 1, the interviews were designed to start with the concept of masculinity – as viewed by the participant – and then extend the discussion to the individual’s father, activities, and possessions until, finally, the respondent was asked to name brands he perceived to be masculine. By structuring the discussion in this way, we were able to generate material related to branding-as-embedded-within-masculinity, rather than beginning with a brand or brands and working outward toward masculinity. Additionally, by comparing two diverse geographic regions, we are able to obtain a much clearer picture of which brands are generally seen as masculine in American culture, versus those which represent this concept only on a regional basis.

Further, we were able to determine if the participant believed there had been a shift in what masculinity meant between the present generation and that of his father, an important piece of information for marketers who might wish to appeal to both the older and younger age cohorts in their advertising. Using this methodology, the brand-centric focus of prior marketing studies is avoided and a more accurate view of a given brand’s ability to represent the cultural concept – in this case, masculinity – is achieved.

When asked to talk about “What does masculinity mean to you?” the male respondents in the northeast/urban region placed emphasis on actions and their bodies to some extent, but placed *primary* emphasis on their mental and personality traits. This would seem consistent with social science research indicating that male success in corporate institutions requires mental traits of decision-making and rationality (see e.g., Kimmel 2012). The actions mentioned centered on athletics (e.g., good at sports), household repairs, and some manual labor (e.g., “good with hands”). The bulk of perceived masculinity for these northeastern urban men is seen to reside in one’s mind and demeanor. Notably, *no objects* and *no brands* were mentioned as representing masculinity within the northeastern interviewee set.

The structure of the southeast/rural respondents’ discussion was centered around the *traditional* conception of masculine action (e.g., Twitchell 2006). As can be seen from Exhibit 3, those interviewed in the southeastern/rural region emphasized being a breadwinner/good provider, and patriarchy (i.e., the subordination of women), which are traditional aspects of masculinity (Kimmel 2012). Other regional differences included a greater emphasis on being a risk-taker, having courage, territoriality, and individuality. This, we propose, is akin to Holt and Thompson’s Rebel model (2005) and consistent with the largely agricultural and manual labor economy of rural areas (Friend 2009).

The activities named also varied. While the Northeast and Southeast regions overlapped in citing *physical labor* as masculine, the Southeastern/rural respondents additionally named “eating meat”, “shooting guns”, “heterosexuality” and even impolite behaviors, e.g., farting, as representing masculinity. Further, the Southern men named objects -- raw steaks, cold beer, cars -- as representing masculinity and even named one brand: Grizzly tobacco (a chewing tobacco/dip). Note that this is the only brand to have emerged in this portion of our data.

Thus, from the data discussed so far, we can conclude that regional differences in the meaning of masculinity *are present* in contemporary American culture, and that specific brands are rarely used to anchor masculinity at the conceptual level.

## GENERATIONAL DIFFERENCES

We next asked both regional groups of men what they believed masculinity meant to their fathers. Here we were interested in learning if the present generation of young men believed there were shifts in masculine ideology from the previous generation to their own. They did. Among the northeastern/urban respondents, the present generation believed their fathers were more emotionally restricted, dominant (and domineering) and more insistent at being “the head of the house” and the “breadwinner,” than they themselves are. One brand, a BMW automobile, was mentioned as representing masculinity for this older generation of men.

Southeastern/rural men saw their fathers as placing more emphasis on “keeping one’s word”, providing for their families and being physically strong, than did those from the northeast. And once again we see evidence of patriarchy and gender dominance as characterizing southern/rural masculinity (Friend 2009). As one respondent put it, to be masculine in his father’s generation was “to be a good father and husband, but not focus too much on the wife’s wants.”

The contrasting prior generational masculinities of these two regions are brought into clearer contrast by the two extended quotes below:

*“From what I recall, my father would most likely define his masculinity by how many girlfriends he could maintain at one time, or what kind of BMW he drove. But most importantly, it was not what his family thought of him, but more so what his peers thought.” Northeast/urban (Michael, age 33).*

*“He was a football player in high school and began working in the coal mines when he was 17 years old. He’s close to 50 now and still works in those mines. My father was the hardest of workers; he worked hurt, sick, and tired...He instilled a sense of accountability in me. He emphasized being truthful...Winning was huge to him, almost as much as being tough...He taught me that crying...would emasculate me...I would be less of a man.” Southeast/rural (Robert, age 24).*

The form of masculinity we found in the Northeast, even in the prior generation, seems to express a greater orientation toward the public display of success; while that in the Southeast is grounded more deeply in stoicism and self-denial.

## WHAT ACTIVITIES ARE MASCULINE?

Here we find similarities across the two regions. For example, both groups saw “hanging out” (often at bars) with male friends as masculine activities; Kimmel (2012) terms this homo-sociality and views it as a cornerstone of American masculinity. Both groups also mention “pursuing women” as a masculine activity; this is also mentioned by researchers as a characteristic of American masculinity (Kimmel 2012). Participating in sports such as football, hockey, soccer, golfing, boxing/fighting/martial arts, weight-lifting/working out was seen as masculine by men in both groups.

However, there were some subtle, but telling, regional differences. For example, the northeast/urban men saw *watching* sports as masculine and engaging in “intellectual gaming”, such as fantasy football, as masculine, whereas these were not mentioned by men in the southeastern/rural region. In contrast, men in the rural South named car racing, bowling, wrestling and 4-wheeling as masculine pursuits. From a branding perspective, these regional variations in masculinity could be significant. Men in the southeast seem to view physically demanding *participation* as more indicative of masculin-

ity, whereas men in the northeast value *knowledge* about sporting activities.

The more “rugged” orientation of southeastern rural masculinity is also reflected in the many mentions of *hunting* as a masculine pursuit (an activity not present in any of the northeastern interviews). Southern men also appeared to more highly value mechanical/automotive/construction projects as indicators of masculinity. Further, two other important regional occupational variations are present. First, men in the southeast/rural area named criminal justice/police work and serving in the military as signifiers of masculinity, whereas those in the northeast/urban area did not. . Notably the Southeast is markedly higher in military enlistments as a percentage of the population than is the Northeast (Watts 2008). Second, “dipping” – the use of chewing tobacco products – was mentioned by several respondents as a masculine activity. Tobacco usage rates are higher in the Southeast than the Northeast, the region being the source of most US-grown tobacco (Watts 2008), and it is interesting to note that chewing tobacco use (as opposed to smoking cigarettes) is seen as uniquely masculine there.

These regional overlaps and variations suggest that branding efforts may need to be modulated regionally depending upon the product category. Also important is the fact that *no specific brands* were mentioned as signifiers of masculinity by either regional group in the context of activities.

### PRODUCTS BELIEVED TO BE MASCULINE

When respondents were asked to discuss “products you think of as masculine”, the results yielded several brand names, some of which were common to both regions, while others were unique to one region. This is managerially important because, ideally, a national brand seeking to position itself as “masculine” would want this image to be spread across all regions. Further, regional masculine brands should be of interest to marketers because they likely are linked to key behaviors or attitudes indigenous to the area. Marketers seeking to enter such a regional market could benefit from researching these brands and gaining an understanding of their appeal.

Notably, there were some significant variations across the northeast/urban and southeast/rural regions in the product categories deemed to be masculine. For example, both groups of men named “beer” as masculine (and, indeed, virtually all beer advertising targets men); however, southeastern men also named “dip” (chewing tobacco) as masculine, indicating that both product categories were seen as ways to display one’s manliness.

Vehicles viewed as masculine also varied by region. The northeastern/urban men saw “cars”, especially sports cars and SUVs, as representing masculinity. Jeeps, Corvettes, and Mustangs were frequently mentioned. But the southeastern/rural men preferred pickup trucks as masculine vehicles, naming the Chevy Tahoe, specifically, and also the Mustang sports car (as did the northeastern men).

Both groups of men saw consumer electronics as being masculine; for example, the X-box was cited in both regions. However, the southeastern/rural respondents named a greater variety of electronics, ranging from laptop computers to GPS equipment. It is possible that this group’s *general mechanical orientation* may play a larger role in their masculinity and that they are more attuned to electronic gadgetry (Friend 2009)

Within both groups of men, *Old Spice* deodorant was spontaneously mentioned as a masculine grooming product. This suggests that the *Old Spice* marketing communications campaign, “Smell like a man, man”, has been successful in creating a cross-regional positioning as masculine. Of interest is the fact that Tim McGraw cologne was named by an interviewee in the northeast as representing

masculinity. McGraw is a country-western singer from the southeastern region who typically wears cowboy apparel when performing. The cowboy, of course, is one of the “circulating icons of cultural masculinity” (Cawelti 1984) we mentioned earlier.

The most powerful variation between the two regions was the very large emphasis placed on *weapons* – especially guns – by the men in the southeastern/rural region. As can be seen in Exhibit Nine, southeastern men “skewed” toward hunting activities, not only in mentioning rifles and shotguns, but also by describing “coon stretchers” and “de-fleshers,” both instruments used to field-dress animals, as masculine tools. They also were generally more oriented toward outdoor and wilderness pursuits, which is logical, given their rural environment (and see also Watts 2008).

### MASCULINE BRANDS

Toward the end of each interview, participants were asked what *brands* they thought of as being masculine. This was the first point at which the interviewer explicitly mentioned the term “brand,” although as we have in seen earlier discussion, some men spontaneously brought specific brand names into the conversation. What is compelling about the responses to this query is not only the brand names that were mentioned, but also the *product categories* into which they fell. Across both regional groups of men, brands in the categories of *weapons, vehicles, tools, media, grooming, apparel, alcohol* and *tobacco* were named. This provides support for the “masculinity-as-consumption” thesis (e.g., Faludi 1999; Kimmel 2012) mentioned earlier. Men believe that what they wear, what they drink, what they drive and what they watch are indicative of their masculinity. In essence, these product categories form the marketplace sources for the purchase and display of one’s masculinity. Each category, and its brand anchors, are discussed below:

**Weapons.** Weapons, especially guns and rifles, have long been considered a masculine arena of consumption (e.g., Souter 2012). Notably, men in both the northeast/urban and southeast/rural regions named *Smith & Wesson* as a brand of gun representing masculinity. This is likely linked to the several *Dirty Harry* motion pictures starring Clint Eastwood which popularized the Smith & Wesson handgun (see Souter 2012). A comparison of Exhibits 10 and 11 shows that several gun brands were mentioned by men in the southeast as masculine, e.g., *Barretta, Winchester*. Weaponry seems to play a larger role in defining masculinity in this rural region.

**Vehicles.** Perhaps no motor vehicle is more strongly associated with masculinity in the United States than the *Harley Davidson* brand of motorcycles (Schouten and McAlexander 1995). Notably, although none of the respondents actually owned a motorcycle, several cited this brand as representing masculinity. A mountain bike brand, *Trek*, was mentioned in the northeastern/urban sample; however among the southeastern men, the pick-up truck, especially *Ford* and *Dodge* brands, and “muscle” cars, for example, *Mustang* and *Camaro*, were more commonly mentioned.

**Tools and Equipment.** The *Sears* brand of *Craftsman* tools was named as representing masculinity by both regional groups of men. This suggests that Sears has been effective in anchoring this brand in American men’s cultural conceptions of manliness. Similarly, *John Deere* was also prominent as a perceived masculine brand for both groups. Possessing these brands therefore is believed to ‘signal’ one’s masculinity to both the self and others (Belk 1988).

**Apparel.** Among the apparel brands named spontaneously during the interviews, only *Nike* was present in both the northeastern/urban and southeastern/rural regional cultures as symbolizing masculinity. This is a strong testimony to Nike’s advertising and other marketing efforts. Even though they have aggressively targeted

women as well, Nike has succeeded in becoming an *anchor brand* for the concept of masculinity. Notably, specific apparel brands seem to hold a larger place in the consciousness of southeastern/rural men as signifying masculinity. Only four apparel brands were named in the northeastern sample, while the southeastern sample named sixteen discrete brands. Apparently, in the southeastern U.S., clothing really does “make the man.”

**Grooming Products** Three brands of men’s deodorant – *Old Spice*, *Axe*, and (Gillette) *Speed Stick* – were named in discussion by men in both regions. The current Old Spice advertising theme of “Smell like a Man, Man” was even cited by some respondents. What is notable about this is that these three brands, though promoting what could be considered a convenience product, have succeeded in placing themselves as anchoring points for the American cultural conception of masculinity. This suggests that marketing does have potency in shaping social belief systems. There was a time when smelling natural or sweaty would have been perceived as masculine.

**Alcohol and Tobacco.** Masculinity has long been associated with the consumption of liquor and beer (Kimmel 2012), as well as tobacco (Kimmel 2012) in the US. Across our regional informants, however, only the *Budweiser* brand was seen as a consistent symbol of masculinity. Northeastern/urban men considered *Marlboro* to be a ‘manly’ brand of tobacco, whereas in the Southeast, *Copenhagen* tobacco – a chewing tobacco brand – was named. There is clearly a strong, pervasive linkage in the southeast between “being a man” and using chewing tobacco products; one that likely is cause for public health concern. Notably the southeastern/rural sample also viewed two soft drinks as signifying masculinity: *Gatorade* and *Mountain Dew*. Although Holt (2004) notes the success of Pepsi in representing Mountain Dew as a national youth culture beverage, in the southeastern region (its place of origin), the brand remains seen as masculine.

### Media and Professional Sports

Professional sports associations, such as the National Hockey League and “major league baseball,” were named as masculine brands by the men in the northeastern/urban sample, but not by those in the southeast/rural region. This is significant, because it suggests men in the latter region may be less attuned to organized, ‘professional’ spectacles of masculinity, and more oriented toward localized, on-the-ground sources of masculinity. Supporting this thesis is the absence of mentions of NASCAR by the southern men, despite the fact that the Southeast is the origin point for stockcar racing (Hirschman 2003) and men in this region display a strong affinity with motor vehicles, as already noted. Male-oriented television channels, such as ESPN and Spike-TV, were spontaneously named by our samples, but none were common to both samples. Thus, men in these two regions do not seem to be drawing a strong sense of masculinity from television programming, despite the earlier quote from Kimmel (2012).

### Masculinity: The Brand Constellation

In Exhibit 2, we show the six product categories which consistently were drawn-upon by our respondents to construct their sense of being masculine, together with the specific brands believed to convey masculinity to the user. To our knowledge this is the first marketing study to work from a cultural concept to the brand level of consumer consciousness. In so doing, we have avoided the common error of brand-centrism, whereby a brand or set of brands is used to anchor the inquiry, and consumer input is developed from the brands outward (Holt 2004). The brand-centric research approach does not – and cannot – elicit cultural level meanings that are the keystone to successful

brand management. By instead working from a core cultural concept toward brands that represent the concept in consumers’ perceptions, we gain direct access to the larger structure of meaning in which brands are embedded.

In the present case, what have we learned about masculinity and branding? First, we have learned that men (at least in the urban northeast and rural southeast regions) draw meaning from six product categories to construct a sense of masculinity; these are Firearms, Tools & Equipment, Vehicles, Alcohol, Tobacco, Apparel and Grooming Products. These product categories may therefore be said to compose the consumption constellation from which masculinity is constructed. These brands are the objects supplied by the marketplace that enable men to present themselves *as men*.

That each product category has at least one brand exemplar as its “anchor” is also of great importance to marketing managers and researchers. It means that at least one company in each product category has positioned and communicated its brand to the marketplace with such potency that the brand has come to represent culturally the original concept upon which it was marketed. In essence, these brands have become metaphors for masculinity. Future research would be well-directed toward examining the marketing history of the nine brands found to instantiate the masculinity prototype. Brand repositioning across gender lines can, however, take place, as seen with Marlboro cigarettes and Right Guard deodorant, for example.

**Limitations.** The present study is limited both by its sample and method. The sample included only men from urban northeastern areas and rural southeastern areas of the United States. While these areas are the most typical for their regions, it is possible that rural northeastern men and urban southeastern men may deviate from the present findings. The Midwest, Southwest and Northwestern regions were not examined and, hence, additional research is required to see if the same brand constellation composing masculinity is found in these regions.

Further, the method employed, depth interviews, does not provide a quantified data set. It is possible that nationwide sampling could result in metric weights for the relative importance of each of the product category components found to compose the branded level of masculinity. Yet as desirable as this may seem to some, such an approach would shift the research focus away from the concept, itself, and toward a set of metrics. In our view, this might hamper the most valuable lesson to be learned from the present study and its method: masculinity, ultimately, does not dwell in a brand, a set of brands, or product categories, but rather in the culture and minds of men. Marketing managers and theorists, we believe, would do well to respect the concept, first and foremost.

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# Smile: You Haven't Seen This Before! Positivity, False Familiarity, and Consumer Behavior

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## ABSTRACT

*Trinity: A déjà vu is usually a glitch in the Matrix.*  
(The Matrix 1999)

In the science-fiction action film, *The Matrix*, reality is expressed as a digital simulation designed to manipulate people's thoughts, feelings, and behavior. This simulation shares its name with the film's title; hence, the Matrix represents people's perceptions of reality. In this sense, the Matrix is analogous to a key marketing communication tactic; that is, marketers often attempt to influence the perceptions of consumers, by making use of both mindless, heuristic processing (Williams, Fitzsimons, and Block 2004), and cognitive biases (Kahneman 2003).

Déjà vu is a French term, which translates to "already seen". Marcovitz (1952) explains it as a feeling that the current situation has previously been experienced, despite the circumstances of the past experience (that is, when, where, and how the earlier experience occurred) being uncertain and/or impossible. Consequently, déjà vu refers not to a prophetic vision, but rather, a false memory; a "glitch" in a consumer's understanding of what is real.

False memories can influence consumer attitudes (Rajagopal and Montgomery 2011), as well as future consumption-related behaviors; for example, food preferences and choices (Bernstein and Loftus 2009). As such, the antecedents to false memories have received extensive attention from scholars. Research into false memory triggers has spanned several domains, such as conceptual elaboration via the DRM paradigm (Roediger and McDermott 1995; Sherman 2013; Sherman and Moran 2011); misinformation cues in advertising, including those relying on autobiographical recall (Braun, Ellis, and Loftus 2002; Braun-LaTour et al 2004), as well as imagery (Lakshmanan and Krishnan 2009; Rajagopal and Montgomery 2011); time, and perceptual fluency misattributions, leading to the "false fame effect" (Holden and Vanhuele 1999; Jacoby et al 1989; Topolinski and Strack 2010); and positivity-inspired false familiarity (Claypool et al 2008; Lander and Metcalfe 2007; Monin 2003). In this study, I use positivity as an umbrella term to refer to an individual's overall positive emotional state, including their mood, and/or affect.

Positivity is an important element of consumer behavior, having been shown to enhance receptiveness to advertising messages (Batra and Stayman 1990); facilitate brand name learning (Lee and Sternthal 1999); and reduce the influence of suspicion in an interpersonal sales context (DeCarlo and Barone 2009). Considering these effects—and in conjunction with the aforementioned consequences of false memories—it is pertinent to understand the potential influence that a positivity heuristic (Bagozzi, Gopinath, and Nyer 1999; Bless et al 1996; Greifeneder, Bless, and Pham 2010) may exert on consumers' inferences of familiarity. Research of this nature is currently dispersed throughout the cognitive and social psychology fields; however, it must be integrated to contribute to more comprehensive and informative theory development (Peracchio, Luce, and McGill 2014). Thus, in this study, I present a meta-analysis, in an effort to 1) provide a foundational base for a more generalized theory of the relationship between positivity and false familiarity; and 2) identify the implications of this relationship to the understanding and prediction of consumer behavior.

## MEMORY, POSITIVITY, AND FALSE FAMILIARITY

To determine the criteria for my literature search, I first reviewed the key concepts relevant to my study. This section provides a brief overview of these concepts, beginning with 1) memory processes; 2) the positivity heuristic; and 3) fluency misattributions, which are responsible for the false inference of familiarity when an individual experiences positivity.

First, memory (that is, recognition) is comprised of familiarity, which is a fast, automatic, and nonconscious feeling that an event was experienced; and recall, which is a slow, controlled, and conscious process involving the elaboration and recollection of the specific details of an experience (Jacoby 1991; Yonelinas 2002). This dual-process conceptualization of memory is supported by findings from the neuroscience field, which suggest distinct brain functions are involved for inferences of familiarity, versus recall (Sauvage, Beer, and Eichenbaum 2010; Yovel and Paller 2004).

Second, positivity promotes the use of general knowledge structures which, in turn, encourage heuristic processing (Bagozzi et al 1999; Bless et al 1996; Greifeneder et al 2010). When people rely on heuristics, they are prone to substantial errors in judgment, as a result of the mindless and non-elaborative manner in which they process information (Kahneman 2003). Thus, the positivity heuristic can lead people to make false inferences regarding their familiarity to a stimulus.

Finally, fluency misattributions are the mechanism by which positivity triggers false familiarity (Koriat, Goldsmith, and Pansky 2000). Traditional fluency paradigms suggest that ease of processing activates positive affect, which is then misattributed to the source of the fluency, rather than the fluency itself (Reber, Schwarz, and Winkielman 2004; Winkielman et al 2003). However, this effect can also occur inversely, whereby positivity induces a reliance on heuristic cues, freeing cognitive resources for other processing activities (Bagozzi et al 1999; Bless et al 1996; Greifeneder et al 2010). Consequently, individuals experience processing ease (that is, fluency), which they can misattribute—as a result of their heuristic processing—when making intuitive judgments (Kahneman 2003); for example, by making an inference of familiarity.

## META-ANALYSIS: METHOD

The preceding review of key concepts led to the establishment of inclusion criteria for studies in the meta-analysis, which guided the literature search process. This process is outlined next, followed by a discussion of the considerations relevant to the calculation of effect sizes.

### *The Search for Relevant Literature*

The identification of studies applicable to the meta-analysis took place during the months of October, November, and December, 2013, as follows. First, using the search term "positivity AND familiarity" (which also incorporates related terms and variations, such as "positive" and "familiar"), a Google Web search yielded 444 displayed results (from a total of approximately 4.3 million), of which eight journal articles and one unpublished Master's thesis were deemed potentially relevant. Then, a Google Scholar search was undertaken, of which Google displayed 1000 of approximately 13600 results, whereby eight additional journal articles were collected. Next, the PsycINFO database was searched, in which three (that is, two book chapters and one unpublished doctoral dissertation) of the 53 results were added to the list of possibly relevant research. Fi-

nally, the ProQuest database was consulted, leading to the review of 6625 journal articles, and 1840 eBooks (for a total of 8465 results), which ultimately identified one additional journal article for the meta-analysis. The literature search process therefore included journal articles, conference proceedings, books and book chapters, and theses and dissertations—as well as blogs and other non-scholarly work, which was perused for any reference to academic research that may have been inadvertently overlooked during the search process.

I carefully scrutinized the 21 pieces of scholarly research that were identified as being potentially relevant to the meta-analysis. First, the reference lists were scoured for 1) the titles of other studies that appeared to examine a similar effect; and 2) other publications by the authors whose work appeared in the applicable pieces of research. This process yielded a further six journal articles; I repeated the process on these articles, but no additional publications were found. Second, the web pages of the university laboratories where the authors of the potentially relevant research are employed (or were employed, at the time their study was conducted), as well as the personal web pages of the authors themselves (if available), were examined, which resulted in a further two journal articles being located.

Next, the inclusion criteria were applied to the 29 pieces of possibly applicable research. I checked for studies within the research that examined the influence of positivity in the generation of false inferences of familiarity, by way of a fluency-related misattribution process. Seventeen pieces of research were consequently excluded, leaving 11 journal articles, and one unpublished Master's thesis. Within this research, 27 individual studies were selected for the meta-analysis.

I then repeated this literature search process, but no additional research was identified as relevant. As this process is consistent with the recommendations of leading behavioral science meta-analysts (Cumming 2012; Field and Gillett 2010; Hunter and Schmidt 2004), I was confident that I had not overlooked any pertinent studies. Furthermore, to assist in the prevention of an availability bias, I searched the online PsychFileDrawer repository for the following terms: “positivity familiarity”; “positivity heuristic”; “false familiarity”; “false recognition”; “false recall”; “false memory”; and “false alarm”. These searches, however, yielded no relevant results. Finally, the online Retraction Watch blog was consulted, but none of the 12 pieces of research, containing the 27 individual studies, had been retracted. Thus, I began my analysis by categorizing the studies, as follows.

### *Classifying the Studies*

I organized the 27 studies into groups, according to the manipulation of positivity that had been employed, in order to demonstrate the versatility of the positivity heuristic's influence on false familiarity. Three broad categories emerged: 1) mood manipulation, which involved the use of a mood induction procedure (Westermann, Spies, Stahl, and Hesse 1996) to generate positivity in participants; 2) stimuli valence, whereby positivity was primed by both supraliminal (Dimberg 1988; Lundqvist and Dimberg 1995; Vaughan and Lanzetta 1980) and subliminal (Murphy and Zajonc 1993; Niedenthal 1990; Wild, Erb, and Bartels 2001) affectively-laden stimuli; and 3) stimulus correlation ratings, in which associations between positivity and familiarity were assessed.

The third category, comprising four studies, requires clarification at this point, as it is widely understood that correlation does not mean causality (Aldrich 1995; Holland 1986; Simon 1954). In other words, although positivity and familiarity may be associated, this does not mean that positivity *causes* familiarity. This assumption is consistent with the three criteria that must be satisfied before causal

inferences can be made: 1) concomitant variation; 2) time order occurrence of variables; and 3) elimination of all other possible causal factors (Shadish, Cook, and Campbell 2002). However, as this meta-analysis examines *false* familiarity, the studies were using stimuli that were completely novel to participants. As a result, familiarity was controlled in these four studies, by elimination; that is, the participants could not possibly have been familiar with stimuli they had not previously encountered. Combined with the control of other confounding variables (for example, through experimental design and setting), this fact means that correlations between the ratings of positivity and (false) familiarity—in these four studies—must be due to the influence of positivity (that is, positivity generated false inferences of familiarity). This conclusion converges with the contentions of the authors of these four studies, as well as with the findings of other studies included in the meta-analysis.

With the determination of a list of categorized studies for the meta-analysis, I next calculated the effect sizes for each of the studies, using reported statistics. This step is outlined for the present analysis, below.

### *Calculation of Standardized Effect Sizes*

Using formulas described by Cohen (1988), and Lipsey and Wilson (2001), I computed standardized effect sizes for each of the 27 studies. I chose Cohen's *d* as the common metric, because the majority of the 27 studies explored the effect of positivity on false familiarity by employing a test of (mean) difference.

It is necessary here to explain several important decisions regarding the determination of effect sizes. First, for some of the studies, it was possible to compute multiple values for Cohen's *d*; for example, when 1) different methods of analysis were used on the same data; 2) statistics regarding differences between experimental groups included those between positive and negative moods/stimuli, as well as those between positive and neutral moods/stimuli; and 3) 95% confidence intervals were included for studies reporting averages of correlations. For these instances, I made the decision (prior to the analysis stage) to use only the most conservative effect size measure during analysis. This decision ensured that the overall effect size was not overestimated, in the belief that underestimating the effect has fewer negative consequences; for example, in relation to 1) the influence of an availability bias (Field and Gillett 2010; Hunter and Schmidt 2004; Rosenthal 1979); and 2) generalizability, including the tendency for scholars to overgeneralize research conclusions, especially when undertaking conceptual and theoretical development (Pham 2013).

Second, with specific regard to one of the studies (Corneille, Monin, and Pleyers 2005), the effect size I computed and included in the meta-analysis was based upon the affective explanation for the warm glow heuristic (that is, positivity-inspired false familiarity), as opposed to the prototypical explanation—despite the effect for the latter being weaker. In this case, the weaker (that is, more conservative) effect size was not chosen, because two experiments in prior research had ruled out the prototypical explanation as an adequate account of the warm glow heuristic (Monin 2003, experiments 2 and 5).

### *Conducting the Meta-Analysis*

I analyzed the 27 studies using the Exploratory Software for Confidence Intervals (ESCI) software package for Microsoft Excel. ESCI is endorsed by the Association for Psychological Science (Eich 2014), and does not rely on the use of *p*-values from null-hypothesis significance testing. Geoff Cumming, the developer of ESCI, argues that *p*-values are not only irrelevant and uninformative (Cohen 1994, 1995; Hunter and Schmidt 2004), but also potentially confounding to

the interpretation of a meta-analysis (Cumming 2012, 2014). Thus, I focus my discussion of the findings on the precision and size of the estimated overall effect; these outcomes are detailed in the following section.

When conducting the analysis, ESCI provides the option of either a fixed-effects model, or a random-effects model. Field and Gillett (2010) state that a random-effects model is considered appropriate when population estimates are assumed to vary widely (that is, they are heterogeneous), and when a goal of the meta-analysis is to make unconditional inferences (that is, to generalize the findings beyond the studies included in the meta-analysis). As these two criteria align with the circumstances and goals of the present study, I used a random-effects model. Furthermore, leading meta-analysts argue that a random-effects model mirrors the real world, and should therefore be the norm in behavioral science research (Cumming 2012; Field and Gillett 2010; Hunter and Schmidt 2004).

To complete the meta-analysis, ESCI requires the input of only two statistics. For each of the studies, these statistics are the sample sizes, and the standardized effect sizes (for which ESCI automatically removes the bias from Cohen's  $d$ ). With these inputs, ESCI generates both statistical, and graphical, output for interpretation. The outputs and interpretations for this meta-analysis are presented next.

## META-ANALYSIS: FINDINGS

### *Results and Discussion*

Table 1 summarizes the statistics relevant to the meta-analysis, whilst figure 1 displays the results graphically. As shown, the overall effect size was  $d = .397$  [.255, .539], which means that the effect is classified as “small” to “medium” (Cohen 1988). In practical terms, Cohen (1988, 26) suggests that a small effect size (that is,  $d = .20$ ) “is approximately the size of the difference in mean height between 15- and 16-year-old girls”. Conversely, a medium effect size (that is,  $d = .50$ ) “is conceived as one large enough to be visible to the naked eye”; for example, “the magnitude of the difference in height between 14- and 18-year-old girls” (Cohen 1988, 26). Therefore, the positivity heuristic has a discernible influence on false familiarity, but perhaps in a not entirely obvious way. In other words, although this effect is not especially strong, it is nonetheless rigorous, real, and reliable—which means that it can affect consumer behavior.

The meta-analysis revealed a “source awareness” boundary condition for the positivity heuristic, as shown in figure 1 by study 1 and study 12. Study 1 asked participants to rate their current mood state at the immediate conclusion of the mood manipulation task, which drew their attention to the source of their positive mood (Claypool et al 2008). Meanwhile, study 12 used positively valenced words in the test list (for the familiarity assessment), which Housley (2007) suggested were inferred by participants as the source of their positivity. When these two studies were removed from the meta-analysis, the overall effect size increased, and became more precise ( $d = .464$  [.353, .574]), which provides further support for the rigor, reliability, and generalizability of the positivity heuristic in the context of false familiarity.

The positivity heuristic can also be examined by categories, whereby the majority of research has focused on stimuli valence manipulations, thereby rendering the estimates from that category more precise than those of the other two categories. That is, after removing the two studies illustrating the boundary condition, 25 studies remained. Of these studies, four were from the mood manipulation category, 17 were from the stimuli valence category, and four were from the stimulus correlation ratings category. I compared the effect sizes of these categories, and found that inducing positivity with the use of affectively-laden stimuli ( $d = .535$  [.384, .685]) produces

stronger inferences of familiarity—by point estimate—relative to mood manipulation ( $d = .341$  [.078, .604]), and employing stimulus correlation ratings ( $d = .337$  [.188, .485]).

Overall, future research might involve further study of the positivity heuristic when mood manipulation is used—with an emphasis on enhancing the precision of findings—to allow additional comparison with the stimuli valence category. Furthermore, prospective studies in this area should prioritize the identification of moderating variables, and other boundary conditions, to assist in maximizing the theoretical and practical utility of this positivity heuristic. For example, Mather and Carstensen (2005) reported that—relative to younger individuals—older people will typically 1) experience fewer negative emotions; 2) retain a higher proportion of positively valenced memories, after being shown affectively-laden stimuli; and 3) distort their memories in a more emotionally gratifying (that is, positive) manner. Thus, age may play a moderating role in positivity-inspired false familiarity; however, as all 27 studies in this meta-analysis used undergraduate student samples, the influence of age—if any—remains unclear.

Finally, there is a question as to how valid these conclusions are. As such, to address this question, attention shifts now to an exploration of the potential limitations of this meta-analysis.

### *Assessing the Availability Bias*

There are two main types of bias that can affect a meta-analysis: 1) publication bias (Field and Gillett 2010; Rosenthal 1979); and 2) selection, or retrieval, bias (Cumming 2012; Lipsey and Wilson 2001). Consistent with the recommendations of Hunter and Schmidt (2004), I grouped these biases together, under the umbrella term “availability bias”.

Whilst all due care was taken during the literature search process, to identify studies demonstrating the positivity heuristic in the context of false familiarity, some studies may have inadvertently been overlooked, because this specific effect was often not the focus of the research from which a study was drawn. It is also possible that unknown and/or unpublished studies were not included in the meta-analysis.

To examine the extent of availability bias, I used Begg and Mazumdar's (1994) correlation method, which involves a statistical assessment, using Kendall's tau, of the association between the unbiased effect sizes, and 1) the variances ( $\tau = .091$ , NS); 2) the sample sizes ( $\tau = .058$ , NS); or 3) the standard errors ( $\tau = .034$ , NS), of each of the studies. All correlations were trivial in nature (as well as statistically non-significant), which indicates that the meta-analysis was not subject to an availability bias (Begg and Mazumdar 1994; Field and Gillett 2010; Hunter and Schmidt 2004). Consequently, the conclusions of the meta-analysis—especially those regarding the size and strength of the positivity heuristic—were deemed valid.

In summary, I have demonstrated, using this meta-analysis, that the positivity heuristic is a robust phenomenon. Therefore, this heuristic has implications for the understanding and prediction of consumer behavior, as follows.

## IMPLICATIONS AND CONCLUSIONS

By integrating the findings of 27 studies spanning the cognitive and social psychology literatures, I have shown that positivity, in and of itself, can lead individuals to infer familiarity to completely novel stimuli. As familiarity is one of two key components (along with expertise) that determine consumer knowledge (Alba and Hutchinson 1987, 2000), positivity-inspired false familiarity could potentially result in the misuse of knowledge by consumers. In turn, knowledge contributes to attitude certainty (Rucker et al 2014), which suggests a

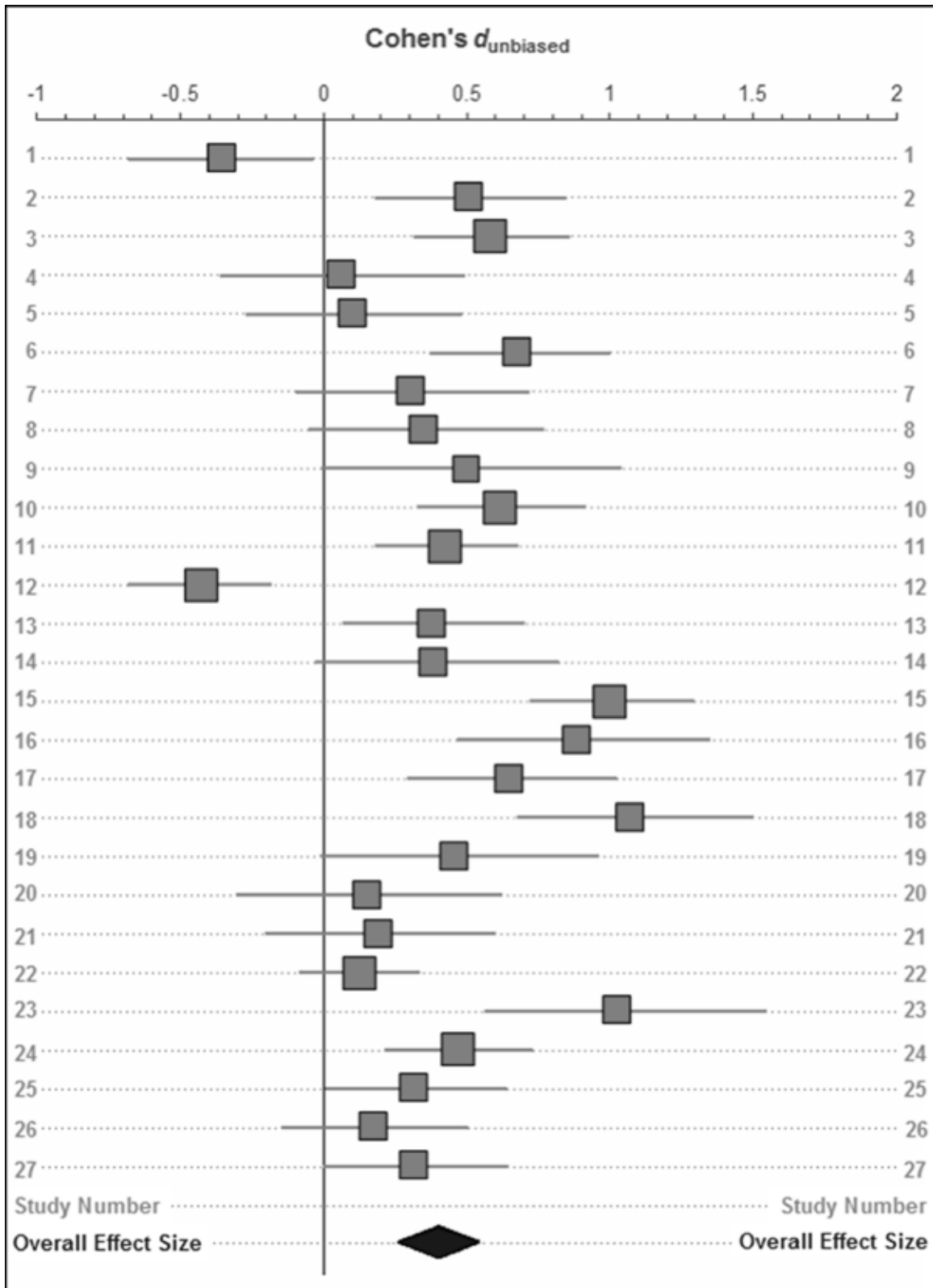


**TABLE 1**  
**RESULTS OF A META-ANALYSIS (RANDOM-EFFECTS MODEL) EXAMINING THE INFLUENCE OF THE POSITIVITY HEURISTIC ON FALSE INFERENCES OF FAMILIARITY**

Study	Weight	Cohen's $d_{unbiased}$	N	Variance	SE
1. Claypool et al (2008): experiment 1, mood source salient	3.9	-.353 [-.682, -.034]	39	.02623	.02593
2. Claypool et al (2008): experiment 1, mood source not salient	3.8	.507 [.180, .849]	39	.02793	.02676
3. Garcia-Marques et al (2004): experiment 3	4.1	.582 [.313, .861]	60	.01906	.01782
4. Rotteveel and Phaf (2007): experiment 2	3.4	.062 [-.364, .492]	21	.04416	.04586
5. Verde et al (2010): experiment 1	3.6	.103 [-.274, .483]	27	.03510	.03606
6. Baudouin et al (2000): experiment 1	3.9	.680 [.373, 1.003]	48	.02498	.02281
7. Baudouin et al (2000): experiment 2, short presentation of prime	3.5	.305 [-.098, .722]	24	.04090	.04128
8. Baudouin et al (2000): experiment 2, long presentation of prime	3.5	.350 [-.055, .772]	24	.04151	.04159
9. Garcia-Marques et al (2004): experiment 1	3.0	.497 [-.008, 1.040]	16	.06400	.06325
10. Garcia-Marques et al (2004): experiment 2	4.0	.615 [.324, .919]	52	.02230	.02071
11. Housley (2007): experiment 1, neutral prime	4.2	.426 [.177, .682]	66	.01618	.01566
12. Housley (2007): experiment 1, positive prime	4.2	-.429 [-.685, -.180]	66	.01620	.01567
13. Housley et al (2010): experiment 1, most conservative analysis	3.9	.379 [.067, .702]	41	.02523	.02481
14. Housley et al (2010): experiment 2	3.4	.386 [-.030, .821]	23	.04376	.04362
15. Lander and Metcalfe (2007): experiment 1, positive-neutral difference	4.0	.997 [.717, 1.293]	70	.02107	.01735
16. Monin (2003): experiment 3, most conservative analysis	3.3	.888 [.465, 1.350]	28	.04782	.04133
17. Monin (2003): experiment 4, positive-neutral difference	3.7	.647 [.291, 1.024]	35	.03329	.03084
18. Phaf and Rotteveel (2005): experiment 1, overall positive false alarm rate	3.5	1.072 [.676, 1.505]	36	.04254	.03438
19. Phaf and Rotteveel (2005): experiment 1, short presentation of prime	3.2	.458 [-.016, .962]	18	.05651	.05603
20. Phaf and Rotteveel (2005): experiment 1, long presentation of prime	3.3	.115 [-.305, .625]	18	.05135	.05341
21. Phaf and Rotteveel (2005): experiment 2, positive-neutral difference	3.5	.193 [-.206, .602]	24	.03974	.04069
22. Rotteveel and Phaf (2007): experiment 1	4.3	.124 [-.088, .337]	86	.01151	.01157
23. Verde et al (2010): experiment 2	3.1	1.026 [.560, 1.545]	25	.05858	.04841
24. Corneille et al (2005): experiment 1	4.1	.467 [.210, .732]	63	.01722	.01653
25. Monin and Oppenheimer (2005): experiment 1, most conservative analysis	3.9	.318 [.004, .640]	40	.02530	.02515
26. Monin and Oppenheimer (2005): experiment 2, most conservative analysis	3.9	.177 [-.145, .504]	37	.02633	.02668
27. Monin and Oppenheimer (2005): experiment 3, most conservative analysis	3.9	.318 [.000, .644]	39	.02593	.02752
Overall effect size	N/A	.397 [.255, .539]	1065	.00526	.00222

Note.—The description following a study name does not refer to the method used in a study; rather, it is provided to clarify which specific experiment or analysis the data came from, using a defining characteristic (which should be clear when the original research is consulted).

**FIGURE 1**  
**FOREST PLOT SHOWING ESTIMATES OF EFFECT SIZES AND 95% CONFIDENCE INTERVALS, FOR A META-ANALYSIS (RANDOM-EFFECTS MODEL) EXAMINING THE INFLUENCE OF THE POSITIVITY HEURISTIC ON FALSE INFERENCES OF FAMILIARITY**



possible explanation for why Alba and Hutchinson (2000) concluded that most consumers are overconfident.

Attitude certainty is dependent upon a consumer's use of various appraisals, including accuracy and completeness—the latter of which is directly affected by confidence (Rucker et al 2014). As such, if a consumer uses positivity as a heuristic, this can lead to false familiarity, which can form the basis of an attitude they are highly certain about. However, this attitude will be grounded upon inaccurate and/or incomplete knowledge, meaning that the consumer's ability to use their knowledge appropriately will be comprised; for example, in the context of responding to a persuasion attempt (Friestad and Wright 1994). Additionally, attitude certainty has been shown to decrease information processing (Maheswaran and Chai-ken 1991; Rucker et al 2014; Wan and Rucker 2013) which, in turn, could make consumers more likely to rely on heuristics (such as positivity), thereby exacerbating these issues.

In conclusion, these implications represent the foundations of a generalized, integrative theory of emotion, memory, cognitive processing, attitude formation, and persuasion. Together, these elements are of great interest to academics, marketers, and consumers (Pham 2013). Thus, consumer behavior scholars should seek to build upon the results of this meta-analysis, and further integrate research findings, to build a cumulative, evidence-based discipline. In doing so, the consumer research field will benefit from a richer understanding of the interrelated processes guiding consumer behavior (Peracchio et al 2014).

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## Reminders of God Can Increase Risk-taking

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### EXTENDED ABSTRACT

Behavior modification programs—e.g., twelve-step addiction rehabilitation programs—routinely invoke God and religion to help people reduce or eliminate risky behaviors (e.g., Cain, 1991; Ferdinand, 1997; Holt et al., 2009). The wisdom of this strategy has empirical support: Religiosity and participation in religious activities are associated with decreased risk-taking (e.g., Arnett, 1998; Steinman & Zimmerman, 2004), and religious references can decrease risky behaviors such as substance abuse (Wallace & Bachman, 1991), speeding (Arnett, 1998), and gambling (Hoffman, 2000). Here, we propose that in some instances references to God can have the opposite effect, and instead increase the tendency to take certain types of risks.

In particular, God is commonly viewed as a source of security, and people often treat God as an attachment figure (Kirkpatrick & Shaver, 1992). Research reveals that feelings of security can reduce people's perceptions of risk, which increases their willingness to engage in risky behavior (Fishbein & Ajzen, 1975). We predict that the association between God and feelings of security may lead people who are reminded of God to view risky behavior as less dangerous, which should in turn increase their willingness to take risks.

Consistent with this prediction, in Study 1A individuals who were primed (versus not primed) with the concept of God indicated a higher likelihood of risk-taking on the Domain-Specific Risk-Taking Task (DOSPERT; Weber et al., 2002;  $t(59) = 2.21, p = .031$ ). In Study 1B, priming God increased individuals' willingness to take a risk that they had considered taking in the past ( $t(200) = 2.72, p = .024$ ). Importantly, individuals differ in the extent to which they believe God provides security (Kirkpatrick & Shaver, 1992). Consistent with our hypothesis, a replication of Study 1B revealed that this effect was more likely to emerge among individuals who perceived God to be a reliable source of security ( $B = 1.33, t(96) = 2.36, p = .020$ ) than among individuals who did not ( $B = -.33, t(96) = -.60, p = .557$ ).

Study 1C replicated these findings with real behavior. Specifically, participants chose between either completing a task that could

(ostensibly) cause eye damage or an equivalent task that carried no risk. Participants learned that this safer task was two minutes longer and paid 25 cents less. Participants who were reminded (versus not reminded) of the concept of God chose the risky task more often (95.5%<sub>God</sub>; 84.3%<sub>Control</sub>;  $\chi^2(1, N = 136) = 4.59, p = .032$ ).

Study 2 aimed to reconcile our findings with the existing literature on religion and risk-taking. Specifically, while previous research suggests that religious references can decrease risk-taking (e.g., Arnett, 1998), many of these previously-studied risky behaviors had immoral connotations. We predicted that God primes decrease these immoral risky behaviors (e.g., Mazar, Amir, & Arieli, 2008) even as they increase non-moral risk-taking. To that end, we conducted a field experiment in which we posted ads to Facebook. We found that ads promoting non-moral risks generated more interest (i.e., more clicks) when they made God salient ( $B = .71, z = 2.04, p = .041$ ), that ads promoting immoral risks generated *less* interest when they made God salient ( $B = 1.39, z = 2.31, p = .021$ ), and that ads promoting neutral behavior generated the same amount of interest regardless of whether they made God salient ( $B = .24, z = .83, p = .410$ ). Hence, this study suggests that reminders of God may decrease *immoral* risk-taking, but increase non-moral risk-taking.

In Study 3 we tested our hypothesis that reminders of God increase risk-taking by leading individuals to perceive risky behaviors as less dangerous. We found that participants who were primed (versus not primed) with the concept of God perceived less danger associated with various risks ( $B = -0.44, t(99) = -3.00, p = .004$ ), and also indicated a higher likelihood of taking the risks ( $B = 0.61, t(99) = 2.29, p = .024$ ). Importantly, perceived danger mediated the effect of condition on risk-taking ( $CI_{95\%}: .12, .64$ ).

Together, these studies suggest that references to God can increase risk-taking. References to God pervade daily life; indeed, the word "God" is one of the most common nouns in the English language (Wiktionary, 2013). This research suggests that these frequent reminders can shape people's risk perceptions and influence their likelihood of engaging in potentially dangerous behaviors.

# Asymmetric Relationship between Reference Group Influence on Pro-Health and Deviant Behaviors of Base of Pyramid Consumers

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## ABSTRACT

Social capital and reference group influence have been found to influence consumer health-promoting (healthy vs. unhealthy food choices - Liu and Campbell 2012) and deviant behavior (alcohol consumption - Neighbors et al. 2008) in developed countries. However, there is a dearth of research evaluating the collective impact of social capital and reference group influence on healthy eating behavior and alcohol intake of subsistence consumers, especially those based at the Bottom of the Pyramid (BoP) (Pralhad 2005, 2009) and live on less than two dollars a day. Alcohol abuse and poor food/nutrition choices in socio-economically disadvantaged populations are typically gateways to many chronic diseases such as HIV and AIDS and social problems (e.g., suicide, violence, child abuse) in developing countries like India (Planning Commission 2012) with large proportions of low-income consumers and warrant investigation.

Most research has extensively examined the role of social capital on health outcomes of subsistence consumers in developing countries at a macro-level. However, recent research on social capital argues that social capital is a multidimensional concept and structural versus cognitive components of social capital differ in their impact on behavior. Further, there is heterogeneity in access to social capital across individual consumers based on age, status, hierarchy within a community and across geographies which macro-level research cannot address. At the micro level, social capital relates to attributes and propensities that facilitate mutually beneficial collective action among members of a community. This research examines individual perception of social capital in terms of its components; cognitive and structural social capital and how they are related to health-promoting (healthy eating) and deviant (alcohol consumption) behavior of subsistence consumers when there are differences in magnitudes and forms of reference group influence - informational versus normative. Specifically, this study, drawing from social capital and reference group theories, examines if informational and normative reference group influence moderate the relationship between social capital and health eating behavior and alcohol consumption.

## SOCIAL CAPITAL, REFERENCE GROUP INFLUENCE AND HEALTH BEHAVIOR

Social capital includes structural (quantity of social relationships such group membership, bonding, bridging, linking) and cognitive (quality of social relationships such as trust, social harmony, sense of belonging) components (De Silva 2006). The cognitive elements of social capital – relating to norms, values, attitudes and beliefs predispose people toward mutually beneficial collective action, while structural elements – relating to networks, roles, rules, precedents facilitate such action (Uphoff 2000). In relation to health, cognitive social capital (predominantly socialized at the micro level) impacts behavioral norms, including control of risk behavior, and informal means of informational exchange. Social networks and relationships between individuals within and outside family circles, can promote the exchange of information and sharing of experiences (Coleman 1988). Individuals who exchange information through formal and informal networks can facilitate inter-individual coordination and cooperation as well as the acquisition and diffusion of information for mutual benefit thereby influencing others' behavior.

Conversely, individuals who are isolated and lack trust in neighborhood, networks, and institutions may not only have limited access to resources, they may be unable to develop the support and the capacity necessary for accessing the collectively-owned and mutually beneficial capital.

Social capital theory holds that the more the people possess social ties, the larger pool of confidants they possess; the more the people connect with others, the more they trust others and the greater the likelihood to receive social support and health-related information (Putnam 1995; Umberson and Montez 2010). This may suggest that social capital is positively related health behavior. The structural dimension (bonding, bridging and linking) is more objective and refers to quantity and quality of social relationships, and its indicator is network characteristics of individuals' relationships (Uphoff 2000). Research indicates that structural social capital in the form of social network, social support, including emotional, instrumental, and informational support positively impact healthy food choices (Berkman and Glass 2000). For instance, Sorensen et al. (2007) contend that social networks (e.g., social ties, diversity of friendship patterns) play an important role in promoting fruit and vegetable intake. This is especially true in Indian context, where religious, community, and caste determine "allowed" food options (Ghurye 2008).

However, the association with deviant behaviors like alcohol consumption is equivocal. While some studies conclude that social capital exerts protective effects on alcohol consumption (e.g., see Weitzman and Kawachi 2000 and Weitzman and Chen 2005 in Western college setting), others argue that the influence of some aspects of social capital (e.g., social networks, social participation) may be negative, mixed, or none (e.g., Mohnen et al. 2012; McCrady 2004; Lindstrom 2005). Culture differences and social influence may play an important role in predicting the impact of social capital on alcohol use. Asian cultures emphasize responsibility, interdependence, moderation and restraint consistent with lower alcohol consumption. While alcohol consumption has a place in Indian mythological history, strict social customs discourage alcohol consumption (Ghurye 2008). Multi-generational family units imply parental influences lower alcohol intake patterns however peers tend to encourage consumption of higher levels of alcohol among young adults. Hence, cognitive social capital may play a major role in alcohol consumption.

Research on reference-group effects and social norms – the standards against which the appropriateness of a certain behavior is assessed – have shown that have independent and significant social control over human behavior (Bearden, Netemeyer, and Teel 1989). Research on reference group influence suggests that mere group membership does not influence behavior unless consumers orient themselves to the group norms that shape behavior and evaluations. Informational influence occurs when an individual perceives enhancement of knowledge and ability to cope with environment when using information from opinion leaders, experts, or product user. Normative influence operates through the identification process whereas an individual who associates oneself with a group to enhance self-concept adopts this group's consumption patterns.

Individuals often rely on social norms on making food choices and how much to eat (Herman, Roth, and Polivy 2003). The health

sciences literature suggests that descriptive (what most people are believed to do) and injunctive norms (what people are supposed to do) drive consumer choices. Injunctive norms “eating healthy food is good for you” or “consuming alcohol is bad for your health” are accepted as universal truths, and public health officials can reinforce them through mass-media public service announcements and use of community health-care workers to educate consumers. However, descriptive norms are based on perceptions within reference groups, if information indicates that others typically make healthy choices, individuals are more likely to select healthier foods (Burger et al. 2010). For example, Ball et al. (2010) find that social norms for healthy eating predict higher intakes fruit and vegetable. However, perceptions of descriptive norms can be often inaccurate and have been shown to correlate with levels of excessive drinking (Neighbors et al. 2004).

Reference group influences require the opportunity for social interaction and public scrutiny of behavior (Bearden, Netemeyer, and Teel 1989). Alcohol consumption is more often a social affair than a solitary act and its after-effects are likely to be more conspicuous and visible relative to choice of food. In contrast, food choices and consumption is more private and a family activity mostly within the confines of a home since most Indians eat home-cooked food. Normative influence is likely to be stronger for publicly consumed products like alcohol, and almost non-existent for necessity products like food. In addition, publicly consumed alcohol beverages are likely to violate social norms in certain religious groups and castes in India. Hence, *this study examines the moderating role of reference group influence on the relationship between social capital and healthy eating behavior and alcohol consumption*. We theorize that informational influence that is less susceptible to perceptual differences will be salient for healthy eating behavior while normative influence will have higher salience for alcohol consumption. It is hypothesized that social capital is positively related to healthy eating behavior when informational influence is high rather than low. However, social capital is inversely related to alcohol consumption when normative influence is high rather than low.

## METHOD

*Data for this study were obtained through a statewide survey of 711 individuals from rural India who live below the poverty level line.* The study recruited only those BoP individuals who possessed Antyodaya Anna Yojana (AAY) ration cards and were qualified to receive subsidized food and other services delivered through the public distribution system. A total of 1500 participants were randomly selected using the AAY membership list maintained by the local government and they were requested to participate in the study. Taking into account the nature of participants enrolled in our study, we hired a reputed research firm to conduct the interview from July to September in 2012. The average age of respondents was 42 years, and 54.6 percent were males. Most respondents (57.3%) completed primary education, and 71.8 percent were employed.

The measure of social capital was adapted from De Silva et al. (2006), which is specially designed to measure social capital in low-income countries. This scale assessed structural social capital in terms of group membership, support from groups, support from individuals, bonding, bridging, and linking and the cognitive social capital measured trust in neighborhood, social harmony, and sense of belonging. This construct includes one new item “trust in community workers” that reflect the nature of the study population. Healthy eating behavior was measured with eight items on a 5-point Likert scale ranging from strongly disagree (1) to strongly agree (5). These items were adapted from various studies (e.g., Wardle et al. 2004;

Kearney et al. 2001). Two examples of the statements are “I make conscious efforts to try and eat healthy foods” and “I try not to eat too much fatty foods.” Alcohol consumption was measured by a question “How often do you drink alcoholic beverages?” which was adapted from Bobak et al. (1999). The response options were: never, less than once a month, about once a month, about once a week, and every day. Three items adapted from Bearden, Netemeyer, and Teel (1989) measured informational influence on a scale from 1 (strongly disagree) to 5 (strongly agree). Normative influence was measured with a three-item scale adapted from (LaTour and Manrai 1989). The respondents rated the extent to which three referents (family, neighbors, and people in the community) opposed or favored their alcohol consumption on a 5-point scale ranging from 1 (strongly opposes my alcohol consumption) to 5 (strongly encourages my alcohol consumption). Reference group influence measures were dichotomized into high and low scores using median split approach.

To exam the interaction effects between social capital and reference group influence on outcome measures, a series of multivariate analysis of variance (MANOVA) were conducted. At first, we evaluated basic assumptions of MANOVA. The Levene’s test is not significant ( $p > .05$ ) which indicates that the assumption of homogeneity of group variances was not violated. The non-significance of Box’s M tests ( $p > .05$ ) shows that the assumption of equality of covariances among the set of dependent variables is met.

## RESULTS

In this study, we predicted that social capital would be positively related to healthy eating behavior when informational influence was high rather than low. Providing support for the proposition, the results reveal significant informational influence  $\times$  social capital interaction effect on healthy eating behavior -- group membership (Wilks’  $\lambda = .948$ ,  $F_{(1,707)} = 10.726$ ,  $p < .01$ ), bridging (Wilks’  $\lambda = .987$ ,  $F_{(1,707)} = 4.343$ ,  $p < .05$ ), trust in neighborhood (Wilks’  $\lambda = .972$ ,  $F_{(1,707)} = 7.494$ ,  $p < .01$ ), social harmony (Wilks’  $\lambda = .985$ ,  $F_{(1,707)} = 3.111$ ,  $p < .05$ ), and community workers (Wilks’  $\lambda = .958$ ,  $F_{(1,707)} = 11.783$ ,  $p < .001$ ). When informational influence was high than low, consumers who were active members of one or more groups or who carried out any organized activities in villages demonstrated higher levels of healthy eating behavior than those who did not actively participate in any groups or who did not carry out any organized activities in villages. Similarly, consumers with higher levels of trust in neighborhood, social harmony (who get along well with others), and trust in community workers (who trust and talk to Anganwadi or community workers about any of the health problems) exhibited higher levels of healthy eating behavior under high level of informational influence than low level of informational influence.

This study also posited that social capital would be inversely related to alcohol consumption when normative influence was high than low. Two measures of cognitive social capital -- trust in neighborhood (Wilks’  $\lambda = .987$ ,  $F_{(1,707)} = 3.488$ ,  $p < .05$ ) and trust in community workers (Wilks’  $\lambda = .947$ ,  $F_{(1,707)} = 12.654$ ,  $p < .001$ ) -- were significantly related to reduced alcohol consumption when normative influence was high than low. The result suggests that cognitive social capital may play an important role in reducing alcohol consumption if family, neighbor and people in the community demonstrate higher levels of opposition to alcohol consumption.

## DISCUSSION

This study investigates the relationship of structural and cognitive social capital on health promoting (eating healthy) and deviant (alcohol consumption) behavior and the moderating effect of informational and normative reference group influence. Empirical



analysis of survey data show that both structural social capital and cognitive capital are positively related to healthy eating behavior, but these relationships are moderated by informational influence only. However, only cognitive social capital (i.e., trust in neighborhood and community workers) positively relates to lower level of alcohol consumption among the consumers with high levels of normative influence. This means both structural and cognitive dimensions can be useful in promoting healthy eating behavior while cognitive social capital appears to play a major role in reducing alcohol consumption. These results indicate that strengthening the social capital within communities may provide an important avenue for promoting healthy eating behavior and reducing alcohol consumption among low-income people in rural areas.

This research focuses on social capital provides insights for health practitioners, policy makers, social marketers, and advocates of health design collaborative community-oriented and decentralized strategies. Findings from research on health-related behaviors can have important ramifications, on policy formation and on improving the means, efficacy, and targeting of health communications and service delivery. There are two major approaches in planning health promotion; one based on centralized planning from above, and the other with a holistic, community-oriented, decentralized approach.

Our finding that high levels of informational influence can enhance the positive impact of social capital on community members' health behavior by promoting a more rapid diffusion of health information or increasing the likelihood that healthy behavior norms are adopted (like healthy eating) provide support for the fact that inside of centralized top-down government programs, returns on public spending are higher when community-based development programs are used to mobilize women from the lowest castes and poorest families in rural Indian villages to set up women's groups in their community to come up with solutions to jointly address issues like health training (including monitoring of the free school lunch program). It has significantly improved trust and cooperation among participants, hygienic and healthy meal preparation, immunization rates, schooling and access to informal credit. Moreover, studies find evidence of spillover effects on households who do not participate in the program themselves but who live in a village where the program is active. Several NGOs and non-profits fund rehabilitation centers for de-addiction and fund local initiatives involving sports and entertainment activities targeted to males exerting social control over deviant substance abuse behavior in communities.

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# Fashionalising Sustainable Consumption in Lifestyle Media

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## ABSTRACT

The trendiness or even the status-enhancing qualities of sustainable consumption have been noted in previous studies. To give just a couple of examples of this phenomenon, the concept of “eco-chic” has been popularised to refer to the idea that some products can be both eco-friendly and trendy so that consumers would not have to give up their sense of style to aim for sustainability (Elliott 2013). In the *Independent*, Fury (2013) also started his article about a new vegan store launch by saying: “Why is a fashion editor writing about veganism? Because it’s fashionable ... Vegan is in.” In his article Fury refers to celebrity adherents such as Beyoncé and Gwyneth Paltrow, and Hollywood A-listers seem indeed to have become major promoters of sustainability (e.g. Boykoff, Goodman, and Littler 2010; Jill 2012; Gray 2011).

From the extant literature, I have identified three competing explanations for this phenomenon. The first one comes from the proponents of evolutionary psychology (e.g. Griskevicius, Cantú, and van Vugt 2012; Griskevicius, Tybur, and Van den Bergh 2010; Van Vugt and Hardy 2010). They argue that through conspicuous sustainable consumption a consumer is able to show that they are altruistic and that they can afford to spend money on the welfare of others. The second explanation is provided by Elliott (2013). With the help of Bourdieu (1984), she argues for a more subtle way of signalling status and taste. However, these studies offer a very static explanation for the status of sustainability: they do not account for the rise of sustainability and also seem to imply that interest in it will not wane either. Neither do they account for the active role of the market system or of cultural elites such as celebrities, apart from the notion by Griskevicius et al. (2010) that marketers should make eco-products more expensive to appeal to consumers. This notion is objectionable on many accounts such as making sustainability the purview of only the rich and privileged as well as potentially promoting unnecessary consumption (Elliott 2013; Owen 2012; Soron 2010).

The third explanation, the co-optation theory (Frank 1997; Heath and Potter 2004; Thompson and Coskuner-Balli 2007), does take the market system into account by arguing that market forces will eventually internalise and commodify radical and marginalised consumption phenomena. They are transformed into “a constellation of trendy commodities and depoliticized fashion styles” (Thompson and Coskuner-Balli 2007, 136). However, the theory does not explain in detail how and why certain previously stigmatised forms of consumption become fashionable (Sandicki and Ger 2010). In addition, the co-optation theory concentrates on marketers and thus largely ignores the role of media, apart from media being the site for advertising. But as the battle for and against social change is fought in the public sphere (Castells 2009) and as lifestyle media has become littered with messages about sustainability (Lewis 2008, 2012), this is a major gap in the literature.

The main contribution of this paper is then to provide a fourth, complementary explanation for the phenomenon by analysing how and why media institutions shape the market to give rise to a fashion trend of sustainable consumption. I have called this the fashionalisation of sustainable consumption to highlight the active involvement of a market actor. In relation to the previous studies, I argue against the view taken by the proponents of evolutionary psychology that there is something inherently status-enhancing about green products. Instead, I concur with Elliott (2013) that these meanings are historically emergent. Moreover, I argue that these meanings are shaped

by the market system, and, in fact, created due to two interlinked motives: firstly, the profit-making logic of the media business and, secondly, upholding of the status quo and the ideology of ever increasing consumption for economic growth.

The second contribution of this paper is to highlight that the status and the trend of sustainable consumption seems to be short-term in nature due to the need for the lifestyle media to keep churning out new trends. This runs counter to what Elliott (2013) and the evolutionary psychologists seem to imply. But even if sustained over a long period of time, it may not guarantee environmental benefits: instead of limiting consumption, which would be necessary for true sustainability (Alexander & Ussher 2012; Kilbourne & Pickett 2008), this kind of commodified sustainability may lead to excesses and unnecessary consumption (e.g. Boykoff et al. 2010; Owen 2012).

In this study I use frame analysis. It is often associated with Goffman (1974) but I depart from the Goffmanesque frame analysis in that, as Tuchman (1978) argues, Goffman does not adequately explain the ideological functions or institutional mechanism of media (see also Vliegthart and van Zoonen 2011). In this article, the classic study of Herman and Chomsky (1988; for a critical review see Klaehn 2002), *Manufacturing Consent*, is used to tie the media content to the context. In their model they argue that there are five filters which affect the media content. These are 1) the ownership and profit orientation of media corporations; 2) advertising as the primary source of funding; 3) the reliance on specialist, elite sources; 4) “flak” as a means of disciplining the media; and 5) “anti-communism” against the threat of enemies, of which the latter was later termed “otherness” by Chomsky (1998). Of these, the filters of profit orientation, advertising, sourcing and otherness are the most relevant for the current study. One may argue that flak from, for instance, governmental agencies is also an important factor in raising the profile of sustainability in the first place but discussing these forces is beyond the scope of this paper. The findings are then analysed with reference to the remaining four filters. Before proceeding with the detailed exploration of the two frames, however, I will briefly outline the methodology of this study.

## METHODOLOGY

Women’s magazines were chosen as, for instance, Elliott (2013) shows that being female increases the odds of finding green consumption desirable. As domestic consumers, women are also targeted to buy greener, particularly in their role as caregivers (MacGregor 2006). The aim was also to gain data from a broad spectrum of women’s magazines. Consequently three Finnish women’s magazines with differing target audiences were chosen: *Kaksplus* aimed at young mothers (readership 113 000, Otavamedia 2013b), *Eeva* aimed at mature, wealthier women (45+ years of age, readership 357 000, A-lehdet 2013) and *Anna* aimed at slightly younger women (35+ years of age, readership 324 000, Otavamedia 2013a) with a more modest budget. All the magazines have a wide circulation given that Finland has approximately 5.5 million inhabitants. The study has a time span of 5 years (2009–2013) and, all in all, 360 magazines were analysed (*Anna* having 48 issues a year whilst *Eeva* and *Kaksplus* have 12 issues a year).

The magazines were searched for articles, images, readers’ letters and advertisements related to sustainability and sustainable consumption in its widest definition. This included environmental, social, cultural and economic sustainability but as environmental

sustainability emerged as the most frequently promoted facet, the analysis focused on this. In addition to consumption stories, the data was also scanned for, for instance, political discourses, factual information and messages emanating from the environmental movement. However, these instances were rare. Instead, the majority of the data coded included products or consumption behaviours which were promoted as environmentally sustainable choices or had some reference to sustainability (e.g. the use of the prefix “eco”) and, to a lesser degree, voices arguing against sustainable consumption.

The analysis in this study involved two steps which are in line with the critical frame research tradition: the first exploring the rhetorical strategies employed and the second examining the specific industrial processes that facilitate the production of the emerging frames (Watkins 2001). The rhetorical strategies include problem or issue definition, key words and images, sources and themes which highlight and promote specific facts and interpretations (Entman 1993; Gamson 1992; Tucker 1998; Watkins 2001). The frames can then be thought of as clusters of messages which deploy similar strategies and offer similar explanations and solutions to the problem at hand. Several rounds of iterations between the data and the proposed frames were made until the final two frames emerged. The second step, the contextualization of framing, was done in particular with the help of Herman and Chomsky’s (1988) work which also stems from the critical theory tradition. In this critical view, then, frames are “the outcome of newsgathering routines by which journalists convey information ... from the perspective of values held by political and economic elites” (D’Angelo 2002, 876). Through framing, media as an institution select some information and intentionally omit other points of view to support the status quo (D’Angelo 2002, 876).

## FINDINGS

### “Eco-chic” frame

The first frame is labelled “Eco-chic” and it was present in all of the magazines. As explained above, eco-chic aims to combine sustainable living with trendiness, and the trendiness of sustainable consumption was indeed often stated in clear terms, such as naming sustainable consumption or organic food as “the trend” of the year. In addition, for instance, in the 11/2009 issue of *Anna* alone, the fashion section made bold statements in its headlines such as “Choose wisely—the green wave of fashion”, “This week ecological values are in”, “Nature power—eco beauty products for the spring pampering of the body and for maintaining inner peace” and “Only green in the wardrobe”, to name but a few. Often sustainable consumption was promoted through product reviews which list various eco-products the reader should try out. Two of the main product categories promoted by the magazines were organic food and cosmetics but the list is, in fact, endless. Eco-boutiques were featured, new hybrid cars were reviewed and eco-products from eco-hoovers to eco-washing-up liquids and eco-sofas made regular appearances. At the height of the trend in 2011, *Eeva* even promoted “eco-art” exhibitions and music labelled as “organic”.

Three important points are raised by these examples. Firstly, in all of the three magazines, sustainable consumption—or rather ostensibly sustainable consumption—was ubiquitous (see also Lewis 2008, 2012). Secondly, in line with the eco-chic ideology, ecological values can be combined with beauty, both on the inside and the outside, and that consumers preferring sustainable products are discerning and quality conscious. In fact, it seemed as though the word or prefix “eco” was often used as a short-hand for such qualities in the headline whereas the actual text may not even mention the ecological benefits of the product at all, which begs the question, what is

the main motivation for such consumption behaviour. Thirdly, the sustainability promoted by the magazines was generally commodified in the form of various eco-products—although perhaps less so in *Eeva* which, in comparison, emphasised the taste and cultural values the readers should espouse more (Lewis 2008, 231). Furthermore, anti-consumption stories, factual arguments, political discourses and voices from the environmental movement were also silenced.

This ties in with the profit-making and funding filters (Herman and Chomsky 1988) of media. Firstly, the media content is biased as to protect the interests of the corporation. Lifestyle magazines, such as the current three, often revolve around fashion trends and they have also been dubbed the “dreamworld” of shopping (Stevens and Maclaran 2005). Their existence is therefore reliant on maintaining an urgency around being fashionable and up-to-date and, to keep the readers coming back for more, there is a need to actively create consumption trends. Sustainability, when defined as reducing the amount of consumption (Alexander and Ussher 2012), is therefore a threat to the media as it would make this type of media redundant and would hence destabilise their profit-making logic. Commodified, fashionised sustainability, however, is not a threat so long as it keeps consumers buying more and so long as it can be replaced by other trends once interest wanes. Secondly, magazines rely on advertisers for their funding but in order to attract advertisers they need a sizeable audience of the right kind—thus making the audience the commodity sold instead of the magazine itself. Hence, the content will take any form necessary to attract the audience. More importantly, content which is likely to put the audience off buying—in other words, anti-consumption stories—is marginalising or left out. Essentially, then, magazines are geared towards ever increasing consumption.

This is also where the filter “otherness” (Chomsky 1998) comes into play. The idea that enemies (i.e. the anti-consumption movement) are attacking us is promoted and thus we are encouraged to protect the dominant ideology of free capitalist markets. Here, then, the perpetuation of the sustainability trend can be seen as an offensive against the rising tide of anti-consumption voices. By promoting sustainability through consumption, it is possible to answer the call for sustainability but apply the rules of the dominant ideology to the game thus high jacking, or co-opting, the environmental movement. Taking a critical point of view Luke (2005), for instance, then argues that sustainable development is merely a social movement for greater commodification.

In this quest, images of celebrities are also evoked, which coincides with the overall trend of using celebrities in the media coverage of climate change (Boykoff et al. 2010). In many cultures, celebrities have become a special elite stratum. Many extraordinary qualities are attached to them (e.g. Goodman 2010; Lundahl 2014; McCracken 1989) and that is why they make such powerful cues to accentuate and give credence to the intended message of “sustainable consumption is trendy and fashionable.” In the data, these celebrities included, but were not limited to, models, artists and actors. In issue 11/2010 *Anna*, for instance, argued that “The charming British actor Colin Firth is involved with the Eco-Age store ... You may also spot Colin helping out behind the counter during a rush hour—which is a wonderful reason to nip over to London to be eco!” This quote shows how celebrities are evoked to prompt action. The main rationale here though is to be closer to the celebrity both physically and symbolically while from the ecological point of view the argument is, to say the least, flawed. In fact, one is reminded of the Jevons paradox (Owen 2012; Polimeni et al. 2008) where the purported sustainability of the product in fact increases the ecological strain of that consumption activity by seeming efficient and therefore more desirable.

Here, reference to Herman and Chomsky's (1988) filter "sourcing", is also prudent. They argue that media forms a symbiotic relationship with its trusted sources out of economic necessity and reciprocity of interest. Good sources, for instance, provide a steady stream of news which are guaranteed to interest the audience. I argue that, especially for lifestyle media, celebrities are such sources. Media rely on celebrities to sell the magazines whilst celebrities rely on lifestyle media to build their brands thus forming a symbiotic relationship. What embeds celebrities even deeper into the institutions upholding the hegemony of consumption culture is that celebrities act as endorsers of brands (Erdogan 1999) and, as Brockington (2008) states, celebrities exist to facilitate ever-increasing consumption. Similarly, Brockington (2009, 10) argues that celebrity culture is the most pervasive in cultures where a greater inequality prevails. Celebrities therefore seem to have a pacifying effect, a new kind of "opium of the people" (Marx 1844). This ties in well with the aim of preserving the status quo.

### "Free to choose" frame

The second frame, "Free to choose", was present especially in *Kaksplus* and, as time went on, in *Anna* whereas in *Eeva* sustainability discreetly dropped off the agenda in favour of other trends. This frame highlighted that sustainability will have to come second after more important shopping criteria and the readers do not appreciate being pressured into sustainable consumption. In *Kaksplus*, for instance, the conflict is created because young parents are torn between the demands of family and work, and the demands for sustainability only add to these pressures. Instead, then, the consumers should be free to choose, without any guilt, how they spend their money.

This conflict was often recognised by *Kaksplus*. The editor (issue 02/2009), for instance, acknowledged this pressure by saying that in 2005–2007 alternative and ecological parenting became "big things" but raising the issue brought about major arguments for and against. She writes: "I was surprised ... how absolute [the readers] are at their worst." And whilst the trendiness of sustainable consumers was acknowledged, they were also often ridiculed and stigmatised for being too easily led by the fashion industry (e.g. issue 02/2010 "Hero mums" and issue 04/2010 "Top 10 parenting"; cf. hipsters e.g. Arsel and Thompson 2011). In fact, sustainability could even be seen to hurt the family:

*[In issue 12/2012, there] was an interview of the mother of a vegetarian family. The whole family were vegetarians. And to top it all, the only creature that got meat was the dog! A vegetarian dog would be animal cruelty according to the mum! But only feeding a small child fodder is not?*

*Use your common sense, young women ... The world will not be any better for your fussing. (Reader's letter; Kaksplus 03/2013)*

Here, the filter "otherness" (Chomsky 1998) raises its head again. The radical voices of those who "fuss" about the environment are marginalised to protect the dominant ideology of consumption culture, free choice and the rights of the individual. Read in this critical way, what one finds is that, in fact, the so-called dissident voices are aimed at upholding the status quo, in a similar fashion to the media and marketing institutions themselves.

The magazines also soon capitalised on these voices—again arguably because they need new trends to sustain themselves and because, due to the funding filter, antagonising the readers is not in the best interests of light-hearted lifestyle magazines. *Anna's* changed

attitude is highlighted in issue 19/2012 in a short article titled "Climate change in memoriam":

*Are you haunted by thoughts about global warming? Do you calculate your carbon footprint? Are you worried about the destruction of the world?*

*Exactly, me neither. Anymore. Finns worry less about climate change, says a new survey. The same can be concluded based on general observations. Media is no longer filled with (guilt-inducing) stories about the ecological problems ... (Anna 19/2012)*

In this cleverly written article, purportedly summarising the feelings of the nation, the writer then goes on to say that she would be more likely to still care about the environment if things which are out of the control of ordinary people had changed (e.g. cheaper electric and hybrid cars and organic food, public transport and recycling made easier). The article thus pushes the responsibility away from the consumers (cf. Lewis 2008; Moisander 2007; Moisander, Markkula, and Eräranta 2010) and hence justifies the on-going consumer culture.

This marked the end for the sustainability trend in *Anna* and similar downturn can also be detected in the other magazines. Instead the limelight was hijacked by other trends, such as the so-called superfoods (berries, seeds, and legumes etc. which are supposedly full of nutrients) and their use in beauty products. These products were framed in a similar fashion compared to sustainable consumption in that denotations of healthiness, trendiness, quality and discerning taste were emphasised but references to sustainability were dropped. This highlights the fact that sustainable consumption for the lifestyle media institutions is no more than another trend to churn out to keep the never-ending cycle of consumption going.

## DISCUSSION AND CONCLUSIONS

The main thesis of this article has been that media has shaped the market to give rise to the sustainable consumption trend through the "Eco-chic" frame for profit-making reasons. At the same time, it upholds the hegemony of consumer culture. But the study has also highlighted that the trend of sustainable consumption indeed seems to be short-term in nature. This is due to the fact that magazines, often dedicated to trends and fashion, have kept churning out new issues, and thus, new trends. However, even if sustained over a long period of time, it may not guarantee environmental benefits as commodified, fashionised sustainability may lead to excesses and unnecessary consumption (e.g. Boykoff et al. 2010; Elliott 2013; Owen 2012).

This phenomenon must also be acknowledged by consumer research. Firstly, it is important to be critical about the so-called sustainable consumption consumers engage in and not merely applaud any new consumption trend disguised as such. Csutora's (2012) analysis in fact shows that the ecological footprint of "green" consumers does not differ significantly from that of the uninterested "brown" consumers.

Secondly, the fact that ecological problems are included in the media agenda nowadays does not necessarily mean that progress is being made. In fact, the underlying ideology perpetuated by lifestyle media seems to imply that true sustainability is unlikely to be achieved under these conditions as has been argued here and by commentators such as Lewis (2013). The hegemony of progress through consumption seems to be so ingrained that even the readers, as shown by the "Free to choose" frame, seem unable to question it.

As Hall (1979, 1995) argues, the power of media lies in its ability to make certain representations of the world seem natural and as common sense.

On the other hand, even Herman and Chomsky (1988) do not subscribe to the view that media are monolithic or entirely void of dissent. It is therefore necessary to analyse the current understanding on an issue and the internal logic of the media to be able to contest the meanings and to transform the conceptions of the masses (Hall 1986, 20). This provides hope but also direction for future research. Media is at the heart of social change (Castells 2009), and change is possible. It will, however, require uncovering the hidden mechanisms of media institutions and is not a matter of couple of targeted media communications campaigns as is implied by, for instance, Kolandai-Matchett (2009). This article has aimed to be one step in that direction.

The current study is not without its limitations, however. The first one is that it was not possible to discuss the role of the government in this development. This is an important factor as, for instance, Alexander and Ussher (2012) argue that even governments are yet to accept the necessity to consume less and, instead, promote “sustainable development”, in other words, continuing to pursue economic growth whilst aiming for efficiency. As argued above, this seems to be a flawed way of thinking (e.g. Owen 2012; Polimeni et al. 2008). Therefore, I concur with commentators such as Moisaner (2007) in that sustainable consumption research should direct their gaze away from individual consumers and, instead, problematise the hegemony of “sustainable development” and of consumption culture, and investigate the forces which uphold this ideology.

Secondly, only women’s magazines were analysed and further research is required in a wider range of publications. There is also a real danger of perpetuating the gendered view on sustainable consumption (Bourdieu 1984, 382; Elliott 2013). In addition, the context here was Finland which is arguably a small market. However, the basic principles of media business are the same in modern, capitalist countries. Cross-cultural comparisons would, however, be a fruitful avenue for future research. Other recommendations for future research include a more detailed analysis of the role of the celebrities in this process. The research could also include investigating the role of what Castells (2009) calls mass self-communication, in other words blogs and social media such as Twitter, whereby the celebrities can communicate with their followers directly and thus bypass mainstream media institutions.

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# Tryvertising - What Makes Consumers Share Product Innovations With Others?

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## INTRODUCTION

Increasing numbers of consumers rely on peer-to-peer community recommendations rather than messages spread from marketing agencies (Nielsen 2009; Berthon, Pitt and Campbell 2008). Since consumers' trust in mass advertising is declining, current trends show that people want to try out new products before they actually purchase them (Trendwatching 2007). In response to that, tryvertising as a new form of product placement has been introduced to the marketing environment. Basically tryvertising "is all about becoming consumers familiar with new products by actually trying them out" (Trendwatching 2005). Tryvertising aims at including innovative products into consumers' every-day life enabling them to form an opinion, based on their own experience instead of the message spread from professional agencies (Trendwatching 2005, 2008). Consumers are given several products to try out and are asked to share some of those with their peers as well as exchange their experiences within social networks and peer-to-peer communities. Thereby, consumers may become co-marketers of new products (Villanueva, Yoo, and Hanssens 2008) speeding up their diffusion. To sum it up, tryvertising as an experience-based advertising approach leads to increased word of mouth (WOM) (Berger and Schwartz 2011) by responding to consumers' desire to try out products before the actual purchase (Trendwatching 2007).

Marketers as sales managers alike became aware of product trials as promising means to promote new products. Companies such as Dr. Oetker, Henkel (Kjoro n.d.), Nivea (TRND 2014), and Procter & Gamble (e.g., Gillette) have recognized the power of advertising new products over consumers' personal experience (Trendwatching 2005). While tryvertising as an additional marketing tool is rather popular among companies, little is known about what makes tryvertising successful.

However, from diffusion theory we know that besides the innovative product itself, the individuals and their experiences with the new product do play a major role in the diffusion process. Rogers (1983, 17) argues that individuals who have "knowledge of, or experience with using, the innovation" will communicate the innovation through their personal networks to several others who do not yet have any experience with the innovation. Thus, the use experience of early adopters can be seen as an important prerequisite for the speed of new products being adopted by their adherents. The diffusion of products further depends on consumers' characteristics and their personal networks. Moreover, consumers' communication skills, knowledge about the product and the product category, as well as their passion may influence the speed of diffusion (Rogers 1983).

Instead of just providing consumers with more products companies may ask whom they should invite for free trials and whom not. The allocation of free products may for example attract consumers who just go for the receipt of free products but may neither be interested in sharing their experiences nor their free products. Such participants presumably will not contribute to successful product diffusion in terms of higher levels of WOM. Thus, our study explores whether and how different types of participants' motives influence consumers' WOM communication (offline and online) as well as their product sharing behavior. In this context, we study consumers' participation behavior within the scope of an online tryvertising campaign that has been designed to support the launch of a new fast

moving consumer good (FMCG) – De Oleos' product innovation of Bertolli oil sprays. At the beginning of the campaign consumers were sent six Bertolli oil sprays in original size allowing them to experience and share the product, but also to interact with others in the corresponding online community. Taken together, this study sheds light on the new promising means of tryvertising. Our empirical study should support managers to select participants who are best suited for contributing to the expected outcome. This may help to increase the efficiency of tryvertising, as these campaigns are not free of cost and should also spur the rate of diffusion. Based on existing literature we developed the conceptual framework shown in figure 1 to gain a deeper understanding of the impact of intrinsic and extrinsic motives on consumers' product sharing behavior mediated through their personal network activities in terms of offline WOM and electronic WOM (eWOM).

## THEROY AND HYPOTHESES

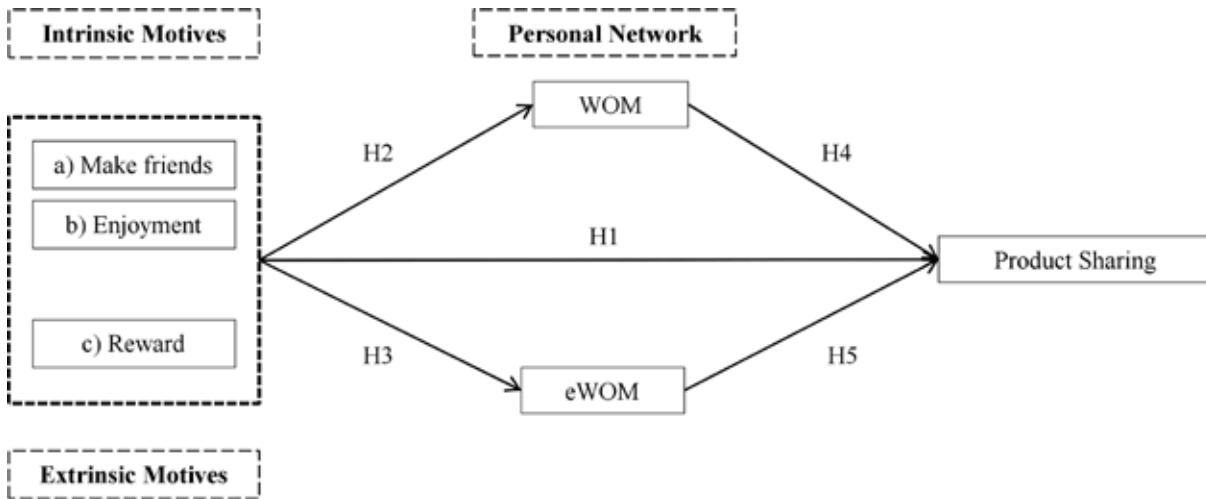
### Main Effects of Motives

Consumers may engage in tryvertising campaigns for various reasons (Hennig-Thurau and Walsh 2003). One reason why consumers engage in tryvertising campaigns relies in the possibility of getting in touch with like-minded participants (Kozinets 2002) enabling them to build up new friendships (Gwinner, Gremler, and Bitner 1998) that are perceived as being similar to real-life friendships. By fulfilling consumers' need of social relatedness (Deci and Ryan 2000) it is the activity of sharing product experiences with others, which provides value to them (Butler et al. 2007). Furthermore, consumers may also derive value from enjoying the activity of trying out new products. This responds to their need of feeling competent and self-determining (Deci and Ryan 2000). Enjoyment is understood as peoples' feeling of happiness while being engaged in a specific activity (Russell and Mehrabian 1977). Consumers who are mainly interested in the offered incentives (Deci and Ryan 2000) may perceive the provision of free products as a rewarding outcome for participating in tryvertising campaigns. Hence, the provision of free products responds to consumers' underlying motive of reward. It may be the activity of trying out innovative products itself, the enjoyment (Cropanzano and Mitchell 2005) of exchanging experiences with like-minded others (Emerson 1976) or just the effect of receiving exclusive products for free (Blau 1964) which may drive consumers' engagement. According to Deci and Ryan (2000) intrinsic motives arise out of individuals' own interest for engagement, while activities based on extrinsic motives are solely undertaken due to its desirable consequences. Thus extrinsically driven consumers who are mainly interested in the free products are assumed to interact less with others and therefore to share fewer products as they derive no benefits from becoming active (Blau 1964; Deci and Ryan 2000). Furthermore, sharing products with others may even reduce their value as fewer products may be left for them. Compared to the aforementioned, consumers who are intrinsically driven by the need to make friends or experience enjoyment are expected to actively engage within their social networks and will therefore physically share more products with their peers.

Generally, consumers' interactions by which experiences are transferred (Rogers 1983) occur within these networks. More pre-



FIGURE 1  
Conceptual Model



cisely, offline and online interactions, namely WOM and eWOM, help people to transfer product related information from one to another (Rogers 1983). While consumers' online behavior refers to their weak ties, consumers' offline behavior occurs within the network of strong ties and therefore implies a high need for close relationships (Granovetter 1973). Those who engage in WOM and eWOM conversations within their personal networks (Emerson 1976) are expected to go a step further by sharing their products with others as an ultimate means to fulfill their needs of making friends (Gwinner et al. 1998) and enjoyment (Cropanzano and Mitchell 2005). On the contrary, those who contribute less within their personal networks are expected to share fewer products because they perceive no benefit arising out of this behavior (Blau 1964). Thus, we propose:

*Hypothesis 1: Intrinsic motives like a) making friends and b) enjoyment have a positive impact on consumers' product sharing behavior. The extrinsic motive c) reward therefore has a negative impact on consumers' product sharing behavior.*

*Hypothesis 2: Intrinsic motives like a) making friends and b) enjoyment have a positive impact on the quantity of WOM contributions. The extrinsic motive c) reward therefore has a negative impact on the quantity of WOM contributions.*

*Hypothesis 3: Intrinsic motives like a) making friends and b) enjoyment have a positive impact on the quantity of eWOM contributions. The extrinsic motive c) reward therefore has a negative impact on the quantity of eWOM contributions.*

### Mediating Effects of WOM and eWOM

Although the exchange of product experiences and the sharing of products are different activities they are somehow related. It may be rather difficult to share a product with someone without talking about it. Before consumers are sharing products with others, they primarily may want to find out if others are generally interested in

obtaining one of those products. Thus consumers' WOM and eWOM contributions are seen as an indicator of their product sharing behavior because the decision to share products is based on such interactions (Mudie, Cottam, and Raeside 2003). Hennig-Thurau and Walsh (2003) as well show that consumers' online interactions highly influence their decision-making process and their further behavior. Both, consumers' interactions as well as product sharing behavior, therefore constitute a mean to build up and reinforce network ties. As strong and weak ties are highly interrelated (Jack 2005), consumers' WOM and eWOM contributions are assumed as being necessary antecedents of their product sharing behavior. Therefore, we further explore the mediating effects of WOM and eWOM concerning the impact of consumers' motives on product sharing behavior. Thus, we hypothesize:

*Hypothesis 4: The quantity of WOM contributions mediates the relationships between consumers' motives and their product sharing behavior.*

*Hypothesis 5: The quantity of eWOM contributions mediates the relationships between consumers' motives and their product sharing behavior.*

## EMPIRICAL STUDY

### Research Field and Study Design

In July 2013, a tryvertising campaign for a new fast moving consumer good (FMCG) was launched for De Oleos' product innovation of Bertolli oil sprays, which has been created to facilitate the apportioning of oil use. Participating consumers were sent a packet containing six bottles of the new olive oil. They were asked to try out the product, share their experiences as well as some of the obtained products with family, friends and acquaintances. To exchange their consumption experiences with a larger community they got access to the corresponding online tryvertising platform. To study whether and how different motives affect participants' WOM and eWOM as well as product sharing behavior, we applied a multi-method approach, consisting of online surveys and community data, to prevent a common bias (Podsakoff et al. 2003). In order to capture participants'

motives, one survey was conducted at the beginning of the tryvertising campaign. At the end of the campaign another online survey was conducted to obtain data on participants' WOM and product sharing behavior throughout the entire product trial stage. Furthermore, by accessing log-file data of the online tryvertising community platform, we captured the actual eWOM of the participants by counting the number of actual comments contributed to the community. To measure participants' motive to *make friends* two items were adapted from Butler et al. (2007). Participants' *enjoyment* was measured by using two items from Constant, Sproull and Kiesler (1996) and one item from Füller (2006). Further participants' interest in the offered incentives was measured by adapting two items from Füller (2006). All construct items were assessed using a five-point Likert scale ranging from strongly disagree to strongly agree. To measure the level of *WOM*, participants were asked to indicate the number of persons they have spoken to regarding the product throughout the campaign. Participants' *product sharing behavior* was measured by asking how many of their products they had actually shared with others. In total, 422 respondents completed both online surveys. While the majority of respondents (63.27%) participated in the tryvertising online platform, the remaining 36.73% did not post anything. The final sample consisted of 83.9% (n=354) female respondents averagely aged 38.80 years, and 16.1% (n=68) male respondents averagely aged 37.43 years.

## FINDINGS

*Main Effects of Motives:* Multiple regressions were conducted to study the main effects of intrinsic and extrinsic motives on consumer behavior. As expected, our results (see table 1) confirm a significant impact of consumers' motives on product sharing behavior ( $R^2 = .036$ ,  $F(3, 418) = 5.278$ ,  $p \leq .001$ ) as well as on WOM ( $R^2 = .131$ ,  $F(3, 418) = 21.076$ ,  $p < .001$ ) and eWOM ( $R^2 = .019$ ,  $F(3, 418) = 2.631$ ,  $p < .05$ ). Findings reveal a significant positive impact of the motive to make friends ( $\beta = .132$ ,  $p \leq .01$ ) and enjoyment ( $\beta = .099$ ,  $p \leq .05$ ) on product sharing behavior thus confirming hypothesis 1a and 1b. However, there we found no significant impact of getting rewarded ( $\beta = .000$ ,  $p > .05$ ) on product sharing behavior. Hence no evidence for hypothesis 1c was found. Furthermore, regression analyses revealed a significant positive impact of the motive to make friends ( $\beta = .258$ ,  $p < .001$ ) and enjoyment ( $\beta = .154$ ,  $p < .01$ ) on WOM. Results also showed a significant negative impact for the motive reward ( $\beta = -.125$ ,  $p < .01$ ) on WOM. Thus full support for hypothesis 2 was found. Regarding the direct impact of motives on eWOM, only the intrinsic motive to make friends ( $\beta = .121$ ,  $p < .05$ ) led to a significant positive impact. Enjoyment ( $\beta = .021$ ,  $p > .05$ ) and reward ( $\beta = -.050$ ,  $p > .05$ ) had no significant impact on eWOM. Therefore hypothesis 3a can be supported, while hypotheses 3b and 3c must be rejected.

*Mediating Effects of WOM and eWOM:* We hypothesized that WOM and eWOM mediate the effect of motives on product sharing behavior. We applied a simple mediation model, suggested by Preacher and Hayes (2004) due to its emphasis on finding significant indirect effects between the independent and the dependent variable. Three mediation models with biased-corrected bootstrapping (N=5000, 95% confidence interval (CI)) were estimated for each independent variable. There was a significant and positive mediating effect of both intrinsic motives to make friends (95% CI: .054 to .127,  $\beta = .087$ ) and enjoyment (95% CI: .045 to .105,  $\beta = .073$ ) on product sharing behavior through WOM. The indirect effect of reward (95% CI: -.071 to -.004,  $\beta = -.036$ ) on product sharing behavior through WOM therefore was significant and negative. Furthermore, eWOM did neither act as a mediator for the impact of making friends

on product sharing behavior (95% CI: -.029 to .002,  $\beta = -.008$ ), nor for the impact of enjoyment (95% CI: -.021 to .004,  $\beta = -.004$ ) or reward (95% CI: -.002 to .016,  $\beta = .002$ ) on product sharing behavior. Hence, WOM positively mediated the effect of intrinsic motives on product sharing behavior, and negatively mediated the effect of extrinsic motives on product sharing behavior. In other words, WOM plays a very important role as it explains the relationship between peoples' motives to engage in tryvertising campaigns and their product sharing behavior. Thus, evidence for hypothesis 4 is found, while hypothesis 5 needs to be rejected.

**TABLE 1**  
Multiple Regression Results and Mediating Effects

Independent Variables	Dependent Variables					
	Product Sharing		WOM		eWOM	
	$\beta$	SE	$\beta$	SE	$\beta$	SE
Make Friends	.132**	.051	.258***	.049	.121*	.052
Enjoyment	.099*	.051	.154**	.049	.021	.052
Reward	.000		-.125**	.046	-.050	.049
R <sup>2</sup>	.036		.131		.019	
F	5.278***		21.076***		2.631*	
Mediating Variables	Mediating Variables					
	WOM		eWOM			
	$\beta$	SE	$\beta$	SE		
Make Friends	.087*	.019	-.008	.007		
Enjoyment	.073*	.016	-.004	.006		
Reward	-.036*	.017	.002	.004		

\*  $p \leq .05$ , \*\*  $p \leq .01$ , \*\*\*  $p \leq .001$

## DISCUSSION

Today's mass advertising is more and more replaced by interactive marketing approaches granting consumers an active role in the advertising process. Although tryvertising emerges as a new trend for product placement in marketing (Trendwatching 2005), so far little is known about what makes tryvertising interesting for consumers. In order to make tryvertising a successful strategy in marketing, firms need to be aware of various consumer motives which might have a different impact on the expected outcome in terms of WOM, eWOM and product sharing behavior. Our findings show that consumer motives indeed have a significant impact on product sharing behavior. While the motive to make friends generates significantly more WOM and eWOM, the motive of enjoyment contributes at least to more WOM. Contrarily, consumers' motive of reward results in lower levels of WOM as they are merely interested in obtaining the free products instead of bringing about the expected benefits for the firms. Thus, firms should preselect participants based on their motives if they want to boost product diffusion. Moreover, our study shows a significant mediating effect of WOM for the relationship between consumer motives and product sharing behavior, meaning that people first need to engage in face-to-face interactions in order to share the products with others. Although eWOM does not act as

mediator for the relationship between consumer motives and product sharing behavior, firms should create a well-functioning online community that fosters consumers' interactions by stimulating the establishment of new friendships and responding to the need of enjoyment. In doing so, community activities are perceived as an outstanding and amusing experience, which helps firms to profit from consumers' online interactions in the future. Therefore, we suggest that firms follow a twofold strategy. As a first step they should decide whether they focus on generating WOM or eWOM. Based on this decision they could then either create an online or an offline environment, which stimulates frequent interactions among consumers.

Although our study delivers interesting insights regarding the effects of tryvertising campaigns, more research remains to be done in order to address its limitations. Our study only concentrates on one single product category within a single market. Future research should focus on other product categories like food, beverages, personal care and beauty products or telecommunication. Thus it would be interesting to see if our results hold for other product categories in different countries. Even though our study explores the impact of three different consumer motives, further research might ask which other personal characteristics affect product sharing behavior. This should help firms to design online tryvertising campaigns more efficiently in the future. Accordingly, future research might also study the ideal product sample size that leads to the most beneficial outcome for firms and consumers alike. Moreover, it should be questioned which other incentives, besides the product itself, could be offered to participants in order to drive WOM, eWOM and physical product sharing behavior.

Despite these limitations our study highly contributes to a better understanding of the new and promising marketing form of tryvertising. Contrary to prior research, which mainly uses behavioral intention measures, our study draws on real customer data, and therefore applies real behavior measures. Ultimately, it ensures a high level of ecological validity.

Our study showed that consumer motives significantly affect physical product as well as experience sharing behavior in terms of WOM and eWOM. Besides we found evidence for WOM mediating the impact of consumer motives on product sharing behavior. We hope that this study will inspire other researchers to further explore the topic of tryvertising as a specific form of co-creation and engagement that emphasizes consumers' role of co-marketers and salesmen.

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# Understanding Gamification of Consumer Experiences

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## ABSTRACT

Recently, organizations have begun to tout 'gamification' as an effective method of increasing motivation and engagement of employees, customers, patients, and students, among other stakeholders (Wingfield 2012). Nonetheless, despite projections that such gamification will become a widely adopted phenomenon, estimates are gloomy with respect to the real impact these projects will have on the experiences of 'players' (i.e., participants who are supposed to have fun), and on the organizations that would like to use gamification to improve the players' behavior in their favor (Burke 2011). Gamification is difficult, and fraught with problems that can lead to strategic and resource-based problems for the firm. In this article, we present an experience framework in order to show the effect of gamification on consumers' experiences that is illustrated through four extended examples. We conclude this article with a few implications for future research into, as well as practical application for the successful gamification of consumer experiences. But first, we discuss what gamification is and what it is not.

## GAMIFICATION

The term 'gamification' is misleading and has introduced a number of myths. For one, it suggest that we ought to play games at work, which would be a difficult proposition to make to managers who try to keep their employees on task, for example. In fact, gamification is not about games or the gaming industry at all. It is neither about simply adding rewards and points (Robertson 2010) to incentivize consumers, nor about merely adding leaderboards to work contexts to compare employee performances. Likewise, gamification is also not just about adding fun competitions and using 'Game Theory' (Peters 2011) to introduce cooperation and conflict into decision-making processes. The distinguishing characteristic in games is that game design principles are brought to bear within a game, whereas with gamification, game design principles are applied to existing organizational, real world problems, situations or processes.

We define gamification as: the application of lessons from the gaming domain in order to change stakeholder behaviors and outcomes in non-game situations. Arguably, this is a fairly academic definition, but at its heart lays the notion that through gamification, we turn traditional organizational processes into fun, game-like experiences. To better understand gamification, it is necessary to break this definition down into its core components, beginning with lessons from the gaming domain. Specifically, we present the MDE Framework, which posits that there are three game-design principles, known as mechanics, dynamics, and emotions (adapted from Hunnicke, LeBlanc, and Zubek 2004). *Mechanics* are the instructions of a game, specifying its goals, rules, and prescribed playing sequence, and rarely change. *Dynamics* emerge when people start to play, and are defined as the interpersonal results of following, bending, or breaking the mechanics. Dynamics are harder to predict, as they depend on the players and can change over time. *Emotions* are the affective states that occur when people partake in the game that are formed around how players feel about the mechanics and dynamics of the game.

Together, these three game principles describe how good games are designed. We argue that the same principles apply for designing gamified consumer experiences. Somewhat surprisingly, given the popularity of the gamification today, we only found one study that explored gamification in the context of consumer behavior. Lounis, Neratzouli, and Pramataris (2013) conducted in-depth interviews with fifteen consumers, in which consumers expressed their opinions regarding environmentally friendly products and gamified shopping. The results of this study reveal that gamification has potential to increase consumer purchase intentions, as well as potential to increase their willingness to pay (Lounis et al. 2013).

Thus, market research (Burke 2011; Meloni and Gruener 2012), as well as initial academic research on gamification, and reports from industry, suggest that gamification can lead to a number of important outcomes, both desirable and undesirable, in the consumer behavior realm. In order to shed light on how gamification can change behavior in desired ways, we apply an experience-lens to the processes that are to be gamified. For example, rather than arguing that saving energy becomes fun when people turn off appliances that are not in use (which is not fun), we think of it as an overall experience that can be made more fun by adding appropriate mechanics, dynamics and emotions to it. In what follows, first we introduce our experience framework, and then we present four cases that illustrate how through MDE, gamification can make consumer experiences more fun and more successful.

## A MATTER OF EXPERIENCE

We reason that gamified experiences can be described using two fundamental dimensions (adapted from Pine II and Gilmore 1998, 2011): variations in player participation and in player connection with the gamified environment. Player *participation* describes the extent to which the individual is either passively involved in the experience or actively contributes to it. Player *connection* describes the type of environmental relationship that unites the individual with the experience. In absorption, the experience unfolds before the person and occupies the person's mind, whereas in immersion a person becomes part of the experience itself.

These dimensions permit the delineation of four types of experiences, and we argue that most traditional experiences fit neatly into one of the four descriptive quadrants of Figure 1. Imagine the experience of a traditional boxing match. If it's a good one, it will have lots of *observers*. Glued to their TVs, they are clearly passively involved and absorbed in the fight – this is one type of experience. There are also those who attend the fight ringside. *Spectators*, as members of the audience, get a lot closer to the action. The tension in the air, the heat of the arena, and the cheers of the other spectators immerse them deeply into the fight. Of course, in hopes of one day entering the ring, there are also *apprentices* who take lessons to master the sport. Boxing is a very active and absorbing experience for them, but as long as they are only shadow-boxing, they are not fully immersed and remain outside of the action. Lastly, there are of course the boxers themselves. They are the real *performers*, who actively participate in the experience, are highly immersed and leave everything else behind when they exchange bouts with other performers.

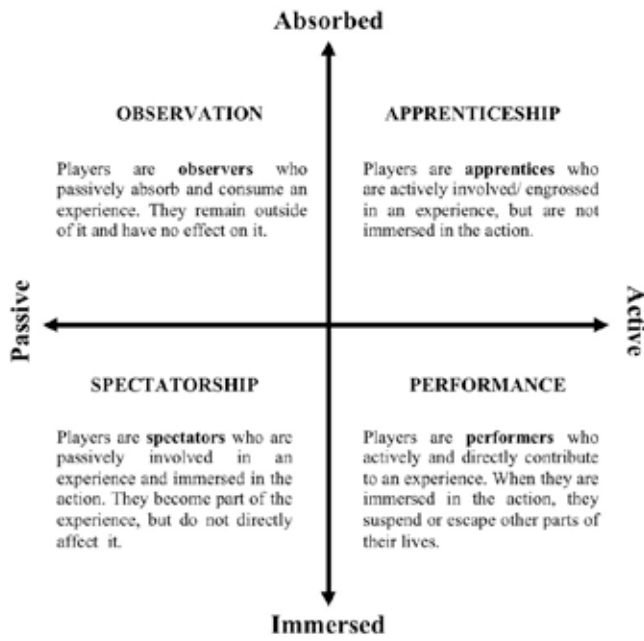


Figure 1: Types of Player Experiences

### TRANSFORMING EXPERIENCES

To aid understanding of how gamification can transform traditional business processes, we present cases to show the results of applying the MDE Framework to change the role of the player. Specifically, in the following four subsections, we describe the gamification of a prostate cancer awareness campaign named Movember; the gamification of the launch of singer Jay-Z's book *Decoded*; the gamification of art-curation at the Brooklyn Museum; and finally the gamification of personnel management using software called Freshdesk. In each of these examples, the traditional consumer experience has been gamified to include other elements of experience, and the role of the individual involved with the activity expands. We present these to show how through the appropriate use of gamification principles, traditional consumer experiences can become more fun and engaging by combining appropriate elements from the four quadrants to deepen the connection and involvement with players.

#### Gamifying Awareness Campaigns: Movember

When individuals *actively* participate in an experience and are *absorbed* by it (e.g., attending a university lecture), players assume the role of an apprentice. Traditional social awareness campaigns are good examples of such experiences, often with interested members of the public engaging in conversations with outreach volunteers to learn about social issues. But garnering public interest can be quite difficult. However, Movember, an organization dedicated to raising awareness of prostate cancer, has successfully gamified its annual public awareness campaign by expanding this experience to include elements of all experience quadrants. Every November since 2003, male players grow moustaches to “change the face of men’s health”, and both male and female players work to raise money and public awareness of prostate cancer.

The *mechanics* of the experience are limited to the month of November; each male player must start November with a clean shaven face, and then throughout the month must grow and groom a moustache (Movember 2012). Male and female players both work, online

and offline, to generate donations and to increase awareness of prostate cancer. These efforts are rewarded through various achievement rewards including dollar figure milestones for fundraising, and leaderboards that track player, team, and even country performance. *Dynamics* are largely collaborative, with a friendly sense of competition where teams want to raise more money than others, but have as an overall goal the maximization of their collective donations. Movember generates a variety of positive *emotions* as players often enjoy the sense of pride and amusement of watching others’ moustaches or showing off their own regular ‘regents’ (like Super Mario’s or Albert Einstein’s) or particularly eye-catching styles (a ‘Fu Manchu’ or a ‘Salvador Dali’). Interestingly, the milestone progression rewards (e.g., coupons for razors and shaving cream) players can win are not overly attractive, rather it is the fun, gamified experience that attracts 1 million players annually to Movember.

Indeed, Movember only succeeds by changing the very nature of public awareness campaigns. Traditionally, people attracted by awareness campaigns (think about street level campaigns of Greenpeace and SCPA) are largely apprentices who are at best actively involved and absorbed in the experience. In Movember, these individuals are also entertained by being observers as they passively absorb the progress of others (e.g., watching moustaches grow). In addition, players become performers when they grow moustaches and actively immerse themselves by educating others about men’s health. Female players, unable to grow their own moustaches, can still be immersed in the campaign and indirectly affect it by supporting their male by generating discussion about men’s health and prostate cancer. Finally, people involved in Movember can also be spectators, as they passively watch those around them and cheer them on. Movember combines all four experience types to provoke an emotionally engaging experience for players, and motivates not only friendly competition, but also collegial and supportive dynamics aimed at collectively raising funds for and awareness of prostate cancer.

Awareness and fundraising campaigns are only one example of gamifying a traditional experience in which people are predominately apprentices. There are many others – Khan Academy, for instance, attracts millions of students who support each others’ learning process through novel gamification mechanics, dynamics and emotions. More generally, employee training sessions and professional development workshops can be gamified to further motivate attendants by making them assume the role of performers, spectators, or observers.

#### Gamifying a Book Launch: Decoded

When an individual *passively absorbs* an experience (e.g. when watching a movie), players are observers. Book launches are good examples of experiences that involve passive and absorptive participation of their attendees.

Droga5, a young advertising agency, provides an example of how this can be changed through gamification. When launching singer Jay-Z’s book, *Decoded*, Droga5 utilized a real world scavenger hunt, named Decode, in which participants had to find the pages of Jay-Z’s book. The result was a highly successful book launch: Jay-Z saw his Facebook friends increase by more than one million, *Decoded* was covered by most major international news outlets and many cultural influencers (e.g., bloggers), and the book spent 18 weeks on the New York Times’ best sellers list. To understand how the Decode campaign achieved all this, we again turn to evaluating the experience.

The *mechanics* of Decode were similar to those of a typical scavenger hunt: Decode consisted of sharing the 300 pages of *Decoded* across 200 physical locations (some locations had two pages) in thirteen major US cities in the month before the book’s release in

stores. The spatial dimensions of the scavenger hunt reflected the content of the prose on the any given page, and players could garner ideas of where the pages were located based on hints they found offline “on-the-street”, and online. A fun and competitive *dynamic* emerged as individual players raced to be the first to find the page both online and offline. Progression mechanics and achievement rewards were given to the first player to find each page. This player was rewarded with a copy of Decoded, with the discovered page signed in ink by Jay-Z. In addition, the player received an invitation to a book reading by Jay-Z at the New York City Library. Players experienced a full range of *emotions*, including excitement when competing to decode a page, elation when successfully decoding a page, or frustration and disappointment when unable to find a page.

Droga5 took the traditional book launch experience, in which consumers were predominantly observers that could not affect the experience, and gamified it. Droga5 extended the experience into the other quadrants such that players assumed roles other than that of the observer. Players acted as apprentices when they received clues about pages and learned about Jay-Z’s life. Similarly, when players sought out a page either physically or online, they became performers who actively produced their own book launch experience. Furthermore, players were able to review pages already found by others as well as the clues that led to their discovery, turning players into spectators who could appreciate the creative placement of pages. This combination of the four types of experiences lead to a book launch that was successful for the publisher and the participants alike.

Some other forms of advertising have already been gamified. In 2010, a corrective tape brand called Tipp-Ex launched an advergaming (Mallinckrodt and Mizerski 2007) on YouTube.com, called “Hunter shoots a bear”. Ultimately, this advertisement became a “choose your own adventure” in which viewers decided the outcome of the encounter by typing what they wanted the hunter to do to the bear. Beyond advertisements, many experiences in which players are observers could be gamified, such as attendance at movie theatres or plays.

### Gamifying Art Curation: Brooklyn Museum’s GO Project

Individuals can be *passive* yet *immerse* themselves in the experience (e.g., going on a scenic drive), creating the experience of players being spectators. Individuals become part of the experience, but do not directly impact it. For instance, art galleries invite visitors to view pieces of artwork that a gallery curator previously chose. Brooklyn Museum’s GO Project tried to change this by providing an opportunity to co-create (or co-curate) an art exhibit. The GO project encouraged the public to visit working studios, and invited participants to nominate artists whose work they would like to see at the museum. Over the two-day event, an estimated 18,000 members of the public visited 1,708 artist studios across 44 Brooklyn neighborhoods.

The GO project rule *mechanics* involved numbering each artist’s studio and then encouraging players to visit a variety of studios to observe art, or artists at work. After visiting five studios, players would receive an email ballot and could vote on their favorite artist. Voting took place over two days, and the whole event was bounded by the Brooklyn city limits and by registered artists’ studio locations. Players engaged in the GO Project to be part of a community. This resulting overarching, collective *dynamics* determined which artists would be successful for the GO exhibit. However, even those artists that were not chosen for the exhibit still increased the exposure of their artistic practice to a whole new pool of potential art enthusiasts. The results of the voting and other associated statistics were dis-

played on the museum’s GO website for public access and view. GO players could experience many *emotions*, not only by voting for their favorite artist, but also by observing artwork and meeting artists. Players expressed feelings of wonder or surprise at discovering how many artists lived around them, by observing their artwork, meeting the artists, and by voting for them. Moreover, players were exposed to other art enthusiasts and feelings of fellowship and belonging to the art community resulted.

Through gamification, the Brooklyn museum GO exhibit offered players multiple elements of experiences. Like most museums, visitors acted as spectators of artwork and other exhibits that create an individual esthetic experience. In contrast to most museums, however, the Brooklyn Museum’s GO exhibit also had elements of apprenticeship, observation, and performance. Because the Brooklyn museum GO exhibit generated awareness of the fact that art was being created in people’s neighborhoods, players had the experience of being apprentices. That is, the museum’s patrons acted as apprentice curators when they discovered new artists and their stories. Furthermore, because the experience involved going to art studios to become immersed and active in the nomination process, players also had the experience of being performers. Finally, the experience included assuming the role of the observer, as players watched artists at work and observed the process of artwork creation.

A number of other experiences in which players are spectators could be gamified. Indeed, trips to a variety of places of historic or scientific interest could be improved by incorporating roles as apprentices, performers, and observers. For example, to increase tourist traffic, zoos, science centers, or planetariums could ask patrons to help co-create their exhibits. Similarly, fans cheering or singing along at festivals, concerts, or sporting events also be apprentices, performers, or simply observers if the experience was gamified.

### Gamifying Personnel Management: Freshdesk

Finally, when the individual is both *actively immersed* in an experience (e.g., playing a sport), the experience is one of being a performer with a measure of control as to how the experience unfolds. Work can be such an experience, when employees actively perform job related tasks while being deeply immersed in the workplace environment. In this context, one problem that many employers face is to increase productivity and sustain employee engagement. Freshdesk is a helpdesk software program for customer support centers that addresses this problem through gamification.

Freshdesk’s *mechanics* convert customer inquiries, including telephone inquiries and comments posted on Twitter and Facebook, into virtual tickets that are then assigned to customer service employees. Freshdesk rewards employees with points for successfully completing a virtual ticket. Employees become players who accumulate certain numbers of points reach designated levels and receive badges for their work, which are visible to superiors and other employees. In addition, these points provide managers and employees alike with a means of monitoring performance, and serve as incentives for improvement. Players or teams win a Freshdesk period by accumulating the most points. Moreover, individual players or teams compete for the position of having the most points on a leaderboard. The accumulated points signal a clear leader in the organization on both the team level and the player level, inspiring a competitive *dynamic*. In addition, dynamics such as bragging, or cheering for other players or teams, can emerge. Players experience a range of *emotions* due to the social nature of the competition, including excitement, amusement, surprise, wonder, and frustration.

Freshdesk deepens and extends employees’ experience: Freshdesk takes a typical work environment and turns it in a gamified ex-

perience that incorporates multiple elements of experiences. That is, the experience of going to work is one of performing: employees are immersed in their workplace and are actively involved in creating the workplace experience. Freshdesk adds apprenticeship and observation aspects to the working experience; employees learn more about the service offerings through their interactions and observe the friendly competition and other dynamics that may emerge. Thus, Freshdesk creates an engaging and deeper experience by including elements of education and entertainment in addition to more the traditional experience of being a performer in the workplace.

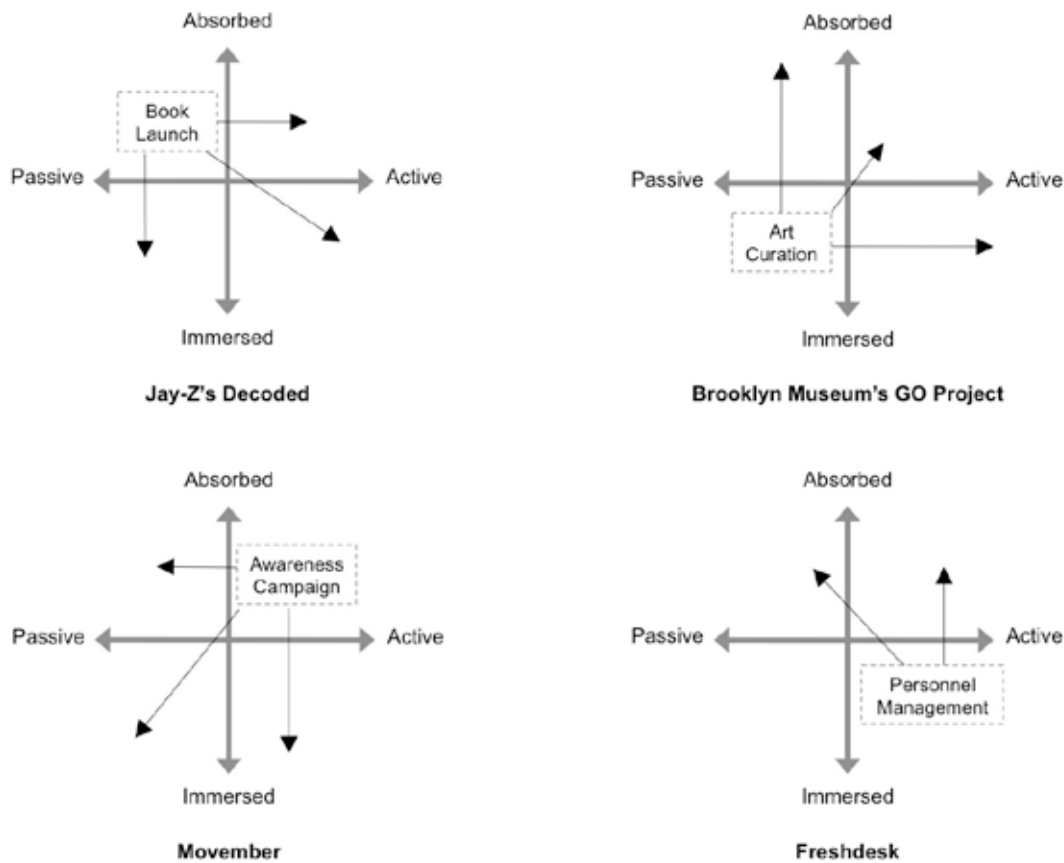
Performances other than HR could be gamified. For example, take a personal experience many people can relate to: losing weight. Many of today's weight loss tools extend this experience through gamification. There are those that keep track of calories (e.g., Calorie Counter), offer information on how much stored energy is in food (e.g., Food Energy Calculator) and reward players with badges for each five pounds lost (e.g., Fit Bit).

**THE DEPTHS OF ENGAGEMENT**

In each of the above examples of gamified experiences, a traditional experience has been revolutionized using the MDE Framework's gamification principles to deepen and extend players' experiences. In Figure 2, we provide a simple summary of the trends in these examples; specifically, we show the traditional experience and

the general trends of expansion into the most appropriate experience quadrants that occur as a result of gamification. Sometimes, players are involved, to various degrees, in all four types of experiences, in other cases players adopt fewer roles. These four examples have offered a glimpse into how applying the gamification principles can engage the public, employees, consumers, or patrons to achieve organizational goals.

Thus, using a typology and cases, we show that gamification can transform individuals into different types of players - observers, apprentices, spectators and performers – who vary in terms of the extent to which they actively or passively participate in the gamified experience and in the degree to which they are absorbed or immersed in the gamified environment. In each experience, gamification added elements of fun – thus turning experiences such as raising money for prostate cancer or simply doing ones job as a customer service employee into something more fun and engaging. Success in gamification will depend on understanding the player experience, and thus must begin with understanding who the players are themselves. Indeed, at the root of engagement is a connection between the experience and the players (Chatfield 2010; Zichermann and Cunningham 2011); this requires not only an in-depth understanding of the current experience the player has, but also of the emotions and dynamics players for which they yearn.



**Figure 2: Expanding Experiences via Gamification**

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# The Influence of Color, Shape, and Font Formatting on Consumers' Perception of Online Drugstores

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## ABSTRACT

On-line retailing has created a global marketplace in which a large number of companies compete, consequently providing consumers with easy access to a wide variety of choices. As consumers increasingly rely on the internet in order to gain information, website trust is one of the key differentiators that will determine the success or failure of many retail companies (Bart et al. 2006; Benedicktus et al. 2010; Urban, Sultan, and Qualls 2000).

In order to create long-term relationships, successful marketing strategies attempt to understand how website trust is developed and how trust influences consumers' behavioral intentions. Particularly when consumers face some degree of risk in a purchase situation, trust in the retailer's website plays a vital role (Doney and Cannon 1997; Jarvenpaa, Tractinsky, and Vitale 2000; Schlosser, White, and Lloyd 2006). In the marketing literature, trust has been predominantly studied in the context of relationship marketing (Doney and Cannon 1997; Ganesan 1994), relying on exchange theory. Exchange theory (Thibaut and Kelley 1959) proposes that individuals form associations on the basis of trust and try to avoid exchange relationships that are likely to bring more pain than pleasure. Trust is at its highest when the trustor (consumer) believes the trustee (company) is credible and is willing to be sympathetic to the actions of the trustor (Mayer, Davis, and Schoorman 1995; Rousseau et al. 1998).

In the literature trust is defined as a multi-dimensional construct (Doney and Cannon 1997; Ganesan 1994; Mayer et al. 1995; McKnight, Choudhury, and Kacmar 2002; Rousseau et al. 1998). Thus, trust measures are typically comprised of competence, benevolence and integrity. Competence beliefs reflect the consumer's confidence that the firm has the skills necessary to perform the job (Mayer et al. 1995). Benevolence beliefs reflect confidence that the firm has a positive orientation towards its consumers beyond an ego-centric profit motive (Mayer et al. 1995). Integrity beliefs reflect confidence that the firm adheres to a set of moral principles or professional standards that guide its interactions with consumers. This conceptualization can also be extended to online trust (Schlosser et al. 2006; Yen and Gwinner 2003).

There is wide agreement that web site design is an important component in building consumer trust (Hoffman, Novak, and Peralta 1999; Schlosser et al. 2006; Shankar, Urban, and Sultan 2002; Urban et al. 2000). A body of research proposes that the development of online trust goes beyond security and privacy and is closely connected with the perception of website aesthetics (Bart et al. 2005; Gupta, Yadav, and Varadarajan 2009; Harris and Goode 2010; Urban, et al. 2000). When surfing a website the first time, consumers judge the attractiveness in fractions of seconds. This first impression is crucial in determining the usability and trustworthiness of a website (Tractinsky et al. 2006; Tractinsky and Lowengart 2007) and influences consumers' intention to re-purchase.

Empirical findings in the online aesthetics literature highlight visual complexity and color schemes as being the most salient design features for consumers (Cyr, Head and Larios 2010). Evidence exists that color schemes affect consumers' trust in a website (Cyr et al. 2010; Kim and Moon 1998). Long-wavelength colors (e.g., blue and green) are viewed more favorably, more aesthetically appealing and more trustworthy than short-wavelength colors (e.g., yellow and red) (Goldberg and Kotval 1999; Latomia and Happ 1987). According to Lichtle (2007), blue is generally associated with security and trust. Cyr et al. (2010)

explored how various website color schemes (blue, yellow, grey) affect consumers' color appeal in website design. They found that increased color appeal influences trust and satisfaction, which results in e-loyalty. We therefore propose that the color of a website has an influence on consumers' trust perception.

Interestingly, the influence of shape and font formatting on trust has thus far been neglected in marketing research. The literature reveals that formal structures reduce risk and uncertainty (Sitkin 1995). Various shapes engender differential responses across individuals (Arnheim 1974). Circular shapes are associated with softness, love, warmth, and harmony whereas angular shapes are associated with hardness, coldness, hate, aggressiveness, and conflict (Bar and Neta 2006; Berlyn 1960; Berlyn 1976; Liu 1997; Zhang, Feick, and Price 2006). In the product design literature, for instance, Zhang et al. (2006) reveal that angular shapes for picture frames and company logos are more attractive than are circular shapes. Bar and Neta (2006) and Westerman et al. (2012), however, paint a different picture, highlighting a general preference for circular shapes with a subsequently higher intention to purchase. However, there is general agreement that circular shapes trigger positive emotions whereas angular shapes cause negative emotions (Bar and Neta 2006; Zhu and Argo 2014). We therefore propose that trust as an emotion is influenced by angular versus circular shape of a website.

Typeface design, as well, significantly influences consumers' valued impressions and their perceptions of web aesthetics and trust (Hagtvedt 2011; Henderson, Giese, and Cote 2004). Especially font formatting as a sub-category of typeface design is a widely neglected research area. One of the most commonly used formatting distinctions is bold versus standard. To our knowledge no study exists measuring the influence of font formatting on consumers' trust perception.

Referring to trust-related theory, we define trust as a multi-dimensional construct consisting of competence, benevolence and integrity. Besides trust in a website, transaction security is another important issue, as consumers prefer secure transactions when surfing and buying online. Transaction security assumes a low risk exposure and is therefore closely connected with the formation of online trust and the confidence of consumers in the online seller (Bart et al. 2005; Cho 2006; Grewal et al. 2003; Harris and Goode 2010; Schlosser et al. 2006). Especially in the context of drug websites, purchasing goods is related to high risk, and therefore conveying transaction security is a strategic tool to better satisfy consumers.

According to current research in website design, trust is also strongly connected to customer satisfaction and loyalty (Cyr et al. 2010; Garbarino and Johnson 1999). Studies have found a significant relationship between satisfaction with the service provider and commitment to trust a relationship (Rusbult et al. 1991). Satisfaction in this regard is the main antecedent of consumer trust in the company's capability (San Martin and Camarero 2005).

In summary, this raises the question whether consumers' trust in a website, their satisfaction and loyalty as well as their security perception can be influenced by website design elements like color, shapes, and font formatting style. We therefore hypothesize that the color of a website (yellow vs. blue), its shape (circular vs angular) and the font formatting style (standard vs. bold) will have an influence on (a) perceived benevolence, (b) perceived competence, (c) perceived integrity, (d) and perceived security, as well as on consume' (e) satisfaction with, and (f)

loyalty towards, an online drugs retailer, named e-doctor. To test this we conducted the following experiment.

## METHOD

### Participants and Design

Participants were 396 students from a European university (125 males and 271 females). The study employed a 2 (website color: yellow vs. blue) x 2 (web site design: circular vs. angular) x 2 (font formatting: standard vs. bold) between-participants factorial design. Participants were randomly assigned to one of the eight different experimental groups. Dependent variables were participants' assessments of e-doctor's benevolence, competence, integrity, and security, as well as participant satisfaction with, and loyalty towards, e-doctor.

### Measures

**Dependent Variables:** Perception of benevolence was measured with a 5-item scale (Cronbach's alpha = .87) which was adapted from Mayer and Davis (1999). Measures for competence were also adapted from Mayer and Davis (1999), also via employment of a 5-item scale (Cronbach's alpha = .92). For integrity we used a 3-item scale (Cronbach's alpha = .89) adapted from Mayer and Davis (1999). Security (Cronbach's alpha = .88) was measured with a 2-item scale adapted from Grewal et al. (2003). Consumer response was measured by two constructs of purchase behavior: customer satisfaction (Cronbach's alpha = .89) was measured via five items adapted from Fornell et al. (1996), whereas loyalty (Cronbach's alpha = .96) (3-items) was measured via the scale of Zeithaml, Berry, and Parasuraman (1996).

**Confounding variables:** Measurement of participants' online experience (1 item) was achieved via an adapted version of Bart et al. (2005). In order to assess online experience with drugstores we used one ad-hoc item. Online risk awareness (Cronbach's alpha = .82) was measured with the 3-item scale of Schlosser et al. (2006). Risk aversion (Cronbach's alpha = .75) was measured by a 3-item scale adapted from Donthu and Gilliland (1996). Preference for the colors yellow and blue, preference for angular and circular designs, and preference for standard and bold fonts were each measured by one ad-hoc item. All items were measured with 6-point rating scales (1 = I do not agree at all; 6 = I totally agree).

### Materials and Procedure

Participants took part in the experiment individually, via a PC. They were instructed to view several analgesics on the web page "e-doctor" and subsequently—but not before 60 seconds had elapsed—were given the opportunity to select one of these analgesics for their medicine cabinet. Following this they were required to answer the questions pertaining to the dependent variables, confounding variables, and demographics.

## RESULTS

2 x 2 x 2 ANCOVAs were conducted in order to evaluate the effects of the three between-participant factors of web page color (yellow vs. blue), web page design (circular vs. angular) and font formatting (standard vs. bold) on e-doctor's perceived benevolence, competence, integrity, and security, as well as participants' satisfaction and loyalty. Participants' online experience, online experience with drugstores, online risk awareness, risk aversion, preference for the color yellow and blue, preference for angular and circular designs and preference for standard and bold fonts were included as covariates.

None of the ANCOVAs indicated significant interaction effects. ANCOVA with competence as the dependent variable yielded a significant main effect for the variable font,  $F(1, 378) = 7.27, p = .007$ , indicating that participants perceived the web page e-doctor to be more

competent when a bold font was used ( $M = 3.92, SE = 0.09$ ) in the stead of a standard font ( $M = 3.57, SE = 0.09$ ). ANCOVA, with integrity as the dependent variable, indicated a significant main effect for the variable design,  $F(1, 378) = 7.19, p = .008$ , which indicates that participants ascribed more integrity to the web page e-doctor when it contained circular elements ( $M = 3.87, SE = 0.09$ ) instead of angular ones ( $M = 3.52, SE = 0.09$ ). ANCOVA, with security as the dependent variable, indicated a significant main effect for the variable design,  $F(1, 378) = 5.96, p = .015$ , indicating that participants considered e-doctor to be a more secure web page when it contained circular elements ( $M = 3.58, SE = 0.11$ ) instead of angular ones ( $M = 3.21, SE = 0.11$ ). ANCOVA also revealed a significant main effect for the variable font,  $F(1, 378) = 5.72, p = .017$ , indicating that participants perceived e-doctor to be a more secure web page when a bold font was employed ( $M = 3.58, SE = 0.11$ ) in stead of a standard font ( $M = 3.22, SE = 0.11$ ). ANCOVA, with loyalty as the dependent variable, yielded a significant main effect for the variable font,  $F(1, 378) = 6.19, p = .013$ , indicating that participants expressed more loyalty towards e-doctor when a bold font was used ( $M = 2.71, SE = 0.11$ ) in stead of a standard font ( $M = 2.33, SE = 0.11$ ). ANCOVA, with satisfaction as the dependent variable, yielded a marginally significant main effect for the variable font,  $F(1, 378) = 2.95, p = .087$ , indicating that participants experienced more satisfaction with e-doctor when a bold font was used ( $M = 3.45, SE = 0.09$ ) instead of a standard font ( $M = 3.23, SE = 0.09$ ). ANCOVA, with benevolence as the dependent variable, did not yield significant main effects.

For the manipulation check respondents evaluated the following statements: "Yellow is the dominant color of this website," "blue is the dominant color of the website", "the website consists mainly of angular shapes", "the website consists mainly of circular shapes, "the font formatting is mainly bold", "the font formatting is mainly standard". All items were measured with 6-point rating scales (1 = I do not agree at all; 6 = I totally agree).

Results indicate that the color yellow was perceived as being more dominant in the yellow color condition than in the blue color condition (5.81 vs. 1.95;  $t(366) = 23.42, p < .001$ ), whereas the color blue was perceived as being more dominant in the blue color condition versus in the yellow color condition (6.22 vs. 2.49;  $t(335) = 23.87, p < .001$ ). Angular shapes were perceived as being more dominant in the angular shape condition than they were in the circular shape condition (5.82 vs. 4.24;  $t(351) = 8.03, p < .001$ ), and circular shapes were perceived as being more dominant in the circular shape condition than they were in the angular shape condition (3.85 vs. 2.18;  $t(348) = 8.44, p < .001$ ). Bold font formatting was perceived as being more dominant in the bold formatting condition than it was in the standard formatting condition (4.38 vs. 3.31;  $t(394) = 5.34, p < .001$ ), whereas standard font formatting was perceived to be more dominant in the standard formatting condition versus in the bold formatting condition (4.84 vs. 4.06;  $t(390) = 3.91, p < .001$ ).

## DISCUSSION

The aim of this study was to investigate whether the aesthetic features of color, shape, and font formatting influence consumers' appraisal of the benevolence, competence, integrity, and security of, as well as consumer satisfaction with, and loyalty towards, an online drugstore.

The findings indicate that consumers perceive an online drugstore to be more competent when a bold font is used instead of standard font. Furthermore they ascribe more integrity to an online drugstore when the website contains circular elements instead of angular ones. Consumers' perceptions of an online drugstore's benevolence were not influenced by the color, shape or font formatting used in this study. Furthermore, consumers are more loyal to, and tend to be more satisfied with, an online drugstore if a bold font is used instead of a standard font on its website. Finally an online drugstore is perceived as being more secure if circular

shapes are used instead of angular shapes, and if a bold font is used instead of a standard font.

Contrary to current research concerning colors we did not find any effect of color on our dependent variables. Although Cyr et al. (2010) also used the colors yellow and blue, and found that they had effects on trust and loyalty, in our study there were no effects. One reason for this could be that those particular colors have no special significance in the context of the drug sector.

In contrast to color, the shape of website design elements had an influence on perceived integrity and security. In the product design literature, Zhang et al. (2006) revealed that angular shapes of picture frames and company logos are perceived as being more attractive than are circular shapes. Our results are different. Circular shapes led to perceptions of greater integrity and security pertaining to the drug retailer. This is in line with studies by Bar and Neta (2006) and Westerman et al. (2012) which propose a general preference for circular shapes and subsequently a higher intention to purchase.

Marketing research on formatting style as a design element influencing consumer behavior has thus far been neglected. Nonetheless our study did find effects: Bold formatting leads to a greater perception of competence and security as it pertains to the retailers' website, as well as to more loyalty towards, and satisfaction with, the online retailer.

For online drug retailers this has the following managerial implications: particularly with respect to the drug sector, security and competence have a major impact. Therefore a bold formatting style for fonts should be used; as bold fonts also imply loyalty and satisfaction, users may also potentially recommend the online drug retailer to others. Security is a significant factor not only in the field of online drug retail but also in internet matters in general. For this reason circular shapes should be integrated into website designs. Integrity, that is, abiding by one's word and treating stakeholders in a fair manner, can thus be suggested through the use of circular design elements. Furthermore, it could be implied that consumers who perceive trust, security, and satisfaction when buying analgesics at an online drugstore might feel less pain and therefore might more easily come back to fun.

### LIMITATIONS AND FURTHER RESEARCH

The findings from this research should be considered in the light of certain limitations. Firstly, we employed only two different colors. Further research could integrate a wider variety of colors and combinations of colors. Secondly, we did not include trust supporting elements on that website, such as seals of approvals, customer reviews, or secure-browsing icons, to prove whether font formatting, color, and shape have any measurable impact in such a context. Thirdly, we recruited exclusively from a student population which is obviously not fully representative of the whole population. Fourthly, the study represented an artificial situation because the participants were not able to actually buy drugs from that retailer. Finally, the study was restricted to online drugstores. In order to obtain more generalizable results, further studies should also be conducted in other retail sectors.

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TABLE 1  
SUMMARY OF RESULTS

Construct	Color	M	Design	M	Font	M
Benevolence	Blue	3.542	Angular	3.376	Standard	3.435
	Yellow	3.396	Circular	3.562	Bold	3.503
Competence	Blue	3.817	Angular	3.657	Standard	3.565**
	Yellow	3.667	Circular	3.827	Bold	3.919
Integrity	Blue	3.724	Angular	3.522**	Standard	3.616
	Yellow	3.668	Circular	3.870	Bold	3.776
Security	Blue	3.514	Angular	3.214**	Standard	3.218**
	Yellow	3.280	Circular	3.580	Bold	3.576
Satisfaction	Blue	3.334	Angular	3.259	Standard	3.227*
	Yellow	3.343	Circular	3.419	Bold	3.450
Loyalty	Blue	2.584	Angular	2.445	Standard	2.329**
	Yellow	2.453	Circular	2.592	Bold	2.708

M = estimated marginal means

\*\* = significant main effect ( $p < .05$ )

\* = marginally significant main effect ( $p$  is between .05 and .10)

# Empirical Evidences of Brand Cultural Resonance: How Brazilians Demonstrators Appropriated a Fiat's Campaign

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## ABSTRACT

In 2013, various demonstrations occurred in Brazil sharing some of the characteristics of international movements such as the Arab Spring and Occupy Wall Street. Brazilians united their voices against the increase in public transport fares, but soon included topics such as political corruption and the underfunding of education and healthcare in their pleas, while the Government was investing heavily in preparations for the 2014 World Cup. The protests spread all throughout the country during the Confederations Cup (seen as a warm-up tournament for the World Cup) after being violently repressed by the police. On the 20th of June the demonstrations mobilized 1.4 million people in more than 130 cities (Moreno 2013).

One of the surprising aspects of this movement was the appropriation by demonstrators of the advertising campaign "Vem pra Rua" (which is referred in this article as "Come to the Street") created for Fiat, the car manufacturer. Launched in May 2013, shortly before the protests became a nationwide phenomenon, the campaign was seen on billboards and started trending on social networks, helping the movement to become vivid and fun. Its jingle was sung in the streets, it was given new lyrics and used to create YouTube videos showing the action of the demonstrators and the police. The original film can be seen in <https://www.youtube.com/watch?v=SxMIwZZPlcM&index=5&list=PL2GmqRtYHmV3exhVrT-5RjPLO50eYHIcw>

Brands constitute the main paradigm of contemporary marketing (Holt 2002) and their study has achieved discipline status (Allen, Fournier, and Miller 2008). However, according to the authors "our understanding of brands is incomplete and sometimes even misaligned with revealed realities of the brand as experienced in today's consumer, corporate, and cultural worlds." Thus, there is a gap in our understanding as to how, why or when a brand's private meanings are able to reflect and resonate the "spirit of their time" (Holt 2004).

The appropriation of the "Come to the street" campaign by the Brazilian demonstrations represents an opportunity to deepen our understanding about the concept of brand cultural resonance (Fournier, Solomon, and Englis 2008). Cultural resonance is "the degree to which a brand's claimed meanings reflect, echo, reinforce and reshape the meanings from the collective social space that consumers access in defining and shaping their lives" (Fournier et al. 2008, 43). The authors suggest eight facets by which a brand can engender this specific type of resonance: 1) cultural bedrock; 2) currency value; 3) meaning oppositions; 4) role resonance and portfolio effects 5) category resonance; 6) cultural co-creation; 7) multivocality; 8) community.

In this paper, we analyze central aspects of the Fiat brand and its campaign "Come to the Street" that allowed its cultural resonance and consequent appropriation by demonstrators.

The investigation of the presence of brands in the context of the demonstrations can be performed within the theoretical framework of New Social Movement Theory that emphasizes logics of action in the spheres of politics, ideology, and culture. Melucci (1985) understands these new movements as constituting collective actions based on solidarity as well as being decentralized, de-bureaucratized, non-hierarchical and composed of networks of small groups. Their objectives are related to long-term social and cultural changes and also symbolic transformations for the dynamic building of collec-

tive identities. The actors are highly transitory and temporary and these networks allow multiple affiliations and part-time activism. In addition, Melucci (1985) suggests that collective action takes place because demonstrators communicate with each other and produce and negotiate meanings.

In this context brands constitute an important source of cultural resources (Holt 2004). According to the author, a strong brand carries a story that circulates in culture and that in some way is able to address cultural tensions of the moment. O'Guinn and Muñiz (2004) suggest that brands have become cultural platforms which, more than simplifiers of choice or reducers of risk, have the potential to constitute themselves as declarations of ideologies.

## METHOD

Two distinct strategies were used in the study: the analysis of cultural texts (Hirschman, Scott, and Wells 1998) and in-depth interviews with demonstrators (McCracken 1988).

The video data were analyzed scene by scene and notes were taken for subsequent analysis. In order to understand the socio-cultural context in which the meanings were created and the tensions that formed the basis of these meanings, we adopted semiology (Barthes 1977). Binary oppositions - a fundamental Saussurian structure - were the key for understanding meanings (Mick 1986). The research analyzed the long commercial, the making-of video of the campaign and video interviews with executive and creators of the campaign (Reclame 2013). Both the analysis of cultural texts and the interpretation of signs, symbols and meanings are widely used in consumer behavior research (Hirschman and Holbrook 1992), mainly as from the 1980s (Askegaard 2010; Belk and Pollay 1985; Hirschman 1988; Hirschman et al. 1998; Mick 1986; Mick et al. 2004)

In addition, the research conducted 21 in-depth interviews in the city of Rio de Janeiro with informants aged 19-35 who had taken part in the 2013 demonstrations. Projective techniques were used to explore feelings and perceptions of the theme (Belk, Fischer, and Kozinets 2013), as well as stimulate memories regarding the presence of the Fiat brand in the protest movement. All the interviews were recorded and transcribed, totaling 415 pages of text. In the analysis process the research used the resource of codification, with the association of labels, highlighting important parts of each interview (Rubin and Rubin 2005). Some of these codes were suggested by the literature while others were created during interaction with the interviews. In addition, analytical summaries of each interview were produced, thus maintaining the holistic meaning of each interviewee's experience while also allowing the comparison and confrontation of the various testimonies.

## RESULTS

In Brazil, the car category expresses meanings such as masculinity, independence, achievement and wealth. Historically, the product's high price has restricted its consumption and constitutes a "dream of consumption" that is present in all social classes (Stefano 2010). In recent years, however, its price has gradually declined and consumption has correspondingly increased, but the cheapest models still cost around US\$ 12 thousand. Fiat has been the market leader for the last 12 consecutive years, what suggests the brand may have be-

come emblematic in the product category itself, achieving category resonance (Fournier et al 2008).

Fiat's portfolio targets mainly the low-end segment and the company has four models among the 10 top-selling cars in the Brazilian market. As a more affordable brand, Fiat harbors contradictory meanings in automobile category, like differentiation and inclusion; achievement and affordability. According to Fournier et al (2008) meaning opposition consists in an important facet that engenders brand cultural resonance. Hence, the brand seems to have gained an emblematic connection with the class of young and emerging consumers that constitutes the majority of the population. Additionally, in this sense, we also identify the role resonance facet (Fournier et al. 2008), which relates to meaning association of a particular social role.

The growth of the domestic vehicle fleet, together with the precarious state of the country's transportation infrastructure and public transport systems, made mobility a central theme of the recent demonstrations. However, in this case Fiat did not suffer rejection of brand hegemony, a phenomenon studied by Cromie and Ewing (2009). In the context of the questioning of the current configuration of mobility conditions in the country, the appropriation of the Fiat campaign suggests that consumers do not feel trapped or disempowered or want to move beyond Fiat (as a representation of the category and the car industry). In the demonstrations motivated by mobility problems the company was surprisingly placed "on the same side as the demonstrators."

Aired in all main media channels, the "Come to the street" campaign was created in order to strengthen the aspects of "passion" and "Brazilianness" of the institutional brand through its connection with soccer (Reclame 2013). The campaign prioritizes the construction of the collective dimension and diversity of "being Brazilian", more than a segmentation and identification of the "FIAT consumer". The video lasts one minute with images of people predominating (45 seconds). The campaign first of all shows the country's diversity focusing on the micro-social dimension (family at home, couple on the beach, customers of a commercial establishment and people camping in the countryside, etc.) Then, suggesting that a game has just ended, people start going to the streets, forming a crowd that interacts harmoniously and has broad diversity in terms of gender, class, race and age. On ten occasions the video focuses on specific individuals in the midst of the group as a collective. These instances reinforces the suggestion of diversity and include: a white/young/slim man, a white/adult/fat man, a masked man, three white/young/slim women, two young/black/slim women, two white/elderly men. The various social classes of these people could be inferred from the surroundings (e.g. alleys in a slum and a home with the paint peeling off the walls), durable goods, clothes and accessories. Thus the campaign seems to touch cultural bedrock meanings (Fournier et al, 2008), evoking durable and persistent Brazilian culture characteristics: the foundation myth of a mestizo people, constituted by the miscegenation of the white, black and indigenous races who coexist in harmony and reconcile diversity joyously. This same myth of a unified country, although constituted by differences, is also present in the testimonies of interviewees regarding their participation in the demonstrations:

*"There were very different people. Some think like me, and others have completely different ideas. In the demonstration, I think they have the same goal which is to protest against corruption and complain about public services... a single voice which speaks louder than their differences" (B. 32 years old)*

*"I didn't expect to see so many different people. During the demonstration when things are getting ugly, it doesn't matter whether you're white, black, poor, rich, old, young, women, man. People are always saying: "Are you alright?"; "Do you need anything?"; "Want some water?" (L. 25 years old)*

When analyzing the film it is noteworthy that cars, the company's central product, appear only in short scenes totaling only 17 seconds. Moreover, the product is not even mentioned in the jingle. In the first images whole cars appear, stationary, but on the edges of the screen. It is the people who are in the center of the video. When the game finishes some cars circulate in the city. But, as the celebrations become intense the cars appear surrounded by the crowd, unable to move, for example in what motorists would normally consider an adverse situation. It is interesting to note that bicycles and a van of the type used for public transport also appear in the commercial, signs that are not often seen in car commercials. The Fiat logo appears for five seconds and is prominent in only two. Our interpretation is that in the "Come to the Street" campaign cars were shown in a supporting role, as if they were hierarchically inferior to people and metaphorically to the changes that society is currently undergoing.

In their accounts, our informants also highlighted the tension between "public transport is for ordinary folk" and "cars are for the elite." Thus, by relativizing the presence of the car in the campaign, the company seems to have subverted the traditional viewpoint, approaching that of the population. In one of the projective exercises interviewees were asked to write a message to Fiat's CEO, and the message reproduced below supports this view:

*"We don't need more cars but good quality public transport. [explaining the poster] I thought about the problem of too many cars on the streets. I have felt very uncomfortable about being in this situation many times. A long line of cars, huge traffic jam, using... Because various cars have only one person in them" (H. 19 years old)*

During the interviews, the informants were shown a panoramic photo and asked to describe what they saw. Then they were asked: "If this were not a demonstration what else could it be?". Many responses mentioned entertainment events such as shows and carnival. Thus, the image of the demonstration suggests an iconic reaction (Mick 1986) related to festivity. We suppose that the images of the festive crowd in the Fiat commercial, as well as its vibrant music, reinforced the association of patriotic demonstrations with the experiences of pleasure and hedonism of soccer celebrations and music concerts.

In the interviewees' accounts of their experience of the demonstrations we can perceive a mixture of emotions varying between revolt and indignation with the status quo; fear of police violence and pride, pleasure and patriotism because they are taking part in a historic moment of the struggle to build a better country. Some even reported epiphany experiences:

*"You know, for me it was really a fantastic experience. It was almost an orgasm! (Laughter). Because, really, as I said I had never had the opportunity to go to a demonstration, to show what I was thinking." (B.32 years old)*

*"At the beginning you are tense because the police create an atmosphere of intimidation. Then you see the people and they seem to be calm and so you calm down. You are enjoying yourself along with everyone else, everyone expressing themselves*

*as I saw in this demonstration. People in the buildings flicking lights on and off... It's great! Makes you feel good to be there. And then there is only the tension when the tear-gas bombs explode." (B. 29 years old)*

Thus, the sensorial aspects experienced by the demonstrators during the protests were similar to what was portrayed in the campaign. The feeling that it was necessary to take part in this collective spirit expressing patriotic feelings seems to evidence the currency-value aspects (Fournier et al. 2008), invoked by the "Come to the Street" campaign. According to the authors this is the ability to capture trends and reflect fashions of the moment. Since it was not an official sponsor of the Confederations Cup or the World Cup (and thus forbidden to make direct associations), Fiat chose the street (and not the stadium) as the focus of the jingle's lyrics and the whole campaign. Thus, it was able to develop meanings of patriotism and collectivity from the point of view of the "street" the place where most of the population could be found and not from the "official" perspective, of the "system", the "government", or the "FIFA" stadiums.

The predominant scenario in the commercial is the urban, paved street surrounded by buildings. According to Roberto DaMatta, one of the main Brazilian anthropologists "home" and "street" are sociological categories for Brazilians that, more than geographical spaces, represent moral entities, spheres of social action, ethical dimensions, institutionalized cultural domains that arouse emotions and reactions. While at home people are qualified by their belonging to a living network of relations, in the street they run the risk of being nobody. The street can harbor contradictions whereas the opposite occurs in private spaces. It is in the street that the collective dimension gains strength and volume and diversity is welcome (DaMatta 1997).

An analysis of the demonstrators' testimonies reveals what does not belong to the street. The interviewees expressed their points of view about spaces when speaking, for example, about the people who stayed at home or in stadiums that are the domain of the elite. They described those that stayed at home in a negative fashion using expressions such as alienated, manipulated, egoistical, wanting to maintain the status quo of corruption. In the case of the stadiums, the comments were against the FIFA standard imposed for the World Cup. This standard involves making heavy investments in stadiums, thus meaning expensive tickets and restricting to the elites the spectacle of soccer, which is such an important element of Brazilian popular culture.

*"There are groups that are completely alienated, who don't even know what's happening in this country...who are also simply egoistical: I don't need public transport, I have a car, so damn public transport. (B., 32 years old)*

*"We need the "FIFA standard" in the street and not only in places frequented by the elite." (L. 25 years old)*

One can say that the use of the phrase "Come to the Street" during or outside the demonstrations imparted singular cultural meanings to the movement. The interviewees perceived that people began to use the expression as a collective identity trait, in some cases, rejecting the direct association with Fiat. Consumers thus seem to have produced a resignification which gave the campaign a different meaning from the one initially proposed by the company.

*"Besides the hashtag, some people sang during the demonstration. For example, when people are at home, in the apartment*

*buildings looking out of the window people sometimes start singing "come to the street." (B. 32 years old)*

*"Come to the street is a thing of the past, it is no longer a Fiat jingle. The lyrics changed to "Come, come, come to the street, come." (L. 25 years old)*

The above accounts suggest that the expression "Come to the Street" acquired new meanings generated by consumers in a cultural co-creation dynamic when others agents in the cultural system serve as sources for brand meaning creation (Fournier et al, 2008). The fact that the brand has a discreet presence and the company offered an open cultural content may have contributed to this fact. Fiat seems to have assumed merely a supporting role in the remodeling of meanings in the collective space. The company's official replies to the press sought, however, to distance it from the meanings of protest and the uncomfortable role of "co-sponsor" of the demonstrations, affirming that "the campaign's focus is solely and exclusively the joy and passion of soccer" (Pearson 2013). Specialized advertising news networks even aired that the campaign would be withdrawn but it was maintained, as originally planned, until the end of the Confederations Cup.

"Come to the Street" was the ninth most talked topic in Portuguese Facebook in 2013 (Facebook, 2013), suggesting its' multivocality facet. According to Fournier et al (2008) multivocality is related to range and diversity of meanings and the power to attract diverse groups of society. The declarations of the respondents revealed some positive effects of the repertoire of meanings associated with the car manufacturer. Firstly, despite being a car company, interviewees emphasized that the appropriation of the phrase by a movement whose main concern was the issue of mobility did not entail any negative opinion regarding the Fiat brand.

*"I did not see any type of action against the brand, but when I think of Fiat I think of come to the street." (B. 32 years old)*

*"If I were the owner of Fiat I would be extremely pleased. I don't have anything against companies earning a lot of money. I think they need to earn more. I think it was a great bit of marketing." (L. 27 years old)*

## FINAL COMMENTS

This article sought to enrich the understanding of cultural resonance based on an empirical study of the appropriation by the 2013 Brazilian demonstrations of Fiat's "Come to the Street" campaign.

Protests are environments of uncertainty and tension especially for governments and companies which are usually targeted by the population. During the Brazilian protests, for example, attacks took place against Rede Globo (the country's main media group) banks and large retailers (many were invaded, destroyed and sacked). This did not happen to Fiat. Although the problem of mobility was at the center of the protests, the company was not rejected, attacked or criticized. On the contrary, its campaign became a hashtag to convoke the population through the Internet and its jingle became the theme song of the demonstrations and was used as the soundtrack for videos that documented the action in the streets.

We suggest that Fiat, in its campaign, touched the social tension that was occurring at that moment, contributing as a cultural resource for creative and productive consumers, capable of generating a symbolic repertoire. This increased word-of-mouth commu-

nication through social media, a tool used spontaneously by demonstrators of various groups to shape the collective identity of the demonstration. Fournier et al. (2008) remind us that companies must forego uniquely internal brand building models to include dynamics of co-creation that also include culture and consumers as agents. In the "Come to the Street" campaign the company ended up having a "supporting" role in the meanings that the campaign came to acquire.

In the analysis of this case we identified, besides co-creation and multivocality, other dimensions of cultural resonance (Fournier et al. 2008). Table 1 summarizes the main cultural facets (Fournier et al. 2008) of this case.

The analysis suggests the importance of cultural resonance as an element of protection in more turbulent contexts. A brand's iconicity (Holt 2004), for example, its ability to reflect the "spirit of its time" appears to shift the company, usually associated with the "system", to the same side as the population and consumers. This case also highlights the importance of brands as a cultural resource (Allen et al. 2008; Holt 2002) and signals that its presence in demonstrations of new social movements all over the world may become even more common. In part because branding professionals, more than politicians and artists, are currently capable to build and coordinate messages targeted at multiple audiences using synergies between media vehicles. This case suggests that brands may have become one of the few repertoires currently shared by increasingly fragmented societies.

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**TABLE 1**  
**FACETS OF CULTURAL RESONANCE OF FIAT AND "COME TO THE STREET" CAMPAIGN**

Facets	Evidences in the Research
Cultural Bedrock	* "Come to the Street" interpretation of the foundation myth of iBrazilians as a mestizo people, constituted by the miscegenation of the white, black and indigenous races who coexist in harmony and reconcile diversity joyously. * Car category as masculinity, independence, achievement and wealth.
Currency value	*Collective celebration of Brazilianness *Social inclusion. *Street as a "hot spot" and a "resistance space".
Meaning oppositions	*Come to the Street" campaign as an iconic representation of patriotic demonstrations (political acts vs. hedonic experiences). *The campaign was interpreted as if it was a claiming against the dominant ideology. *Cars as a symbol of wealth and status versus Fiat's car as affordable and sign of inclusion.
Role resonance and portfolio effects	*Young and emergent consumers. *Social role embedded in campaign meanings.
Category resonance	*Fiat as a market leader for the last 12 years
Cultural Co-creation	* New representations of lyrics and videos using "Come to the Street" music. * #vempruarua (#come to the street) as a call for the demonstrations.
Multivocality	* "Come to the street" campaign as one of the most talked topic in Portuguese Facebook in 2013. *#vempruarua (#come to the street) viral effect. *The campaign served as an expressive element of solidarity among different groups in the movement, collaborating to construct a collective identity.



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# A Brand Culture Approach to Brand Literacy: Consumer Co-creation and Emerging Chinese Luxury Brands

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## ABSTRACT

This study focuses on brand literacy in the emerging market of China. Results reveal Chinese consumer desire to express a deep resonance between Chinese values and aesthetics and a favored brand identity. Chinese brands such as Shanghai Tang and Shang Xia – developed in collaboration with leading European luxury brands – build upon Chinese culture, values, and aesthetics to create distinctive, culturally infused brand identities. At a basic level, culture, which includes aspects of particular histories of meaning, and moments of creative innovation, can be perceived as a resource upon which branding processes and practices can draw. Yet, brand culture refers not to a simple process of applying “culture” to a brand.

Under what conditions may we perceive the many ways in which branding – and brands themselves – go beyond cultural branding, and indeed, co-create culture in relation to consumer processes and practices? One way of thinking about how brands and culture interact draws upon the notion of brand literacy – how well consumers are able to “read,” understand, and engage brands and brand messages. We explore a growing brand literacy among Chinese consumers based upon their perceptions and responses to Shang Xia’s current position in the Chinese market, and reveal how brand literacy is embedded in a cultural context and contributes to brand culture. Compared to extensive research on related, but distinct concepts of media literacy and visual literacy (e.g., Argerinou and Pettersson, 2011; Potter, 2014), brand literacy remains relatively understudied, and not well understood. Given how important brands are in the lives of consumers, this represents an important gap in consumer research knowledge. This study highlights multidimensional aspects of brand literacy and represents an initial step toward a more developed framework in the context of brand culture.

## Brand Culture

Although it is widely agreed that cultural resources provide potentially productive areas for brand development (Holt, 2002, 2004; Schroeder, 2009), most marketing scholars have yet to take notice of historical culture’s important role in brand development research. Our research focuses on a Chinese consumer context, deploying a cultural approach and examining particular narratives and potential paths regarding ways in which Chinese brands globalise. The focus on China acknowledges its steady rise as a global economic power, with the role of brand literacy poised to increase within its enormous market.

Brand culture focuses on how brands share and exchange stories, solve problems, and build communities (Schroeder and Salzer-Mörling, 2006). A brand culture approach directs our attention to shifts and changes that occur through repeated interactions between various brand actors across time and space, drawing attention to new knowledge and practices emerging around the co-creation and circulation of brands and cultures. Studies in international marketing and consumer research often overlook the co-creative power of multiple brand actors. Although market conditions, as well as other contexts and situations, may be acknowledged to influence, if not determine, brand meanings, the ways in which brand development contributes to public discourse and other aspects of living culture is underplayed.

That brand meaning is a product of co-creation is not a new concept. Fournier provides a foundation for this approach. She argued that consumers invest brands with particular meanings by consuming them in socially negotiated ways and, further, brands as companions co-create and contribute to life experiences (Fournier, 1998). Indeed, the cultural meanings of brands are often developed by “various authors” as these intersect with popular culture and important stakeholders (Bengtsson and Östberg 2006). Social and ethical negotiation between consumers, managers, and other employees also contribute to the cultural meanings of brands (e.g., Borgerson, 2005; Cova and Dalli, 2009; Holt, 2002, 2004; Schroeder, 2009; Zwick, Bonsu and Darmody, 2008). In sum, brand meanings are not fixed. Aspects of intended meanings – brand identity – might be expressed by text and images in marketing communications and other brand stimuli, however, consumer perception, experience, and aspiration may intervene with unintended meanings – brand image (Keller, 2003). Thus, the cultural knowledge of consumers filters brand communications, as consumers comprehend and sometimes reconstitute meaning into forms that are not fully consistent with brand builders’ intentions (Puntoni, Schroeder and Ritson, 2010; Scott, 1994).

## Brand Literacy

It has been suggested, however, that brand authors can understand and reconstitute what would function as relevant brand meanings only if they possess a minimal level of competency or *brand literacy*, which facilitates the reading and digesting of brand messages (Oswald, 2010). Competency is desirable as it helps determine how authors will conduct themselves vis-à-vis brands in commercial and social situations (Peñaloza and Gilly, 1999). Meaning construction in relation to brands and brand messages operates through flexible socio-cultural codes written by, and decoded between, varied authors whose interpretation of brand messages exerts a powerful effect on brand development and brand success. Market interpreters focus on reading and decoding consumer codes, partially accessed through consumer activities and choices, and through messages relayed by mass media and shareholders (Kates, 2006). This suggests that brand meaning and brand culture include a complex bundle of personal and socio-cultural meanings (e.g., Allen, Fournier and Miller, 2008; Borgerson, et. al. 2009; Schroeder, 2009).

Related to consumer learning and expertise (e.g., Hutchinson and Eisenstein, 2008), consumer socialization (e.g., Chaplin and John, 2005; John, 1999), as well as advertising interpretation (e.g., Hirschman and Thompson, 1997), current conceptions of brand literacy draw upon a cultural approach to understanding how consumers “read” brands, and engage with brand meaning and symbolism (cf. Wallendorf, 1993). Brand literacy constitutes “the ability of the consumer to make sense of and compose the signs of a brand culture and to understand the meaning systems that are at play” (Bengtsson and Firat, 2006, p. 377). For example, Bengtsson and Firat argue that highly brand literate consumers contribute to the life and meaning of the brand, and fully participate in the culture of brands, in that they do not merely follow the brand’s cultural meanings, but are able to play with and redefine brands through their co-creative activities (Bengtsson and Firat, 2006).

Oswald suggests that emerging market consumers travel through several stages of brand literacy, rapidly covering ground that took Western consumers decades to learn (see also Dong and Tian, 2009; Eckhardt and Houston, 2002; Wong and Li, 2014; Zhan and He 2012; Zhao and Belk, 2008). Interesting for our purposes here, Oswald distinguishes between Chinese consumers and Western consumers: “The distinct cultural heritage of consumers in the People’s Republic of China forms a contrast with Western concepts of luxury that is no less dramatic than the contrast between the Chinese and English languages” (Oswald, 2012, p. 133). As Oswald concludes: “The ‘next generation’ of the new rich in China may expect more of their luxury goods than to display their money and success. They expect luxury brands to both express and inform their *savoir faire*, personality, and taste” (Oswald, 2012, p. 135). In the next section, we suggest that Shanghai Tang represents Chinese consumers’ perceptions and interpretations of an emergent hybrid, multi-cultured Chinese lifestyle. Further, a brand culture perspective on brands such as Shanghai Tang and Shang Xia can shed light on how brands interact with cultural history, dialectical images, and the formation of identity.

### Setting the Stage: Shanghai Tang

Previous research in this vein focused on Shanghai Tang, a brand that promotes itself as the first and only luxury brand to have emerged from China (Shanghai Tang.com, 2014). Shanghai Tang fuses iconic elements of Chinese culture with stylish fashion for the current globetrotting shopper (Chua and Eccles, 2010). The brand includes a range of goods from wearable and affordable luxury to bespoke tailoring for suits and dresses, all of which convey the image of a modern Chinese lifestyle. The Shanghai Tang brand serves to address an important unanswered question: how do Chinese brands draw upon Chinese aesthetics to build brands, and how do consumers “read” such efforts? One study showed that Shanghai Tang plays a role in ‘the myth of the modern Chinese lifestyle,’ that is, Shanghai Tang provides a set of codes that contemporary cosmopolitan Chinese consumers might embrace or reject in identity construction and maintenance (Zhiyan, Borgerson, and Schroeder, 2013). Consumers found Shanghai Tang’s strategic citation of Chinese features, such as mandarin collars, frog closures, and butterfly buttons, intriguing and involving, and they enjoyed deciphering the complicated symbols in the brand’s designs.

Consumers clearly read the messages implicit in Shanghai Tang’s designs, displaying brand literacy in identifying Chinese cultural symbols deployed by the brand, such as gold ingots which signalled ancient Chinese exchange goods, and elaborate designs that incorporated elements from Confucianism, Imperial Chinese history, and 20<sup>th</sup> Century socialism (Zhiyan, Borgerson, and Schroeder, 2013). Informant comments about Shanghai Tang products underscore an emphasis on subtlety in Chinese aesthetics: For example, grandness, when it is expressed in Chinese aesthetics, appears in representations of landscape, which exemplifies the harmonious convergence of diverse formal patterns and designs (e.g., Henderson, Cote, Leong, and Schmitt, 2003; Li, Li, and Kambele 2012; Wong and Ahuvia, 1998). In other words, Chinese consumers exhibit a growing and culturally based brand literacy directed toward a Chinese luxury brand, a kind of functional brand literacy that highlights ability to recognize and articulate brand meanings.

### Shang Xia

Shang Xia, a Chinese luxury lifestyle brand, has chosen a focused and dense branding strategy around the use of Chinese culture and history, from which Shang Xia draws inspiration and concrete

ideas for decoration, detail, and design. At its core, Shang Xia offers low-key luxury products that relate to a shared cultural activity, the tea ceremony (Red Luxury, 2012). From the shapes of early teapots, and the scents, textures, and colors of the tea leaves, to the elegant, slow pace of the practice itself, the tea ceremony offers a deep well of material culture and Chinese aesthetics. Recently, the brand expanded into the European market: “Shang Xia, which aims to revive Chinese crafts that were nearly destroyed by China’s Cultural Revolution, including ancient styles of porcelain, cashmere, felt and furniture, is part of a new generation of Chinese brands elbowing their way into the crowded European luxury goods market” (Wendlandt and Denis, 2013). In this case, the brand maintains a connection to cultural practices, but with a historical fluidity (Bergstrom, 2012).

Shang Xia was established as a joint venture between the Hermès Group and renowned Chinese designer Jiang Qionger in 2008. The Shang Xia brand promises a quiet, simple and harmonious way of life in the midst of harried, shifting contemporary China. *Shang* (meaning “up” or “top”) and *Xia* (meaning “down” or “bottom”) reflects a state of harmony achieved through the exchanges between up and down, east and west, past and future, tradition and innovation, urban and nature. Shang Xia has three boutiques designed by Japanese master architect Kengo Kuma. Shanghai’s boutique space opened on the Bund in 2010 and has a futuristic Zen-like setting; Beijing (2012) has a Great Wall theme; and the Paris Shang Xia (2013) is the first shop outside China (Song, 2013). Shang Xia’s product lines include furniture, housewares, accessories and clothing, all of which communicate aesthetic values, attitudes, and practices that radiate out from the Chinese tea ritual. Shang Xia also develops a range of limited edition “cultural objects” every year. It is noteworthy that Shang Xia has thus far refrained from advertising, or participating in fashion shows or other standard marketing activities (Red Luxury, 2012). In an interesting diversion from typical brand promotion, Shang Xia holds two three-week-long showcases, which include live demonstrations exhibiting high quality materials and consistent craftsmanship in its products and cultural objects, with prices ranging from RMB 500 (\$80) to upwards of RMB 150,000 (\$25,000).

### METHOD

The relevant aspects of the Shang Xia case study consist of retail visits and observation, website analysis, and a set of interviews conducted in 2012 and 2013. This paper focuses on the interview data, informed by insights derived from the other sources. Interviews took place in Shanghai and Beijing, and lasted from 60 to 150 minutes. We used a snowball sampling technique to generate a set of interviews with consumers who were engaged and interested in the brand. We interviewed a Shang Xia brand manager and five consumers – two males and three females, who ranged from age 30 to 42 years old. We met and interviewed a Shang Xia brand manager in Shanghai first. During an observational visit, we met a 42-year old female Shang Xia customer and asked if she would be willing to participate in an interview. She introduced us to two more women, and they introduced us to their husbands.

The interviews were conducted in Chinese, and then translated into English by the interviewer, a native Chinese speaker. The interviews were then further translated and interpreted by a native English speaker, who checked the resulting meanings with the original translator. In analyzing our interviews, we discerned several themes that vividly capture aspects of these consumers’ brand literacy in relation to Shang Xia (Spiggle, 1994).

### Interviews: Themes of Brand Literacy

We suggest that these themes help reveal creative and co-creative aspects of brand literacy in a context of brand culture.

#### A Unifying Cultural Thread

A 30-year old man, who is a hairdresser and works in Beijing, was interviewed at a Beijing coffee shop. After commenting on the high quality of Shang Xia's products, he said:

*Shopping in a Shang Xia store was a unique experience. Its stores were like a gallery of craftwork (cashmere felt, eggshell porcelain, silver and crystal necklaces and bracelets, purple sandalwood and bamboo marquetry). In these galleries, splendid simplicity held sway in the extravagant details.*

He was quite articulate about the brand message, continuing:

*So it "threads" its product lines through a Chinese tea ceremony, rather than a commercial brand structure. As we all know, the tea ceremony was of the highest significance in Chinese hospitality. During the tea ceremony, we often need a nice tea set to serve the tea, a comfortable chair to sit in, a conformable dress, necklace or bracelet to wear, the great scent of sandalwood incense to enjoy. So you know, since Shang Xia's collection stems from Chinese lifestyle, its collection provided an extended experience of tea to its guests.*

*In its stores, as soon as a visitor walks in, a shop assistant brings him (her) tea in a small, white porcelain tea cup, and then the assistant acts like a guide and will explain each product's history and origin. Customized music plays in the background in each store, with a breathtaking video of the Chinese composer Dou Wei giving a performance using different sized Shang Xia porcelain bowls as instruments.*

This consumer appreciates subtle aspects of the brand, and demonstrates a keen understanding of the "unifying thread" of Shang Xia's brand culture. In an advanced stage of brand literacy, he recognizes and espouses the symbols of the brand, and reveals a strong connection between the brand and aspects of emerging contemporary Chinese culture.

#### Resonance Between Esteemed Cultural and Aesthetic Values and the Brand

Another consumer expressed a resonance between the aesthetics and values of China's first lady and the Shang Xia brand. A 42-year old woman who works in the Shanghai Drama Art Center was interviewed at a coffee shop in Shanghai. She pointed out that,

*I was touched by the outstanding craftsmanship, the simple designs and the fine materials that it [Shang Xia] used. In fact, almost everything Shang Xia offered was of otherworldly beauty. It was called a certain kind of 'splendid simplicity'. [...] Such simplicity was totally different from a bling-bling or logo brand. [...] Taking this floor-length cashmere felt robe as an example [she pointed to the robe in her bag]; this robe was created with a seamless piece of fabric and a Mongolian yurt-making technique. This completely handcrafted robe was a simple cocoon design where the front lapels fall to the floor in waves – all achieved with no cutting.*

After sipping a coffee, she went on: "They [Shang Xia's products] all looked simple yet graceful, in the mode that Peng Liyuan

wore on her first trip overseas as China's new first lady." She pointed to a TV screen in the coffee shop, which was reporting that Peng Liyuan had become an instant media sensation in China during first trip abroad as China's first lady: she had a smile on her face, dressed in a simple black pea coat and carried an elegant unbranded bag. "When I bought this [Shang Xia] coat, for example, it felt like attending a private club; no one knew what it was while its stuff was gorgeous – zitan [a rare wood associated with the imperial Chinese court], eggshell porcelain, and hand-crafted cashmere among other materials sourced from far-flung ateliers around China."

In these comments, she reveals a "fluency" in Shang Xia's codes that most Western consumers would not (Oswald, 2012). She represents what Oswald calls the "next generation" of Chinese consumers who associate luxury not necessarily with expense or high quality, but with Confucian values of harmony and simplicity (Oswald, 2012; see also Wong and Ahuvia, 1998; Zhiyan, Borgerson and Schroeder, 2013).

#### Revaluing Chinese Traditional Craftsmanship and Creativity

A 45-year old French-Chinese art teacher was interviewed at the coffee shop at a Shanghai Hong Kong Plaza Service Apartment. Then, the interviewer accompanied her to Shang Xia's store in Shanghai Hong Kong Plaza. She is insightful and articulate about the brand's origins and mission:

*It was time we worked together to bring back craftsmanship or keep it going all together. Mass production was not the answer to luxury, but Shang Xia perhaps was. It was simply transferring the three legacies of craftsmanship, creativity and style into a different environment.*

She reveals an awareness of a deep cultural connection to Shang Xia:

*Both the name and the concept of Shang Xia were fabulous. The word "Shang" meant "top" while "Xia" meant "bottom". At first, you might feel that the brand was confused or joking. But consider further. You realize that "Shang" (top) often stood for Heaven and the Past while "Xia" (bottom), stood for Earth and the Present. The Heaven and Earth was a very important subject in Chinese culture as both, in balance, could create peace and harmony. [...] I think Shang Xia stands for a balanced and harmonious lifestyle from the social sphere to the private; from the urban to nature. This requires a kind of splendid simplicity. We may feel that the words "Shang" and "Xia" stood perfectly for this concept and no other words could replace them. This is the charm of the topsy-turvy.*

At Shang Xia's store in Shanghai Hong Kong Plaza, she went on to explain the why he liked various products, pointing them out within the retail space as she spoke:

*In terms of heritage and innovation, the first case that came to mind was this collection [She pointed to the zitan table, which is part of the Da Tian Di collection]. The Da Tian Di collection was inspired by traditional Ming dynasty-style furniture and had smooth, graceful and modern lines. It used a more complex square outline with rounded inner lines, instead of the common rounded outer lines. Then with hundreds of thousands of polishes, a mortise-and-tenon joint was developed by perfectly aligning the round stool with the square back of the chair. Handcrafted zitan wood has the most comfortable and velvety texture.*

Not all consumers might make these cultural connections, but for this highly brand literate one, Shang Xia offers a complex constellation of Chinese aesthetics, industry, and meaning. She seems intrigued by heritage and innovation beyond functional attributes or status hierarchy. She exhibits knowledge of what Bengtsson and Firat (2006) call a “brand professional” – willing and able to engage with and fully participate in the brand culture of Shang Xia.

## DISCUSSION

Our informants described Shang Xia as a Chinese modern lifestyle brand committed to inheriting Chinese traditional culture and rejuvenating Chinese craftsmanship, in part by supporting Chinese artisans from throughout China. This positioning has resulted in a broad category and product range, as well as intensive labor in making the products. Shifting Chinese brands, such as Shanghai Tang and Shang Xia, away from a focus on indiscernible cheap commodities, toward high quality, as well as, brand development, provides an opening for new insights from brand culture.

We argue that as Chinese consumers change and Chinese brands develop, the tools of a brand culture approach allow us to discern and capture the growth of brand literacy. Indeed, brand literacy emerges as a key construct with which to understand consumers in emerging markets. In articulating themes of a *unifying cultural thread, resonance between esteemed cultural and aesthetic values and the brand, and revaluing Chinese traditional craftsmanship and creativity*, our interview subjects revealed a profound sense of brand knowledge and expertise, showing off their brand literacy, rooted in deep knowledge of and appreciation for Chinese aesthetics and Chinese values, as articulated by an emerging Chinese luxury brand. Whereas, Chinese consumers have been perceived to buy luxury products solely to display status and affluence in a hierarchal society, our informants understood, articulated, and were willing to participate in brand culture beyond typical expectations of Chinese consumers. We see not only a functional or creative brand literacy, but also an articulation of the co-creation of brands and cultures, as a brand culture approach would suggest.

The study is limited by a relatively small sample, and a restricted set of brands, in a particular market. Further work will be necessary in other cultural contexts, and with more diverse brands. Despite these limitations, this study contributes to research on emerging markets, branding, and understandings of brand literacy. As an initial step toward rethinking brand literacy, these cases proved useful exemplars of highly symbolic brands, with a strong cultural orientation. Prior analysis of Chinese brand culture suggested that aesthetic values and historical culture inform, and hold out possibilities for, a global as well as local reception of branded products and services. The Shang Xia research further offers a lens through which to observe productive and co-creative aspects of Chinese brand development in the global marketplace, and sheds light on the ways in which a growing brand literacy supports brands and culture in circulating and constructing each other.

We suggest that brand literacy has several aspects as seen through the lens of brand culture, including *functional* brand literacy, *creative* brand literacy, and *co-creative* brand literacy, each expressed in particular cultural contexts. Functional brand literacy consists of the ability to recognize and describe qualities of brands. Creative brand literacy involves pushing beyond what the brand is expressing, creating personal and cultural associations to the brand. Co-creative brand literacy implies engaging and perceiving the brand’s participation in the creation and circulation of brands and cultures. In this way, the brand culture approach helps reveal distinct aspects of brand literacy.

## CONCLUSION

This study revealed highly brand literate consumers. Brand literacy was shown to have a number of dimensions that emerged from analysis of interview data. Interestingly, notions of media literacy and visual literacy include critical thinking skills and encompass the ability to *produce* media and visual communication – for example to “create and distribute our own media messages” (Media Literacy Project, 2014), whereas work on brand literacy has yet to embrace an active consumer, managing his or her own brand, or participating in brand communities. In the age of social media, this marks an important omission in our understanding of brand literacy. Furthermore, the role that brand literacy plays in consumer research arenas such as digital environments, emerging markets, and young consumers is somewhat unclear. The consumer interviews reported here reveal that brand literacy is not merely an act of “reading” brands and deciphering brand messages. From a brand culture perspective, brand literacy reveals an active consumer and an active brand, co-creating meanings and culture. This study represents a step toward a more coherent and culturally based theory of brand literacy. Finally, there may be more aspects of brand literacy, including *critical* brand literacy.

**Table. Aspects of Brand Literacy**

	<i>Concept</i>	<i>Study Examples</i>
<b>Functional Brand Literacy</b>	ability to recognize and describe qualities of brands in a particular cultural context	description of fashion and retail practices; appreciation of brand symbols
<b>Creative Brand Literacy</b>	pushing beyond what the brand is expressing, creating personal and cultural associations to the brand	understanding how brand expresses personal, social and cultural values
<b>Co-creative Brand Literacy</b>	participation in the creation of brand meaning and values	production, sharing and use of brand aesthetics and values in relation to particular cultural contexts

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# Lonely Rebel or Pioneer of the Future? Towards an Understanding of Moral Stakeholder Framing of Activist Brands

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*“The Titanic was built by professionals, the Arche Noah by the amateur.”*

## ABSTRACT

In the “age of transparency” (Fournier and Avery 2011, 198) brands are increasingly forced to position themselves in relation to public sensitivities concerning socioeconomic and ecological problems, such as labor rights, social fragmentation, and environmental degradation (Arnould 2007; Hertz 2001). Simultaneously, the growing possibility for an “ethical commodity culture” (Shaw, Newholm, and Dickinson 2006, 1062) has yielded a number of niche markets for brands that position themselves deliberately in ethical and/or political contexts. Polit-brands (O’Guinn and Muniz 2004), for instance, exploit the opportunity to provide market-mediated platforms for citizenship and to help consumers to interpret the complexities of the (political) world that surrounds them (Arnould 2007; Holt 2002).

Adding to an extensive body of literature studying consumer tactics of placing moral demands on the market (e.g., Hollenbeck and Zinkhan 2006; Kozinets and Handelman 2004; Luedicke, Thompson, and Giesler 2010; Ulver-Snestrup, Askegaard, and Kristensen 2011), this study rather draws attention to brand-induced activism that challenges dominating social principles, practices and more fundamental ideologies (Giesler 2008; Humphreys and Latour 2013; Kozinets and Handelman 2004). Activist brands promote oppositional moralities through actively transforming shared ideals, concerns, or criticisms into organized debates (c.f. Den Hond and De Bakker 2007), ultimately driving brand stakeholders into a moralized brand-scape (Salzer-Mörling and Strannegård 2010). Yet, despite a long tradition in social movement research “to study targets and tactics of activist groups” (Den Hond and De Bakker 2007, 901), branding and consumer research literature still lacks insights into how activist brands mobilize cultural debates around a brand’s promoted cause.

This study steps into this void through analyzing online discourses twining around a brand that turned from a small, nationally operating shoe manufacturer to an activist brand fighting for legal legitimization of crowd-funding solutions in the midst of a financial crisis. When banks decided to lower the company’s credit line, the company started a successful campaign to raise money directly from brand fans and creditors for needed investments. As the financing model faced opposition from the national financial market authorities, the manufacturer mobilized extensive media coverage and consumer support campaigns, including street protests and petitions. Within one year the brand framed a distinct movement culture (Benford and Snow 2000) promoting market and culture change in the financial sector.

The passionate online discussions and media coverage on the shoe manufacturer offer important avenues for research on discursive stakeholder framing (Martin and Schouten 2014) evolving around an activist brand, and the promoted cause of crowd-funding as an operational practice promising to deliver a new configuration of social practices (Grimm et al. 2008). In this context, this study aims to uncover brand-related discourses (c.f. Keller 2011) in order to investigate the link between moral framing in mediated networks of brand stakeholders and the legitimization processes evolving around an emerging market practice (Giesler 2008; Humphreys and Latour 2013). To gain perspective, the article provides a theoretical introduction into the phenomenon of crowd-funding, discusses existing

research perspectives on brand activism and legitimation processes, and empirically examines the social dynamics of branding discourse (Vallaster and von Wallpach 2013). Subsequently, the findings section presents the discursive framing of an activist brand by media reports and three discursive ‘moral coalitions’. The article closes with a discussion on how stakeholder framing charges activist brands with moral meanings, and how rhetoric tactics drive the legitimation processes of emerging market practices.

## THEORY

### The Phenomenon of Crowd-Funding

Throughout the last decade the public interest in funding models eluding the traditional credit markets has risen quite dramatically (Grimm et al. 2008; Ordanini et al. 2011). Recent alternative funding solutions suggest new principles of financial support for businesses, as traditional (credit) markets fail to take on the risks and costs of providing small, uncollateralized loans for innovative initiatives and investments (Karnani 2007). From a producer perspective, micro-financing solutions and alternative funding models tap into a pressing need for unconventional and non-bureaucratic forms of financing, especially for social entrepreneurs and small and medium-sized companies (Schenk 2012). In this vein, Lawton and Marom (2013) label crowd-funding practices as revolutionary systemic responses that recognize the social power of crowds forming affinities around community initiatives and company projects (c.f. Kozinets, Hemetsberger, and Schau 2008).

The popularity and success of the pooling of money from smaller investors grows particularly in sports, movie, fashion and scientific research industries. Crowd-funding is defined as a “collective effort by people who network and pool their money together, usually via the internet, in order to invest in and support efforts initiated by other people or organizations” (Ordanini 2009; as cited in Ordanini et al. 2011). From a consumer perspective, Ordanini et al. (2011, 462) label consumer investment support as the next possible consumer role in the evolution from “targets,” “information sources,” “co-producers,” “value co-creators” to “investors.” The emergence of alternative funding solutions thus mirrors a wider tendency towards direct consumer participation in creative, yet also risky entrepreneurial activities (Cova and Dalli 2009).

### Brand Activism and the Processes of (Moral) Legitimation

As much as any innovative idea, technology, or product, crowd-funding practices are inclined to the processes of gaining commonly acknowledged acceptance—legitimacy—on cultural-cognitive, normative and regulative levels (Humphreys and Latour 2013). Giesler (2008) has pointed towards stages of perpetual structural instability and legitimational struggles accompanying structural transformations in market systems. Accordingly, the way towards “institutional compromises in historical transitions” (Giesler 2008, 751) is paved by cultural debates over countervailing ideals and tacit ideological appeals (Holt 2002; Holt and Thompson 2004).

Firms, consumers, media, and public policy actors are important market catalysts perpetuating cultural debates and stakeholder framing around emerging markets, products or practices (Arsel and Bean 2013; Martin and Schouten 2014). For once, firms drive new market

practices through establishing a physical reality (Humphreys 2010). More than merely endowing legitimacy to an existing consumer practice, physical reality adds “agency that changes practices and constitutes a different consumer” (Martin and Schouten 2014, 866). However, brand activism exceeds mere product provision through attributing brand-related action with more abstract moral concerns for what is deemed “as right, good or virtuous” (Caruana 2007, 297). Consumer research has pointed in this context to various tactics of signaling alternative moral preferences on the market, including the use of ideological resources from intellectual fields in resistance practices (Ulver-Sneistrup, Askegaard, and Kristensen 2011), or the proactive provision of a common ideological outlook in alternative market systems of exchange relationships (Thompson and Coskuner-Balli 2007).

In sum, existing research has not yet touched upon the case of activist brands driving legitimation processes of emerging market practices. Living up to the increased public and research interests in the market change potential of crowd-funding solutions, a focus on stakeholder framing allows for further insights into the cultural debates and countervailing ideals related to established and emerging regimes of practices.

### METHOD

To gain an empirical understanding of discursive dynamics forming around an activist brand (Vallaster and von Wallpach 2013), this project draws on case-related media reports and forum discussions starting from October 2012, when the financial market authority issued its first warnings, until January 2014 when the company was finally ruled to adapt its micro-financing model to legal frameworks. In line with Humphreys and Latour (2013), this article views media as an amplifier of meanings and frames in the digital age that affects the establishment of legitimacy on a sociocultural level. Using key word search, the author sampled all media articles and the respective reader comments available on three of the biggest national newspaper online platforms. In order to capture a heterogeneous yet illustrative group of opinion leaders, the outlets were chosen according to their diverging target groups and online discussion formats, and to their high density of reporting and traffic on the case. Out of the preliminary sample of 68 articles, the most relevant texts were identified according to the number of comments they generated. The final selection of 15 articles with a total of 2,563 quotations was representative in covering the most important events in the recent brand story and in achieving theoretical saturation (Charmaz 2006). Following principles of interpretive analytics of content according to Keller (2011, 2012), the interpretative process of triangulation combined a rich description of the phenomenal structure with the analysis of meaning patterns and narrative patterns to arrive at a thorough description of stakeholder framing of an activist brand.

### FINDINGS

The case analysis reveals discursive stakeholder framing of an activist brand by media, as well as by three discursive ‘moral coalitions’ (see also table 1). Media reporting *sets the arena* for legitimation foremost through presenting the hard facts on the proposed funding model and its controversies with established law: financial market authorities threatened the company with penalties for operating a deposit banking business without concession when borrowing about 3,000 million Euro from private persons for a permanent interest rate in return. Media orchestrates the moral configuration of the protagonists through providing steady updates on the actions taken by the owner, the authorities, and further interest groups. The portrayal of the company owner includes, for instance, the campaign-

ing at all official channels, the preparation of an amendment for the national assembly, and finally his compliance to the threatening penalty “*while never giving up on the fight.*”

As rhetoric tactics, media coverage alternates the detailed clarifications of positions with direct, emotionalizing quotes from the protagonists, for instance, from the owner: “*I was so angry; my greatest aim was then to get independent from banks and without debts*”, or, from the authorities: “*No matter if good people from the region or crooks,*” says a speaker; “*There are laws to be obeyed and one has to adhere. If not, it is an issue for politics.*” Media frames the owner and the authorities as clear opponents with adverse positions, leaving it up to the reader to judge on their credibility: “*The question arises: who should be protected from whom?*” The owner is portrayed as emotional and fervent, representing in this matter the greater category of small and medium-sized companies. He “ *fights against the authorities*”, which “*put the owner off the private credits*”, yet stand for creditor protection and adherence to existing laws. Media also brings up the question of authenticity and commercialization (c.f. Gabl and Hemetsberger 2012), visible in the prominently placed heading: “*The owner should earn a price for brilliant marketing*” [quote from the FMA chairman].

Amongst the most commented news articles are those reporting on the positions of third parties, such as political parties and official representations of banking and commerce sectors, raising questions on liability for crowd-funding solutions more generally. Ultimately, media accounts for support coalitions and greater solidarity in the population: “*He [the owner] sees the nation standing behind him.*”

### Moral Architects: Building the Greater Puzzle

The discursive coalition of moral architects builds its moral positioning on adhering to the virtuous principles of the given ruling systems, while simultaneously promoting the pragmatic bottom lines of alternative funding ideals. The coalition both engages in *safeguarding and auditing* the authorities; on one hand, authorities gain their legitimacy from protecting citizens from risky endeavors, system failures (i.e. non-transparency) and deception. On the other hand, as market flexibility is not inclined in this bureaucratic system, the current model offers little freedom for creativity, self-initiative, imagination and innovation. When viable ideas such as the funding solution proposed by the shoe manufacturer cannot thrive, compliance comes to an end: “*We adhere to laws only, if they make sense.*”

In terms of solutions, the coalition *proclaims an architectural mission* that involves connecting piece-meal policies with business realities and civil society demands (Levitas 2013); “*He [the owner] also says that rules are good: But adapted to small and medium-sized businesses, not to profit-oriented enterprises and financial aristocracy.*” The coalition pleads for a systemic reform as the creative alternative funding solution taps into the void created by past failures of the global financial market system. Discursive threads circle around the idea of enabling an *organized creative chaos*, and depict the problem solving process as “*a delicate balancing act.*”

In rhetoric tactics of *objectification*, the coalition repeatedly directs the discussion away from emotional conflict talk and towards straightforward problem analysis or progressive imagination of alternatives: “*The best and well-thought of variant is, maybe, the democratic bank [...] I mean, it is the question if that is the answer to global capitalism [...] but it's worth a try.*” Furthermore, the coalition praises the funding idea and, in strategies of *de-coupling* (Salzer-Mörling and Strannegård 2010), disentangles the owner as a person from the project. Eventually, the coalition spreads *provoking unresolved queries*: “[...] *The question remains, how to separate persons acting with juristic integrity, like the owner, from the rest of the liars?*”



	<b>Moral Architects</b> Building the Greater Puzzle	<b>Moral Archeologists</b> Uncovering the Badlands of the Ruling Systems	<b>Moral Disenchancers</b> Crashing the Flight of Fancy
<b>Moral Positioning:</b> <b>Admonitions and Recommendations</b>	<p><b>Safeguarding and auditing the authorities</b></p> <ul style="list-style-type: none"> <li>- “Authorities inspect and control banks to protect banking customers (if good or bad I am not judging here).”</li> <li>- “We adhere to laws only, if they make sense.”</li> </ul> <p><b>Declaring an architectural mission</b></p> <ul style="list-style-type: none"> <li>- “He [the owner] also says that rules are good: But adapted to small and medium-sized businesses, not to profit-oriented enterprises and financial aristocracy.”</li> <li>- “I am not generally against such models, but the legislator should provide well-thought-of framework conditions and not a quick-and dirty solution, as was demanded before.”</li> </ul>	<p><b>Consciousness-raising</b></p> <ul style="list-style-type: none"> <li>- “The authority tells you where you are allowed to invest [...] Don’t you see how sick this system got?”</li> <li>- “Who I am supporting with my money as a private person, that is none of “Dad State’s” and “Mum Bank’s” business.”</li> </ul> <p><b>Declaring an archeological mission</b></p> <ul style="list-style-type: none"> <li>- “He [the owner] stabs the system through the heart. Some have tried it before; they have been suppressed by the authorities.”</li> <li>- “Who is dependent from the banks is in “God’s Hands”, to fight against that is just natural...”</li> <li>- “The Titanic was built by professionals, the Arche Noah by the amateur.”</li> </ul>	<p><b>Re-embedding complexity</b></p> <ul style="list-style-type: none"> <li>- “The problem of the financial crisis is the deficient regulation and that the banks themselves do not understand their business.”</li> <li>- “Where would we be, when everyone does “pick and choose” and just obeys the laws he likes?”</li> </ul> <p><b>Declaring a disenchanting mission</b></p> <ul style="list-style-type: none"> <li>- “Why didn’t he choose a legal funding model? He could have achieved the same! Does he really want to play bank? He is no bank, he is a shoe producer!”</li> <li>- “[...] choose one of the options [...] and do not play the savior of the small and medium-sized ones!”</li> </ul>
<b>Rhetoric</b> <b>Tactics</b>	<p><b>Objectification/De-coupling person and project</b></p> <ul style="list-style-type: none"> <li>- “It is not about judging the person, but about the financial project.”</li> </ul> <p><b>Progressive imagining of alternatives</b></p> <ul style="list-style-type: none"> <li>- “The best and well-thought of variant is, maybe, the democratic bank [...] I mean, it is the question if that is the answer to global capitalism [...] but it’s worth a try.”</li> </ul> <p><b>Placing provoking queries</b></p> <ul style="list-style-type: none"> <li>- “What should he do? 1) close his company and lose 100 jobs? 2) look for another solution (which)?”</li> <li>- The question remains, how to separate persons acting with juristic integrity, like the owner, from the rest of the liars?”</li> </ul>	<p><b>Defending and praising the brand</b></p> <ul style="list-style-type: none"> <li>- “By the way: ... these are awesome shoes!!”</li> <li>- “He is not a lawbreaker, he is a pioneer where others can learn a lot from.”</li> </ul> <p><b>Prompting solidary action</b></p> <ul style="list-style-type: none"> <li>- “Do not wish him well, buy shoes!”</li> </ul> <p><b>Denunciating, despising the opponent/ mirroring the case</b></p> <ul style="list-style-type: none"> <li>- “As much as I appreciate the owners’ creative and commendable entrepreneurship, as much I despise the total failure of the authority in all the fiscal scandals of the last decade.”</li> </ul> <p><b>Cynicism</b></p> <ul style="list-style-type: none"> <li>- “Hurray, we go with waving flags to hell!!!! The world economy is showing us how it goes, other countries are laughing at our rigid traditions and stubborn resistance [...]”</li> </ul>	<p><b>Questioning the “blind” believers</b></p> <ul style="list-style-type: none"> <li>- “Oh my god , what a cult.”</li> <li>- “See it from the point of view of the investors: There is somebody, smiling, not mentioning any risks, he makes a few nice promises and collects the money.”</li> </ul> <p><b>Demasking the brand façade</b></p> <ul style="list-style-type: none"> <li>- “With that he saves the annoying involvement in equity capital; that when people have something to say when they invest. The guy needs to become a politician!”</li> <li>- “Off-topic, I think people are suspicious, who believe they would be talking for all.”</li> </ul> <p><b>Naysaying</b></p> <ul style="list-style-type: none"> <li>- “And as soon as the project crashes [...] then financial experts start to cry”, the “poor investors”, [...] and then it is everyone else’s fault (from god to the company to the authorities)...”</li> </ul>

**Table 1: Discursive Coalitions and the Moral Stakeholder Framing of an Activist Brand**

### Moral Archeologists: Uncovering the Badlands of the Ruling Systems

The second coalition applies an ‘archaeological method’ (Levitas 2013) to its moral positioning in terms of digging out, exposing, engaging with, and critiquing injustice and oppression in current ruling systems. Discourses of *consciousness-raising* evoke emotions of anger against restricted autonomy concerning independent funding models and the patronization of authorities: “*The authority tells you where you are allowed to invest [...] Don’t you see how sick this system got?*” Banks and politics are framed as being in “*an own world*”, “*in a “decoupled system*”, “*offering investments into fantasies*”, not caring for the small and medium-sized companies and, more generally, the ‘structurally weak’: “*The big ones, they let go, the small ones they want to get!*” Corruption, partisanship and inactivity of authorities are interfering with entrepreneurs taking individual initiative and engaging in self-help in times of crisis.

As solutions, the coalition urges investors to evaluate investment risks independently, civil society to create eligible framework conditions, and consumers and brands to fight against inequalities if necessary. The coalition encourages the activist to uncover the badlands of the political and banking system: “*He [the owner] stabs the system through the heart. Some have tried it before; they have been suppressed by the authorities.*” In the activist brand’s mission, there is hope for suitable financial participation models: “*Not bureaucratically, but directly between person and person.*”

Rhetoric tactics in this coalition include *defending and praising the owner, the idea, the product, and the company*: “[...] *It is a model for the future, of course not for the banks.*” and *prompting solidary action*: “*Do not wish him well, buy shoes!*”, “*Aux armes, citoyens...*”. The traits associated with the owner are pioneer spirit and creativity, honesty, trustworthiness, courage, and endurance when suffering transgression with a good idea. Tactics of *mirroring the case* compare the situation with other controversial cases in the political history of the country. Finally, next to direct tactics of *denunciating and despising the authorities*, *cynicism* covertly supports the idea of self-control and individual freedom: “*Dear owner, you have decided to be a bank yourself. That’s “cul”! [...] Do not forget to give parts to the powerful—in other words: representatives of the state—or, you’ll get into trouble.*”

### Moral Disenchancers: Crashing the Flight of Fancy

The third mode of discourses, the disenchanting coalition, educates the desire for a better future promised by the activist brand. Countering the moral archeologist position, the coalition defends the existing legal system, and proposes even tougher regulations for financial markets: “*The problem of the financial crisis is the deficient regulation and that the banks themselves do not understand their business.*” The coalition *re-embeds complexity* in the debate and pillories the manner how the owner takes up the fight; he tramples the laws, promotes easy taking-in of others’ money without structural requirements, and builds a pyramid game that potentially harms creditors: “*Then he [the owner] argues—compelled from the leftist mainstream—against the de-regulation of financial markets just to bring an unleashed product to the market.*”

In terms of solutions, the coalition votes against the relaxation of regulation for banking deals in the midst of the financial crisis: “*But it is not a solution that amateurs come along with even lesser regulation.*”, “*If the authorities show their goodwill in this case, tomorrow there will be 100 other companies with their own laws. Pure anarchy!*”. The owner should appease himself; choose a funding model within the existing system, and even go to jail for the existing

model: “*Why didn’t he choose a legal funding model? He could have achieved the same! [...]*”

As rhetoric tactics the coalition applies *questioning the blind believers* through disparaging the public support as a “*cult*” that turns the activist brand into the unchallenged “*hero*” and the owner to the desired “*messiah*”: “*The victory of populism and ad writers. Good night democracy!*” The rhetoric tactic of *demasking the brand façade* (Holt 2002) entails questioning the owner’s abilities as a sound business man, as well as denouncing the product quality and other company strategies. The coalition portrays the owner as a “*stubborn trouble maker*”, who is stabbing the company into financial trouble and following selfishly a line of thought: “*Off-topic, I think people are suspicious, who believe they would be talking for all.*” *Naysaying* helps playing down the proposed funding solution with worst-case scenarios: “*The outcry and wailing of the creditors would start in the moment, when the house of cards begins to collapse.*”

## DISCUSSION

The case of an activist brand fighting for legitimation of an alternative funding model provides an example of moral discourses gaining traction in daunting times of crisis, or collective uncertainty (Willke 2003). The activist brand steps into collective contingencies and nescience about financial risk evaluation during a global financial crisis, and perpetuates a kind of ‘*pop-up morality debate*’ laden with heterogeneous moral admonitions and recommendations on the case. In this vein, the proposed alternative funding solution turns for a while into an intermediary between different social order systems of the (financial) market, civil society, and legal regulations and authorities.

The analysis of online stakeholder framing of an activist brand adds two major insights to legitimation and branding research: Firstly, the study unveils how brand activism mobilizes mediated networks of consumers and brand stakeholders to charge the brand with distinct moral positions. Rather than enacting a singular, culturally shared ‘hero model’ on the market stage (Giesler 2008), the three unveiled discursive coalitions endow different roles to the activist brand in the legitimation processes of alternative funding solutions. Moral architects portray the brand as *a small piece in a greater puzzle* indicating one of many possible ways towards more direct and just forms of cooperation between consumers and producers. Moral archeologists rather picture the owner as an “*everyman*” (Luedicke, Thompson, and Giesler 2010, 1018) when promoting self-reliance and individual autonomy, and as *a pioneer of the future* when fighting for justice in a morality play today. Moral disenchanters, by contrast, dash the hope for a better society and depict the activist brand as a ‘*lonely rebel*’ (Bauman 1995) building up his own, utopian illusions—a ‘house of cards’.

Secondly, the study indicates how three discursive coalitions drive the legitimation processes of the promoted cause with distinct rhetoric tactics. Although all discursive coalitions work with tactics of *drawing future scenarios*, each coalition endows different objectives to the imagination of the future: Taking up on the cause of *organizing a creative chaos*, moral architects suggest further funding alternatives as a kind of synthesis to overcome seemingly irreconcilable difficulties in an ideological conflict between the authorities and the activist brand (Husemann and Luedicke 2013). Rather than defining a final solution, the coalition directs legitimation discourse away from the brand case towards greater processes of imaginative thinking about “*real utopias*”, or, *heterotopias of resistance* (Chatzidakis, Maclaran, and Bradshaw 2012; Kohn 2003). The archeologist coalition shares with the activist brand the goal of uncovering social injustices within the existing moral system and thus *intensifies the*

problematization of established regimes of practices. The tactics of cynicism and praising the brand as a legitimate symbol for a wider movement hereby justify the solidary cause of a *political form of solidarity* (Scholz 2008). The coalition of disenchanters works against these efforts through *disclosing the "process of ideological recruitment"* (Thompson and Coskuner-Bali 2007, 147), hence, recommitting legitimation discourse towards established regulations.

The case of the activist shoe manufacturer invites further research to pay attention to the interplay between an activist brand's targets and tactics and the wider dynamics of 'moral mobilization'. To expand the unit of analysis from being limited to online inquiries, future brand activism research might consider targeting main protagonists and further stakeholders, including brand fans, creditors, or political parties for moral frame analysis. Ultimately, since the financial market system typically eschews morality from its formal functions (Willke 2003), the present study encourages in-depth analysis of the social dynamics and legitimation processes arising specifically at the intersection between the seemingly contradictory orders of morality and calculation.

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# Inferences on Negative Labels and the Horns Effect

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## ABSTRACT

Consumers need information about the ingredients in and manufacturing of food products. However, certain labels such as artificial flavoring, genetically modified organisms (GMOs), and even conventional (as opposed to organic) farming can lead consumers to form negative inferences concerning food products. Perhaps it is no surprise, then, that manufacturers are not motivated to disclose such labels to consumers (Wong 2014). The current debate on mandating negative labels on packaging is controversial (Chokshi 2014). Although consumers demand the right of information, the negative inferences formed by such negative labels on front-of-packaging causes widespread apprehension (McWilliams 2014). This is because although nutrition labels provide concrete information about attribute contents, labels and advertising slogans on the package, used to advertise the product, can be a source of consumer bias.

In particular, research offers insight into how a single attribute can bias a consumers global inferences about the product that can, in turn, influence subsequent inferences toward unrelated attributes (i.e., the halo effect; Asch 1946; Eagly, Ashmore, Makhijani and Longo 1991). Consumers are known to make positive inferences of food products accompanied with a positive health halo (e.g. reduced salt; Andrews, Netemeyer, and Burton 1998). However, little is known about the presence and potential consequences of foods associated with claims that connote negative evaluations (e.g. labels such as artificial flavoring, artificial ingredients or genetically modified organisms- GMOs). Although the term “horn’s effect” has been used to connote a negative halo, limited research exists on the extent to which negative labels influence inference formation (Kappes, Schmidt and Lee, 2006).

For over twenty years, up to 70% of processed foods sold in the US has contained modified ingredients (Weasel 2009). In an attempt to promote consumer rights and seller responsibility, the food and Drug Administration (FDA) mandates full disclosure of nutrition information of food products (French and Barksdale 1974). Yet, recent policy debates highlight the disadvantages of ingredient labels that conjure negative evaluations of a product. Although the FDA supports voluntary labeling of such products, manufacturers often avoid such disclosure (Wong 2014). Hence, regardless of scientific research determining safety in consumption of products with negative labels, the challenge is to overcome the negative halo associated with such labels.

Three experiments seek to provide direct evidence of negative health halos and, in doing so, offer novel insight into the processes by which health halos in general alter consumers’ inferences. First, we demonstrate that consumers in general make less favorable inferences of food products associated with a negative halo. We then demonstrate the role of critical thinking and show that consumer inferences of food products associated with a negative label affect low critical thinkers. Finally, we demonstrate the underlying role of calorie estimates as affected by negative labels when participants are primed to think diagnostically. Taken together, the results have important implications for consumer bias in response to negative labels.

## CONCEPTUAL DEVELOPMENT

Health halos can be nutritional claims about attributes of a product itself (e.g. low fat or sugar free) or other social ethical claims about the food’s production (e.g., fair trade; Schuldt et al. 2012). Positive health halos are known to impact consumer inferences on other missing attributes and actual consumption (Wansink and Chandon 2006). For example, when a consumer is led to believe that a fast food restaurant is healthy (e.g., Wendy’s), the consumer also makes inferences that the food served (e.g., Wendy’s salads) has other positive attributes such as lower calories.

Extending past research on the effects of health halos, it could be inferred that the effect of negative labels is similar to positive halos (Beckwith and Lehmann 1975). That is, negative labels should lead to negative inferences about specific product features. Furthermore, evidence from multiple sources suggests that negative halos may in fact be stronger than positive ones (Baumeister et al., 2001; Felps, Mitchell, and Byington 2006). Additionally, negative (relative to positive or neutral) cues have been shown to elicit less ambiguous inferences that are in general more resistant (Skowronski and Carlston 1989). Hence we hypothesize that:

*Hypothesis 1: Less favorable health inferences should be formed when a negative label is presented.*

When it comes to positive halos, research indicates that consumers are prone to inferring lower calories when a food product is positioned with a positive halo (Chandon and Wansink 2007). Could the reverse of this drive consumer inference on how healthy a product is? When global perceptions of a product are impacted negatively, the halo effect predicts that individual attributes would be inferred in a negative light. Hence, presenting a consumer with just one negative attribute (i.e., a negative health label) would cause them to generate relevant inferences (e.g., calorie estimates). This would in turn affect health inferences made of the product more broadly.

*Hypothesis 2: Inferences toward specific product attributes (e.g., calorie estimates) will mediate the effect of negative labels on health inferences.*

In making inferences based on prior beliefs, the consumer’s ability to evaluate evidence presented in an unbiased manner requires a cognitive style commonly known as critical thinking (Zechmeister and Johnson 1992). Critical thinking is the disposition that a person should be unbiased in his or her reasoning (Stanovich and West 1997). This style of thinking requires individuals to think through a problem by decontextualizing themselves from it, such that assumptions presented can be considered in a more objective manner (i.e., absence of personal biases) when processing information (Sá, West, and Stanovich 1999). Importantly, then, critical thinking is reflective less of a general motivation to process information (Cacioppo and Petty 1982) and more of a specific motivation to engage in unbiased thought. Consequently, critical thinkers often generate more hypotheses in a given situation and are less likely to hone in on one conclusion (Brookfield 1987). Hence, when it comes to negative labels, we posit that highly critical thinkers place lesser weight on negative labels.

*Hypothesis 3: Individuals low (versus high) in critical thinking should be more susceptible to effects of a negative label.*

But critical thinking can be influenced and Fernbach, Darlow and Sloman (2011) showed that when individuals reason about a particular hypothesis or prediction, diagnostic reasoning (i.e., reasoning from effect to cause) results in multiple causes of a prediction to become salient or be evaluated. On the other hand, predictive reasoning (i.e., reasoning from cause to effect) leads individuals to neglect alternative causes of a given prediction. Hence when asked to reason diagnostically, we predict that individuals would consider alternate hypothesis of what makes a product healthy vs. not, and base their judgments on alternate causes. Hence, influencing a consumer's processing can in turn, influence health evaluations, when processing is critical and made to think diagnostically. In contrast, individuals primed to reason predictively would continue to evaluate the effect with the original cause that they are anchored to.

*Hypothesis 4: Individuals primed to engage in diagnostic reasoning would alter health inferences on the label in comparison to individuals primed to reason predictively.*

Study 1 sets up the phenomenon to demonstrate that negative labels do indeed cause negative health inferences. Negative labels are shown to impact calorie inferences, which mediate the effect of the label on healthiness estimates. Study 2 demonstrates the role of critical thinking in inference formation. Finally, Study 3 demonstrates the underlying mechanism of calorie estimates that is attenuated when participants are primed to alter reasoning.

### STUDY 1

Study 1 was conducted as an initial test of the effect of negative health halos in biasing consumers' health inferences.

*Design.* An online panel was recruited ( $N = 60$ ; 50% females;  $M_{\text{age}} = 35.25$ ) under the guise of evaluating advertising for a new orange juice on the market. The study consisted of three factors (halo label: negative halo v. positive halo v. control). Participants were randomly assigned to a condition.

*Procedure.* While they were shopping for orange juice, participants were told to review an orange juice advertisement. Importantly, description of the orange juice varied as a function of condition. In the *positive halo* condition, the information "real ingredients" was prominently displayed on the label. In the *negative halo* condition, the information "artificial ingredients" was prominently displayed on the label. Note that in both the positive and negative halo conditions, the label was placed in the same position on the advertisement. In the *control* condition, no additional information was provided.

*Measures.* Participants were asked to indicate how important the product was to a healthy diet (Ma, Kusum and Grewal, 2013), how healthy was the product (Raghunathan, Walker and Hoyer, 2006), and how many calories were in the product in comparison to other brands of orange juice (Schuldt, Muller, & Schwarz, 2012). Responses to each question were provided on 7-point scales. Demographic information was then captured.

*Results.* All measures were submitted to a one-way ANOVA, with halo label condition as the independent variable.

*Importance of product in a healthy diet.* Analysis revealed a significant effect of the labels on participants' inferences of how important the product was as part of a healthy diet was significant ( $F(2, 57) = 32.54, p < .001$ ). Pairwise comparisons revealed that participants evaluated the product positioned with artificial ingredients ( $M$

$= 2.47$ ) as less important than the control ( $M = 5.05; t(37) = 6.33, p < .001$ ). The difference between the artificial ingredients positioning ( $M = 2.47$ ) and the real ingredients positioning ( $M = 5.33$ ) was also significant ( $t(38) = 8.65, p < .001$ ). The difference between the control ( $M = 5.33$ ) and real ingredients positioning ( $M = 5.05$ ) was not significant ( $p = .28$ ).

*Healthiness Inferences.* Analysis revealed a significant effect of the labels on participants' healthiness inferences ( $F(2, 57) = 35.27, p < .001$ ). Pairwise comparisons revealed when participants were exposed to the artificial ingredients positioning ( $M = 2.47$ ) they made lower healthiness inferences than the control ( $M = 5.05; t(37) = 6.33, p < .001$ ) or when the product was positioned as consisting of the real ingredients ( $M = 5.33; t(38) = 8.65, p < .001$ ). The difference between the control and real ingredients positioning was not significant ( $p = .45$ ).

*Calorie Estimates in Comparison to Other Products.* Analysis revealed a significant effect of the labels on calorie estimates ( $F(2, 57) = 4.19, p < .05$ ). Pairwise comparisons revealed that participants thought the product was likely to have more calories with the artificial ingredients positioning ( $M = 4.42$ ) than the control ( $M = 3.85; t(37) = 2.00, p < .05$ ). The difference in estimates between the artificial ingredients positioning ( $M = 4.42$ ) and the real ingredients positioning was also significant ( $M = 3.57; t(38) = 2.39, p < .05$ ). The difference between the control and real ingredients positioning was not significant ( $p = .26$ ).

*Mediation Analysis.* To determine whether calorie estimates of the product accounted for the variations in perceptions of importance, a mediation analysis was conducted (Hayes 2012; Model 1; bootstrapped with 5,000 draws). Results indicated that calorie estimates mediated the effect of the label on perceptions of importance ( $\beta = 1.56, SE = .22; p < .001$ ).

The results of this study confirm that negative labels do lead to negative evaluations of the product. Consumers infer negative health attributes, which is driven by estimates of calories of a product perceived as less desirable. In the next two studies, we sought to evaluate the role of reasoning in the formation of consumer inferences and, in particular, whether reasoning could be altered to influence health inferences.

### STUDY 2

Study 2 was conducted to evaluate the moderating role that critical thinking played in inference formation due to negative labels. Participant reasoning style was also primed.

*Design.* Participants ( $N = 198$ ; 59.1% females;  $M_{\text{age}} = 36.86$ ) were recruited from an online panel and exposed to one of two conditions (i.e. control or a negative label). The experiment was a between-subjects design. In addition, critical thinking was measured.

*Procedure and Measures.* Participants were asked to review new packaging for a cereal product. For the negative label, we used the words "Contains Additives" were prominently displayed on the packaging. First they were asked they were asked to indicate out how important they the product they reviewed was as part of a healthy diet (anchored: 1: *not very important*; 7: *extremely important*; Ma, Kusum and Grewal 2013). Then they filled out a 15-item critical thinking scale (Halpern and Riggio 2003). Participants first reviewed each of the thinking skills listed and then were asked to rate their ability with each skill on a 7-point scale. Finally demographic information was captured.

*Results. Importance of Product in a Healthy Diet.* We conducted an analysis of covariance with label and composite critical thinking score predicting importance of the product in a healthy diet, in a full factorial model. The two-way interaction of the model was

significant ( $F(1, 194) = 3.60, p < .05$ ). A spotlight analyses of low critical thinkers at plus one standard deviation from the mean critical thinking score revealed a significant difference in estimates of importance of the product in a healthy diet between participants in the control condition ( $M = 5.04$ ) and those in the negative-label condition ( $M = 3.70; F(1, 62) = 14.32, p < .001$ ). However, no distinction emerged between control and negative-label conditions for low critical thinkers ( $p = .49$ ).

The results of this study indicate that low critical thinkers did indeed modify health inferences based on the label. In the next study, the mediating role of calorie estimates was evaluated across priming conditions.

### STUDY 3

Study 3 was conducted to identify the underlying mechanism of calorie estimates on health inferences.

*Design.* Using an online panel ( $N = 180$ ; 48.3% females;  $M_{\text{age}} = 36.67$ ) the study was posed a new package evaluations study. Participants were randomly assigned to conditions in a 2 (label: control vs. negative halo)  $\times$  3 (reasoning style: control vs. diagnostic vs. predictive) between-subjects design.

*Pretests.* A pretest ( $n = 30$ ) was conducted to obtain reasoning style statements based on past research (Fernbach, Darlow and Sloan, 2010). Participants were asked to provide likelihood estimates of a series of statements that were either predictive or diagnostic. In the predictive mindset condition, participants were asked to provide likelihood ratings for seven statements that evaluated the effect given the cause (e.g. If Mary has blue eyes, how likely is it that her daughter has blue eyes?). In the diagnostic mindset condition, participants were asked to provide likelihood ratings for seven statements that evaluated the cause given the effect (e.g. If Mary's daughter has blue eyes, how likely is it that Mary has blue eyes?). After reviewing each statement, participants were asked to rate the likelihood of the prediction on an 11-point scale (anchored: 0 = *not at all likely*; 10 = *highly likely*). An independent sample t-test comparing the mean likelihood between the two sets of statements indicated that participants reported a greater likelihood score when in the predictive mindset ( $M = 8.33$ ) than the diagnostic mindset ( $M = 7.20; t(1, 28) = 3.05, p < .005$ ). Hence these two sets of statements were carried forward to the study.

*Procedure.* Participants were told that a new product was being introduced across multiple retailers and the study was intended to capture opinions on the new food package. Participants were first asked to review statements on likelihood predictions. Participants either rated predictive statements, diagnostic statements or no statements. Then participants were shown a package of a rice product called Field's Finest. In the negative label condition, "Genetically Modified Organism (GMO)," was used, where the label was positioned prominently on the package. In the control condition, there were no labels on the package.

*Measures.* After the manipulation, participants were told to imagine that they had found a new exciting recipe that needed rice as an ingredient. They were then asked to imagine shopping for rice in their grocery store. First they were asked they were asked to indicate out how important they the product they reviewed was as part of a healthy diet (anchored: 1: *not very important*; 7: *extremely important*; Ma, Kusum and Grewal 2013). Following this, participants were asked to estimate the calories in one serving of the product. Finally demographic information was captured.

*Results. Importance of Product in a Healthy Diet.* A  $2 \times 3$  between-subjects analysis of variance performed on importance of the product in a healthy yielded a significant reasoning style  $\times$  label

interaction ( $F(2, 174) = 5.07, p < .01$ ). Contrast analysis confirmed that the reasoning style moderated the effect that the negative label had on perceived importance. Specifically, in the negative label condition, the reasoning style affected perceptions of importance such that in the control condition perceived importance of the product was rated lower ( $M = 3.23$ ) than either the predictive ( $M = 4.46$ ) or diagnostic priming condition ( $M = 4.33; F(2, 174) = 6.15; p < .01$ ). When no label was present, priming mindset did not significantly impact inference ( $p = .58$ ).

*Calorie Estimates.* A  $2 \times 3$  between-subjects analysis of variance performed on nutritional inferences yielded the predicted mindset  $\times$  halo interaction,  $F(2, 174) = 3.09, p < .05$ . Contrast analysis confirmed that the reasoning style only moderated the effect that the negative label had on calorie estimates. Specifically, in the negative label condition, the reasoning style affected calorie estimates such that in the control condition calorie estimates were higher ( $M = 280.66$ ) than either the predictive ( $M = 178.26$ ) or diagnostic priming condition ( $M = 163.60; F(2, 174) = 4.80; p < .01$ ). When no label was present, priming mindset did not significantly impact inference ( $p = .63$ ).

*Mediation Analysis.* To determine whether calorie estimates of the product accounted for the variations in perceptions of importance, a moderated mediation analysis was conducted (Hayes 2012; Model 5 bootstrapped with 5,000 draws). Results indicated that calorie estimates mediated the effect of the label on perceptions of importance negative label condition ( $\beta = .48, SE = .19; p < .01$ ) but not in the absence of a label ( $\beta = -.10, SE = .19; p = .59$ ). This study suggests that the varying effects on importance of the product, was anchored on the availability of the label. Priming only influenced health inferences when the negative label was present.

### GENERAL DISCUSSION

This paper makes several contributions to literature and considerations important to policy on labels. The studies in this paper first that demonstrate negative labels causes the halo effect on calorie estimates that lead consumers to make negative health inferences. This effect is pronounced for individuals who in general less engage in critical processing of information. Priming individuals to think diagnostically, and hence consider multiple hypotheses to a given event, negates the effect of negative labels. Since the healthiness of a product is determined by other factors (e.g. sodium content, sugar content etc.), participants could be considering other alternatives to making health inferences of the product, when primed to think diagnostically. Finally, it was only when the negative label was present that priming processing style showed an effect on health inferences.

This research lends insights to policy makers attempting to regulate information presented on labels on packaging. Consumers in general react unfavorably to the presence of negative labels (that are deemed safe for consumption, while at the same time perceived as undesirable). However, this paper provides evidence that the horns effect only impacts individuals predisposed to low critical thinking. Finally, regardless of individual differences, encouraging critical thought can cause consumers to consider other factors when a negative label is present. Future research should evaluate the beliefs that drive negative inferences on negative labels.

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# Value Creation and Consumption: When Consumer Creativity Generates Value in Online Forums

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## ABSTRACT

An effect of the digital economy has been to provide consumers with almost unlimited ways to customize their consumption activities. They can craft each consumption experience to fit specific contexts, needs, emotions and other factors. A teenager's night out is documented and shared with her friends in a series of selfies posted on Snapchat. With augmented reality technology, combinations of designs and colors can be tried on before an in-store visit, or a friend's opinion solicited in real time. These examples highlight the fact that consumption is, at its very core, a creative activity. Beyond the product or service itself, creativity is in the experience: alone or with others, privately or in public, physically or virtually, now or later, home-made, customized or factory-made... These are only the most obvious of the infinite ways in which consumers creatively craft or design each of their consumption experiences.

The present research explores the role of creativity in the mechanisms through which consumers create value in their consumption activities and experiences. Hennessey and Amabile (2010) define creativity as involving 'the development of a novel product, idea, or problem solution that is of value to the individual and/or the larger social group' (p 572). Previous researchers (Kleinaltenkamp et al., 2013) have suggested that there is a need to better understand how consumers integrate resources to create value. As consumers engage in increasingly creative activities and experiences, it is important to understand what value consumer creativity brings to brands and how it can be encouraged and harnessed.

## THE SHIFT TOWARDS CUSTOMER-DRIVEN VALUE CREATION

Value and value creation are complex concepts (Karababa & Kjeldgaard, 2014; Payne et al., 2008). Recent research in Consumer Culture Theory (Arnould & Thompson, 2005) and Service Dominant Logic (Vargo & Lusch, 2004) has helped redefine value as a multifaceted phenomenon that results from the relevance of an experience to a customer (Priem, 2007). Prahalad and Ramaswamy (2004) and Lusch and Vargo (2006) argue that customers create value in the process of their consumption experience. In the service research literature, Solomon et al. (1985) point to a 'dyadic' interaction and use role theory to explain the interactions between customers and service providers. In her study on servicescapes, Bitner (1992) further develops this perspective by examining the respective roles of consumers and service employees and the physical environment of the service encounter. Pine and Gilmore (1998) argue that the production of economic value has shifted over time, from the extraction of commodities, to the production of goods, to the delivery of services, and, finally, to the staging of experiences. They advocate building consumer participation in the design of experiences, though the role of consumers remains a fairly passive one in relation to the entire consumption experience. The same shift towards recognizing value creation as driven by consumer experience is also found in the recent strategy literature (Adner & Zemsky, 2006; Priem, 2007; Priem et al., 2013; Zander & Zander, 2005).

Extant research in SDL has focused on resource integration as the core process of value creation or value co-creation in consumption (Akaka et al., 2012; Kleinaltenkamp et al., 2012; Lusch and Var-

go, 2006; Vargo et al., 2008). Resource integration is an *individual* process performed by a consumer using his or her own resources to actively access, adapt and integrate external resources (Akaka et al., 2012). Resource integration is also an *interactive* process, in which consumers access, adapt and integrate each other's resources, in effect exchanging resources (Vargo et al., 2008).

Given its interactive nature, value creation is augmented when it takes place within a network and enhanced by different platforms and touchpoints (Normann and Ramirez, 1993; Prahalad and Ramaswamy, 2004; Ramaswamy, 2011). In other words, the broader the range of resources a consumer can easily access, the greater the potential value. In this respect, the emergence of online platforms of exchange, from specialized websites and online forums to social media, has allowed consumers to extend their networks and to generate and diffuse new and creative ideas. This has resulted in the development of new consumer experiences, a more active and interactive role for all stakeholders and greater value creation (Ramaswamy, 2011).

## METHODOLOGY

The present research uses conversation analysis (Sacks et al., 1974) applied to an online forum, the *Epicurious.com* platform, to study precisely how value is created, more specifically how resources are integrated, in an online forum. The objective of the study is to show how a consumer sharing cooking tips contributes to the creation of value for the community by integrating resources—in the form of knowledge, attitudes, emotions, and more.

We use conversation analysis (CA), a new methodology in the field of consumer research, but one that enjoys a distinguished legacy in other social sciences (Goodwin & Heritage, 1990). CA allows an in-depth analysis of meaning in the context of a conversation: an audience member's response to a participant's contribution provides an analysis of that contribution (Levinson, 1983, 321). At a second level, the structure of the conversation itself also provides important meaningful and valuable elements as participants take turns to contribute to the overall conversation (Clark, 1996, 388). CA has traditionally been used for face-to-face conversations, but productively used in recent years for online interactions, both synchronous and asynchronous (Herring, 2012). In our case, CA is particularly productive in exploring how individual consumers work with each other to integrate resources and create value through their conversation. More specifically, it allows us to label each post for the action(s) it performs within the conversation, based on how it contributes to the joint value-creating project of the conversation itself. In other words, each post is meaningful not just in its content, but also in the role it plays in the conversation, either by building on what has been posted before (e.g., acknowledging someone's contribution before building on it), or by preparing for what will be posted later (e.g. asking for advice). CA can be combined with a grounded theory approach (Glaser & Strauss, 1967) to categorize data and detect broader patterns. In this study, we analyzed data from five long conversation threads which each took place over 12 months or more. Threads were purposely selected for their length – longer threads indicating more active conversations over a longer period of time and providing richer data.

### DATA ANALYSIS

Across the five threads on the *Epicurious.com* forum, we identified 30 specific types of actions revolving around problem-solving and the introduction of creative ideas in the form of experiences, ideas, knowledge, opinions and such. These actions fall into three categories: “soliciting”, “sharing” and “acknowledging,” which actually form the structure of the conversation. The actions and categories are documented with examples from the full data set in the Appendix. Our findings show how value is created every step of the way in these problem-solving conversations.

The first level of analysis is the content of the conversation itself and the actions undertaken by participants in interacting. The second, more abstract, level is the structure of the conversation (Clark, 1996, 388). The two levels of analysis are represented in the Appendix as actions and categories. We review them in turn.

The data extract shown below, selected as representative of the data corpus, is taken from a long thread (51 replies over the course of 15 months), entitled “*Thanksgiving ....not too soon to start thinking*” in which the first contributor (GLG1) solicits tips on how to roast two turkeys in a regular-sized oven. In the third response to her question, R shares the fact that her family always roasts a separate turkey breast alongside the full turkey. Later, another participant, MK lets us in on a friend’s “*secret*”:

*“She usually has between 16 to 20 people for thanksgiving... And she let me in on her secret. She roasts 1 whole bird...for “display” and the night before will roast turkey breasts, and some thighs and drumsticks... At serving time - she displays the bird, and take it back to the kitchen for carving - where she pads the platter out with... (sic)”*

Here, MK implicitly acknowledges GLG1’s challenge and shares a solution. Her contribution results from accessing a memory of her friend’s practice. She characterizes it as “*the way out of this dilemma,*” showing that she has adapted this information to the situation at hand, thus performing “a transformation or reorganization of incoming information and mental structures” (Moran & John-Steiner, 2003, 23). She integrates the information into this thread by commenting on the strategic aspect of her friend’s practices. MK has created value by putting a new, relevant idea on the table.

The next turn is C’s, in direct response to MK:

*“That’s a great way to do it for “show” but we got over the “presentation” a long time ago, unless we are carving at the table 70 years ago... I know everyone has their own traditions... BUT I do love the idea of the additions if and when I need to serve more than 16-18. (sic)”*

C explicitly acknowledges MK’s contribution and challenges it: we see that she accesses MK’s solution, adapts it (as indicated for instance by C switching from MK’s term “*display*” to her own term “*show*”), and integrates it into her own practice by actually challenging the validity of C’s concern for “*presentation.*” It is the very nature and structure of the conversation that promotes the accessing, adapting and integrating process, namely value creation. By engaging in the conversation, participants pick up on each other’s ideas, consider them (access), confront them with their own (adapt) and respond with their own inputs (integrate), which results in value creation.

More strikingly, at a structural level, we also find that participants actively and creatively support and coordinate the conversation, thereby encouraging greater engagement from their audience.

Conversations can be seen as joint projects in which contributors are acting in a “purposive manner” (Clark, 1996, 319) and using culturally-specific conversational techniques to jointly fulfill their purposes. In this case, we show that participants are also creating value by purposefully contributing to the joint project of a conversation-enabled creative process. Our data shows that throughout the conversation, participants creatively integrate resources by soliciting, sharing and acknowledging each other’s ideas (see Appendix 1). This type of coordination activity is typical of conversations and emerges “from participants’ attempts to do what they want to do” (Clark, 1996, 351).

Another way in which participants contribute to the success of the conversation and to value creation is by using specific spontaneous conversational techniques that encourage clarity and participation so as to keep the conversation going. Four of the techniques uncovered in our analysis are documented below.

1. **Capturing the audience’s attention and trust:** In several of the analyzed threads, participants begin their turns by “establishing expertise” to legitimize their contribution and argue for the audience’s attention and trust. E.g.: “*I have read all the studies...to know that it’s not an acceptable way to do things.*” By deliberately establishing what experience allows them to contribute to the conversation, participants legitimize their contribution and argue for the audience’s attention and trust, in effect promoting their posts and the overall conversation as resources to be integrated, and value created as a result.
2. **Clarifying meaning:** Most contributions in the analyzed threads contain “meta-talk” (Schiffrin, 1980), specific reference to the conversation process itself. These references can be to a previous contribution: “*Sounds more like a Blender you’re talking about*” or to the participant’s own contribution: “*Here’s my bad memory...*” and are used as “meaning labels,” clarifying the author’s to make the conversation more transparent and easier to get into. These instances of meta-talk are used to signal the intended meaning (here: clarification of previous post, excuse for forgetfulness). Again here, contributors are working to increase engagement and promote resource integration and, as a result, value creation.
3. **Posting clear conversation directions:** The participant acknowledges a previous contribution (e.g. by asking for clarification or reinforcing a proposed solution) and then “solicits” the next one (e.g., by asking a question, or introducing a new consideration or solution). “*Yea, you have to describe what your final product is...If you have all your items already minced as small as you want, can’t you mix them with a spoon?*” These types of “stage directions” facilitate continuity, clarity, coherence and evolution in the overall conversation flow. Another observed “stage direction” is addressing other participants by their name: “*You try it, Nikki. Honest.*” The function of name-addressing is to actively engage with another participant, and again to provide a “stage direction” indicating whom is being addressed in the absence of non-linguistic cues. These directions make it easier for audiences to integrate available resources and for value to be created.
4. **Validating relevant solutions:** Participants often acknowledge a proposed idea or solution (thus validating it), and specifically refer to their intention to put it to use, thereby encouraging more participation. “*My brother-in-law has his birthday on the 26th and we usually have a*

*beef tenderloin - we will have to give this a try. (sic)*" A couple of posts later, another contributor posts: "*Okay...I will try again- I will be cooking one just like it today and will definitely use your way. Mine turned out okay, but it could have been better; I think.*" This technique also has the effect of encouraging more participation, and value creation as a result.

## DISCUSSION

In our analysis of the *Epicurious* forum, we highlighted the process of accessing, adapting and integrating resources, typical of value creation in consumption (Akaka et al., 2012). We showed, for instance, how participants access solutions, adapt them and integrate them into their own practices. We also showed how participants create value by coordinating and supporting the conversation. Non-contributing readers create value by accessing shared knowledge from the different contributors and integrating it into their own situations and needs. Finally, the platform publisher, Condé Nast, creates value from *Epicurious* in the form of advertising revenue, customer data, product development and brand equity. In this example, value creation can interestingly be tracked all the way to monetization for the firm.

A similar purposive, social and adaptive processing of ideas is discussed in the creativity literature, particularly in Lev Vygotsky's extensive writings on creativity. He describes the creative processes of 'internalization' and 'externalization' of ideas, knowledge and other representations. Commenting on these writings, Moran and John-Steiner (2003: 23 of online version) assert that 'internalization and externalization are the dialectical mechanisms that allow an individual to construct higher psychological structures'. In other words, internalization and externalization allow people to access, adapt and integrate social resources, as illustrated with our *Epicurious* data. According to Glăveanu (2010a), creators externalize their novel ideas (accessed from previously internalized experiences in other contexts and then 'repurposed' or adapted in a new context), thereby integrating them into new creative outcomes which in turn are internalized by an audience of other agents. As audiences and creators trade roles throughout a conversation or other interaction, externalized new ideas become internalized. In other words, creativity results from the cyclical internalization and externalization of novel ideas, which are then 'acknowledged, recognised, valued and used' (Glăveanu, 2010b: 54). Novelty and appropriateness, the two key characteristics of creative outcomes, are clearly seen here (Hennessey & Amabile, 2010).

Everyday consumption is a process that follows a similar creative process and includes casual internalization of meaning and practice through which transformation and externalization occur, creating dynamic value creation (Payne et al., 2008). As seen in our data analysis above, creativity can be about retrieving a memory of a past meal (internalization) and adapting it as a solution to a problem posed in an online forum (externalization). It can be about supporting an online forum by clearly indicating that a cooking tip gleaned on the forum will be put to good use. This analysis reflects our view of consumption as an instance of creativity. Boden (1994) argues that creativity should not be reduced to 'historical' achievements because it is ingrained in everyday life practices as 'mini c' forms of creativity—that is, mundane acts, such as the production and interpretation of verbal communication, the adjustment of actions to a changing context, and the creation of new personal meanings (Kaufman and Beghetto, 2009). What we see in the *Epicurious* data are not "big C" Creative acts of Master Chefs, but rather 'mini

c' creative acts of everyday home cooks consuming and producing knowledge.

Consumption provides an ideal context for people to exercise their creativity. Schau et al. (2009) identify specific creative, value-creating practices around collective consumption. Yet, to date, most of the work on consumer creativity has failed to recognize its full extent and value along the different stages of the consumption journey or experience (Burroughs et al., 2008). The present research suggests that consumer research needs to better align itself with systemic views on creativity, particularly socio-cultural perspectives (Glăveanu, 2010a), and to recognize a broader role for creativity in consumption.

The collaborative and creative nature of everyday acts of consumption, as identified in our analysis, echoes ongoing developments in the literature on socio-cultural creativity. The 'mythology of the genius'—great creators working alone to produce revolutionary outcomes (Montuori and Purser, 1995)—has been challenged in recent decades within the cultural or socio-cultural tradition (John-Steiner, 1992; Sawyer, 1995). Glăveanu (2010a, 2012) suggests that traditional individualist models of creativity fail to account for the roles of audiences and contexts, both of which are especially important when studying consumption. In the *Epicurious* data, the socio-cultural consumer accesses her own resources (e.g., knowledge of available ingredients, skills, time, experience), other consumers' resources (e.g., recipes, tips, feedback) and the publisher's resources (website, forum). She internalizes them by adapting them to the specific context at hand and, through acts of externalization (e.g. posting a recipe, cooking from a recipe), integrates them into a unique value-laden experience. Creativity is embodied not only in the outcomes (e.g. the recipe or completed meal), but also in the processes (e.g. the dynamic nature of an online forum).

Our analysis suggests an account of consumption in which value is created socially as a by-product of creativity. We suggest that consumption is creative through and through. This model of consumer creativity illustrates the idea that value is not 'in' the person or the object but rather 'distributed' in the social process of everyday consumption and resource integration. The model also resonates with current thinking in marketing and service research. For example, SDL (Vargo and Lusch, 2004, 2008) emphasizes service (process) rather than product (outcome) and categorizes resources (operant and operand) according to whether they create value or serve as means to value creation.

From a methodological perspective, CA also addresses limitations of existing textual analyses (content or thematic). While other content analysis methods allow excellent in-depth analysis of contributions, they do not take into account the structure of the conversation or the role played by each contribution in building up to the overall conversation. Our results suggest that the conversation itself allows value to be created as it helps to structure the exchange and build-up of contributions, and also pulls users into the conversation. Such an analysis required CA in order to uncover the value-creating structure in addition to the content of what is said.

## CONCLUSION

The contribution of the present research to the literature on consumer creativity is threefold. First, we showed, and illustrated with qualitative data, that value is created when consumers integrate and share resources. Recent work in SDL, CCT and other paradigms (Payne et al., 2008; Priem, 2007; Schau et al., 2009) has recognized that value is created in consumption, and we shed light on some of the specific psychological, social and cultural mechanisms that actually constitute or drive value creation. We then demonstrated that

resource integration is in fact an act of creativity and that every act of consumption is an opportunity for a consumer to craft a solution that is both novel and appropriate, the two widely accepted characteristics of creative acts (Hennessey & Amabile, 2010). While best illustrated, as above, through technologically enabled consumption, our claim is that creativity is at the very core of consumption, regardless of technology. Our final key finding is that creativity consists of specific types of everyday socio-cultural processes, including consumption, that lead to novel and appropriate solutions. We argued that value is continuously (re-)created through consumers' relationships with their social (other consumers, employees etc) and material (brands, products, services etc) environments and that this creative process is inherent in all acts of consumption. Our aim was to explore the core mechanisms of how consumers create value through their consumption activities and experiences. We identified these mechanisms as instances of creativity, a generic value-creating human activity. As a result, we give greater substance to the role of consumers in creating value, one that has remained difficult to explicate against the traditional "producer-side" view (Priem et al., 2013). Finally, we introduced CA as an insightful method for the analysis of online asynchronous conversations and showed that it can be a powerful analytical tool to capture the value-creating processes inherent to conversations.

The main limitation of this study is the specific consumption context we have chosen. While an online forum is a particularly rich context in which to study creativity, this work must now be extended to other consumption contexts, both offline and less interactional. Our work opens up new research opportunities for consumer creativity and provides avenues for managers to consider encouraging value creation by fostering greater creativity among consumers. Social media and other interactive channels provide unprecedented opportunities for consumers to share knowledge and to engage with each other. The richness of this socio-cultural environment yields the highest level of creativity. By enabling consumers to tap into these creative opportunities in their consumption experiences, marketers can expect to reap the rewards in the form of (1) greater consumer engagement, (2) greater value creation, (3) greater empowerment of consumers to generate creative solutions. Firms should recognize how consumers create value, how to foster greater creativity to result in greater value creation, and how to cede some control to creative consumers who are eager to solve problems with the brands who will allow them to engage creatively.

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APPENDIX: Data Summary Table including Actions, Categories and Data Instances

ACTIONS	CATEGORIES	DATA INSTANCES
1. Starting conversation	<b>SOLICITING</b>	<i>I am having 18 people for turkey day and am considering purchasing two 13-14 pound birds rather than on 27 pounder.</i>
2. Seeking advice		<i>"It works ok for fruit recipes, but for veggies not so well, any help would be helpful."</i>
3. Seeking information/ clarification		<i>"I have a food processor but would never use it as you are describing. What is it you are trying to incorporate?"</i>
4. Challenging to a new solution		<i>"Confited said it couldn't be done without saying why. I'm sure someone with ... would make some perfectly good bread crumbs from unfrozen fresh bread"</i>
5. Sharing problem	<b>SHARING</b>	<i>"It seems like the prices of many foods have skyrocketed lately. Does anyone have any suggestions as to how I can make good quality meals for less?"</i>
6. Giving background		<i>"My kids are pretty good eaters ... but the thought of trying to plan a menu that everyone likes is exhausting."</i>
7. Sharing own experience		<i>"As kids, we read the story of stone soup and thought it was pretty cool when mom would actually serve it."</i>
8. Establishing expertise		<i>"I have read all the studies to know that it's not an acceptable way to do things anymore..."</i>
9. Complementing		<i>"The smaller hen turkeys will produce a higher meat to bone ratio, plus there will be four drumsticks ... for those that enjoy them"</i>
10. Giving evidence		<i>"The menu is decided, all plates, glassware etc. has been washed, I have figured out all but the seating."</i>
11. Giving advice		<i>"If you have access to any professional kitchen supplier, I would really advice you try to and get as a large hotel pan..."</i>
12. Introducing new consideration		<i>"If you de-bone a bird, you can get twice as much stuffing in it."</i>
13. Introducing new solution		<i>"Pizza is awesome. If you learn how to do the pastry, you can feed lots of people with tiny costs!"</i>
14. Taking sides		<i>"I am with Ronie on this one..."</i>
15. Proposing means to solution		<i>"I'm thinking that the night before, preparation of the additional pieces is a wizer solution."</i>
16. Appreciating		<i>"Thanks deself, you gave me a lot to chew on."</i>
17. Introducing new topic for debate		<i>"I read somewhere about the pros and cons of stuffing ... vs cooking ... and was wondering what some of your opinions are on the subject."</i>
18. Stating position		<i>"And there is nothing wrong with stuffing in the bird."</i>
19. Joking		<i>"Rockie, that's borderline cannibalism LOL."</i>
20. Challenging		<i>"I am not getting at all what you are trying to do with a food processor."</i>
21. Storytelling	<i>"My Sito's kitchen had a gas stove/oven that took coal, an ice box... and a wooden pantry that stored flour and rice..."</i>	
22. Sending wishes	<i>"Have a good Thanksgiving."</i>	
23. Acknowledging problem	<b>ACKNOWLEDGING</b>	<i>"The table is a classic battleground between parent and the wee ones!"</i>
24. Acknowledging new solution		<i>"Wow, that is an awesome suggestion to put the pre made stock in a thermos."</i>
25. Acknowledging means to solution		<i>"I do have a friend "in the Business". He's busy all the time so I'll just have to see..."</i>
26. Ranking solution		<i>"...the hen is the better way to go. However, if you don't have enough room for air to circulate... I would really consider doing it some other way."</i>
27. Reinforcing solution under consideration		<i>"But, I do love the idea of the additions if and when I need to serve more than my usual 16-18."</i>
28. Endorsing solution		<i>"Mizk1, this might be the best solution!"</i>
29. Giving in to evidence		<i>"That's a pretty cool memory through the years. And if it works, can't possibly hurt!"</i>
30. Accepting challenge		<i>"I stand by my recommendation for them a year later, since you brought it to the top again."</i>

# The Relationship Between Household Life Cycle and Brand Loyalty

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## ABSTRACT

Brand loyalty is a fundamental concept in brand buying behavior research. It is generally recognized as an asset that firms need to invest in (Aaker, 1984). Therefore developing and maintaining customer loyalty to the company's brand is a critical task for all marketers (Goldberg, 1982). In order to do so, marketers need to understand factors that influence brand loyalty.

Brand loyalty can be classified in either behavioral or attitudinal terms (Chaudhuri and Holbrook, 2001). Behavioral loyalty measures the actual purchases of the brand observed over a particular time period while attitudinal loyalty is based on stated preferences, commitment or purchase intentions of the consumers (Mellens et al., 1996). While many covariates of attitudinal loyalty have been posited, behavioral loyalty has shown few correlates or predictors and this has been controversial. With an attempt to settle some of the current debates, behavioral loyalty is the area of interest for this article.

The relationship between behavioral loyalty and general demographics has been of interest to researchers for decades. For example, Frank's (1967) study of multiple brands in 44 grocery product categories finds virtually no associations between socioeconomics and brand loyalty. As such, he concludes that demographic variables are not effective predictors of brand loyalty. Fennell et al. (2003) and Hammond et al. (1996) examine brands in multiple grocery product categories and find that general demographic and psychographic variables are not useful in explaining brand choice. Uncles and Ehrenberg (1990) and Uncles and Lee (2006) extensively study the relationship between age and brand choice and find that patterns of brand buying are similar between older and younger consumers.

Conversely, other researchers postulate that older consumers' brand choices are different from younger consumers (e.g. Cole et al., 2008; Lambert-Pandraud and Laurent, 2010; Lambert-Pandraud et al., 2005). Lambert-Pandraud and Laurent (2010) and Lambert-Pandraud et al. (2005) provide evidence that younger consumers have a greater propensity to change their preferred brand while older consumers exhibit a propensity to remain attached for a longer duration to the same preferred brand. Lambert-Pandraud and Laurent (2010) argue that innovativeness and attachment mechanisms lead to such results. The innovativeness mechanism suggests that as the consumers get older, they are less willing to explore new options. With the attachment mechanism, the consumers can develop an attachment to their preferred brands over the years, from childhood to older ages. As such, the older the consumers are, the more loyalty the consumers devote to their preferred brands. Yet, it is worth noting that, in contrast to previous studies of household grocery products, Lambert-Pandraud and Laurent (2010) and Lambert-Pandraud et al. (2005)'s findings are based on high involvement products (perfume and cars).

In summary, studies find that brand loyalty does not vary across age ranges for household consumption products. But for high involvement products, age does correlate with brand loyalty. One possible reason to explain this contradiction is that using age alone as a covariate for household brand loyalty only captures one aspect of the household, while household brand choice might be influenced by multidimensional household characteristics.

To overcome this drawback, we propose using household life cycle rather than age to predict brand loyalty for household gro-

cery products. Research suggests that life cycle is likely to be a more meaningful way of classifying consumers than age (Wells and Gubar, 1966). Additionally, life-changing events strongly correlate with changes in consumer preference (Mathur et al., 2008; 2003). As such, we might expect some effects of household life cycle on brand loyalty.

The advantage of household life cycle over other demographic variables is that it captures multiple characteristics of consumers including age, household size, and life changing events such as marriage, the addition/departure of children, and death of spouse. Thus it reflects many factors that influence brand choice, especially in household grocery products. For example, financial burdens at the young family stage with dependent children might encourage households to switch brands to find cheaper alternatives. In contrast, at the post family stage with no dependent children households might be in a better financial position, hence they can afford to buy their preferred brands, resulting in higher brand loyalty. Moreover, the degree of agreement in purchasing decisions between members of the household could influence brand loyalty over the household life cycle stages. Further, the preferences of husband and wife become more similar over the stages of household life cycle (Cox, 1975). Consequently we could expect less variation in brand choice at the later stages of the household life cycle.

The relationship between household life cycle and consumer behavior is widely studied in marketing and consumer research (e.g. Danko and Schaninger, 1990; Douthitt and Fedyk, 1988; Douthitt and Fedyk, 1990; Du and Kamakura, 2006; Fritzsche, 1981; McLeod and Ellis, 1982; Putler et al., 2007; Redondo-Bellón et al., 2001; Wagner and Hanna, 1983; Schaninger and Danko, 1993; Wells and Gubar, 1966; Wilkes, 1995). Most of these studies examine the effects of household life cycle on product category buying behavior. For example, Wilkes (1995) finds a strong relationship between household life cycle and household spending across a wide range of categories including appliance, furniture, entertainment, travel, childcare and automobile. Danko and Schaninger (1990) report significant differences in food and beverage consumption across different household life cycle stages. Wagner and Hanna (1983) show that life cycle successfully explains the variance in total family clothing expenditures. Fritzsche (1981) finds a significant difference in energy consumption by stage of life cycle. Yet there is a lack of research on household life cycle effects on brand, rather than category, buying behavior.

Therefore, this research explores whether and how household loyalty to a brand varies through different stages in their life cycle. We seek to establish the patterns of brand loyalty that households express at different stages in their life cycle.

## RESEARCH METHOD

We use share of category requirements (SCR) to measure brand loyalty. SCR is the ratio of total purchases of the brand to total category purchases among those who buy the brand (Fader and Schmittlein, 1993). SCR indicates how much the buyers of each brand satisfy their product needs by purchasing a particular brand rather than buying other brands (Uncles et al., 1994). As such, the higher SCR the higher brand loyalty.

Although SCR is one of the most important measures of brand loyalty (Farris et al., 2006), defining brand loyalty in this way is not without its problems (Danaher et al., 2003). For example, a consumer

may be seen as being loyal to a brand through repurchase of the same brand when it is on price promotion (Allenby and Rossi 1991). However, comparing different measures of loyalty is a complex topic and it is not the purpose of this paper. We chose SCR because of its widespread use in industry and academia (e.g. in Bhattacharya et al., 1996; Bhattacharya, 1997; Danaher et al., 2003; Ehrenberg et al., 2004; Fader and Schmittlein, 1993; Johnson, 1984; Reibstein, 2002; Stern and Hammond, 2004; Tellis, 1988), making it the most practical measure for behavioral loyalty over the family life cycle.

We use the Dirichlet multinomial negative binomial distribution (known as the Dirichlet model in marketing literature) to estimate SCR. The Dirichlet model was introduced by Goodhardt et al. (1984) to model buyer behavior of multi brands in established competitive markets. We chose the Dirichlet model as past research has shown that the model is very accurate at predicting brand SCR for household grocery products (Bhattacharya, 1997; Danaher et al., 2003; Ehrenberg et al., 2004; Fader and Schmittlein, 1993; Goodhardt et al., 1984; Uncles et al., 1994). The model is also one of the most well-established empirical generalizations in marketing (Uncles et al., 1995), and has successfully characterized brand loyalty across a wide range of categories and conditions (for details about the Dirichlet model and its applications see Goodhardt et al. (1984) and Ehrenberg et al. (2004)). Consequently, the use of a model such as the Dirichlet model corrects any minor disturbances in the observations, allowing purchase behavior to be described in a more accurate way. It also represents a test of the consistency of the findings with prior knowledge. Mathematical expressions of the Dirichlet model are shown in Appendix 1.

We estimate the SCR for six traditional household life stages including young single (age <35), young couple (main shopper age < 35, without children), young family (young couple, main shopper age < 35, with dependent children), older family (older couple, main shopper age: 35+, with dependent children), post family (older couple, main shopper age: 35+, with no children living with them), and single elderly (age: 65+) Although there are different views on how

to categorize the life cycle (e.g. Wells and Gubar, 1966; Murphy and Staples, 1979; and Gilly and Ennis, 1982), agreement exists on one central idea that each family progresses through a number of distinct stages from point of formation to death of both spouses (Murphy and Staples, 1979). The classification in this paper demonstrates six distinct phases in the household life cycle, from young single to older single, which is consistent with previous research using traditional household life cycle. The age cut-offs are based on the traditional flow in Murphy and Staples' model of household life cycle, although due to data availability we are not able to separate out single parent households.

We examine brands in three grocery product categories including shampoo, toothpaste and fabric-washing to establish patterns of relationship between household life cycle and brand loyalty. For reasons of data stability, brands with less than 1 percent market share were excluded from the analysis (this criterion has been used in previous research applying the Dirichlet model such as Fader and Schmittlein (1993) and Bhattacharya (1997)). This left us with the total of 45 brands in our analysis. The data came from a one-year panel of approximately 16000 households in the UK. The data was kindly provided by TNS superpanel database. Estimation was performed using the Dirichlet software developed by Kearns (2000).

## RESULTS AND DISCUSSION

We first report the detailed results for the shampoo category. Then we report the overall results for the other categories.

Table 1 shows the actual and estimated values of SCRs for brands in the shampoo category. As we can see from the table, the Dirichlet model predicts SCRs quite well with the overall mean absolute percentage errors (MAPE) of 16%. The actual and estimated SCRs are very close and show the U shape pattern. Brand loyalty declines from the young single stage to the young couple stage and the young family stage; then remains relatively low at the older family stage; and increases at the post family stage and the single elderly stage.

**Table 1. Actual and estimated SCRs by household life cycle for shampoo brands**

Brand	Young single		Young couple		Young family		Older family		Post family		Single elderly	
	Act	Est	Act	Est	Act	Est	Act	Est	Act	Est	Act	Est
SCR (%)												
Alberto	48	40	32	36	31	30	29	27	34	36	38	45
Head & Shoulders	66	42	54	40	37	30	30	22	41	37	52	45
Pantene	50	41	38	36	33	28	26	21	36	36	45	46
Herbal Essences	40	40	35	37	30	29	27	21	33	35	37	44
LOreal	32	38	26	34	28	29	27	27	36	35	39	43
Dove	21	37	29	34	24	26	21	22	31	34	38	44
Tresemme	40	38	33	34	26	26	22	21	31	33	35	43
Timotei	34	36	30	33	22	26	22	21	28	33	33	42
Tesco	74	37	34	33	30	26	30	27	35	33	47	43
Asda	31	38	34	33	28	26	25	22	32	32	44	42
Wash & Go	51	37	31	32	24	25	22	21	35	33	42	42
Johnsons	37	37	34	33	23	26	21	21	25	32	36	42
Sainsbury	75	36	64	34	34	25	27	27	35	32	48	42
Aussie	31	37	39	33	25	25	24	22	32	32	38	42
Sunsilk	41	36	21	32	22	25	17	21	25	32	31	42
Morrisons	49	36	32	33	26	25	23	21	31	32	38	42
Vosene	37	36	21	32	21	25	21	27	32	32	43	42
Supersoft	27	36	20	32	18	24	16	22	22	31	26	42
T/Gel	23	36	42	33	34	24	26	21	32	31	50	42
<b>Average</b>	<b>42</b>	<b>38</b>	<b>34</b>	<b>34</b>	<b>27</b>	<b>26</b>	<b>24</b>	<b>22</b>	<b>32</b>	<b>34</b>	<b>40</b>	<b>43</b>
<b>MAPE</b>	<b>.30</b>		<b>.19</b>		<b>.13</b>		<b>.13</b>		<b>.09</b>		<b>.14</b>	



Figure 1 graphically describes the average actual and estimated values of SCR for each of the three categories. Again, we find the same pattern as in the shampoo category.

The continuous decline in brand loyalty from the young single stage to the older family stage could be explained by several reasons. First, the decline in brand loyalty from the young single stage to the young couple stage could be due to an increase in joint decision-making by both partners. As each partner might have their own preferred brands, an increase in joint decision-making might reduce their loyalty to their preferred brands by accepting the other partner's preferred brands. Second, the decline in brand loyalty from the young couple stage to the young family stage could be due to more financial burdens at the young family stage compared to the pre family stage, hence households might increase brand switching to find cheaper options. Third, the decline in brand loyalty from the young family stage to the older family stage could be due to household needs become more heterogeneous as household size increases (e.g children develop their own preference).

Brand loyalty rebounds at the post family stage in the household life cycle, possibly due to a better financial position with no dependent children, and greater consensus about brand choice among husbands and wives. Research shows that families in the later stages of the household life cycle demonstrate greater similarities between the preferences of husbands and wives (Cox, 1975). Further, households become more homogenous as children leave home, and are most homogenous once the household reduces to a single elderly person. At this final household life cycle stage, the joint decision is replaced by an individual decision. This could sharpen individual brand loyalty, resulting in an increase in brand loyalty at this stage.

**IMPLICATIONS**

Our results suggest that household life cycle succeeds in predicting brand loyalty for packaged grocery products, where age has previously failed for these categories. Brand loyalty follows a regular U shape pattern as households change from one stage to another. This suggests that some changes in life stages have positive impacts on brand loyalty while other changes have negative impact on brand loyalty. Studies that have bi-modal comparisons of young and old consumers may not detect this non-linear evolution of loyalty.

Studies of individual high involvement products may be confounded by this U shape effect. For these products, age could be a good predictor of brand loyalty as the role of declining innovativeness and attachment could lead to the differences in brand choice across age ranges (Lambert-Pandraud and Laurent, 2010). Gender-related high involvement products, such as perfume, may also not be subject to the same degree of joint decision making as products consumed by the whole family. However, the U shape pattern uncovered here highlights the risk that longitudinal effects of innovativeness and attachment may be confounded by disposable income, household composition and joint decision making. We hypothesize that that the U shape is due to the combined effects of five of these factors. If this is so, then changes to loyalty over time will depend on the relative strength of these five factors in a particular context.

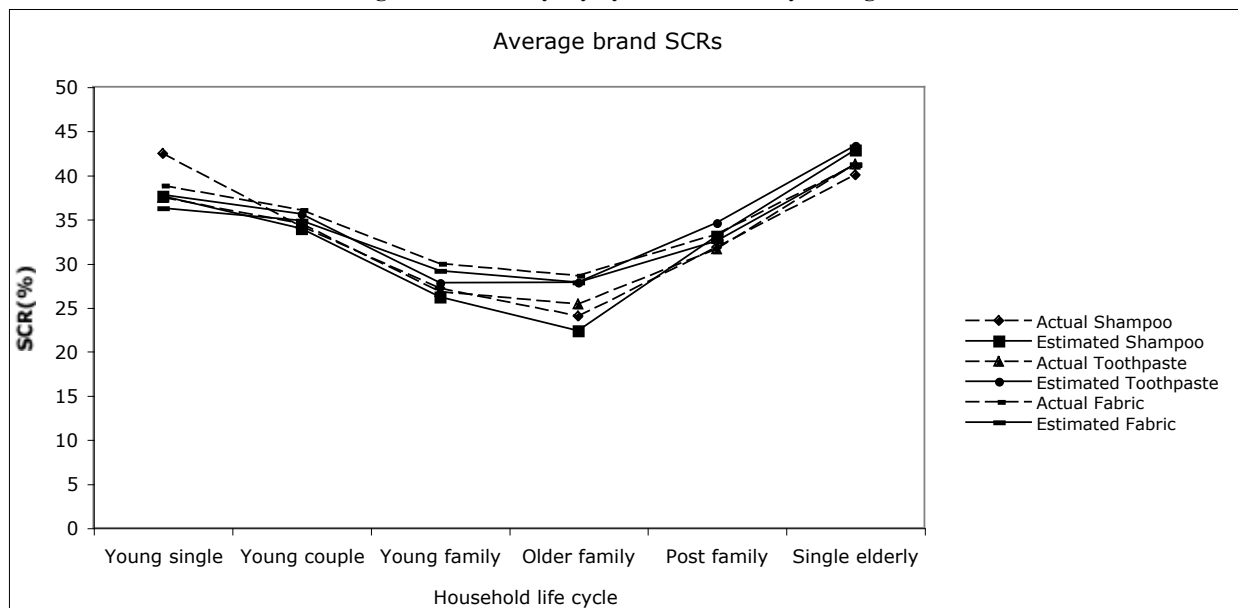
As it stands, knowledge of this empirical regularity is important to marketing. It highlights the complexity of changes to loyalty over time, and the risk that investigating just one or two of these factors will allow confounding influences to swamp detection of main effects. It is also helpful to practitioners in their efforts to preserve their existing customer base as well as attract new customers. For example, practitioners should be aware that their customers are at the lowest loyalty once they experience the family stages in the household life cycle. On the other hand, there are also opportunities for practitioners who wish to attract new customers as those who are in these stages are at the highest chance of brand switching.

**LIMITATIONS AND FUTURE RESEARCH**

Due to data availability, our study only examines the traditional household life cycle; this does not separate out some specific groups, such as single parents. The growth of the non-traditional household has emerged as an important research issue (Schaninger and Danko, 1993), so future research could usefully extend to study the relationship between brand loyalty and the life cycle of non-traditional households.

Our discussion has identified five possible factors that may contribute to the U shape present in the data: innovativeness, attachment, joint decision making, disposable income and household composition. The relative importance of these factors may explain how

**Figure 1. Brand loyalty by household life cycle stages**



longitudinal changes in brand loyalty varies between contexts; such as perfume, cars and packaged grocery products. Therefore, future research could replicate this study in other contexts where the mix of effects is likely to be different, such as individual versus household consumption, hedonic versus utilitarian goods, infrequent versus frequent purchases, high versus low involvement products, and subscription versus repertoire markets. The resulting empirical patterns would provide guidelines to practitioners as well as empirical boundaries for any theoretical explanations of the underlying mechanisms.

Future research could seek to directly test the relative strength of these five effects. For example, the impact of household composition could be quantified by conducting comparative studies of household panels with personal impulse purchase panels, where all purchases are directly associated with an individual customer rather than satisfying the needs of an entire household. Alternatively, the impact of household composition could be assessed by the relationship between brand loyalty and the number of members in the household. Such studies would help to determine the relative importance of household heterogeneity, compared with attachment, innovativeness and income, to changes in brand loyalty over time. Similar work could be undertaken for each of the factors that we hypothesize underlying the U shape detected here.

Meanwhile, we hope the striking empirical pattern reported in this paper will motivate more studies in this under-researched area.

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**APPENDIX1. MATHEMATICAL EXPRESSIONS**

The Dirichlet model is a mixture of the negative binomial distribution (NBD) of category purchase rate and the Dirichlet multinomial distribution (DMD) of the purchases of the individual brands, conditional on the category purchase rate.

The probability density function of NBD is

$$f(n) = (1 + a)^{-k} \frac{\Gamma(n + k)}{n! \Gamma(k)} \left( \frac{a}{1 + a} \right)^n \quad (1)$$

Where  $n$  is category purchase rate,  $k$  and  $a$  are the shape and scale parameters of the gamma distribution, respectively.

The probability density function of DMD is

$$f_{\alpha_1, \alpha_2, \dots, \alpha_m}(x_1, x_2, \dots, x_m \mid x_1 + x_2 + \dots + x_m = n) = \frac{\Gamma(s)n!}{\Gamma(s+n)} \prod_{i=1}^m \frac{\Gamma(\alpha_i + x_i)}{x_i! \Gamma(\alpha_i)} \quad (2)$$

Where  $m$  is the number of brands,  $x$  is brand purchase rate,  $\alpha_i$  is parameter of DMD, and  $s$  is the sum of  $\alpha_i$

Combining (1) and (2) the probability density function of the Dirichlet model is

$$f_{k, a, \alpha_1, \alpha_2, \dots, \alpha_m}(x_1, x_2, \dots, x_m) = (1 + a)^{-k} \frac{\Gamma(n + k)}{n! \Gamma(k)} \left( \frac{a}{1 + a} \right)^n \frac{\Gamma(s)n!}{\Gamma(s+n)} \prod_{i=1}^m \frac{\Gamma(\alpha_i + x_i)}{x_i! \Gamma(\alpha_i)} \quad (3)$$

Share of category requirement for brand  $i$  is

$$SCR_i = \frac{\text{Average purchase rate for brand } i}{\sum f(n)n \left[ 1 - \frac{\Gamma(s)\Gamma(s - \alpha_i + n)}{\Gamma(s+n)\Gamma(s - \alpha_i)} \right]} \quad (4)$$



# Competitive Papers—Extended Abstracts

## How Choosing for Others Affects Consumption for the Self: The Negative Consequences of Preference Imposition

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### EXTENDED ABSTRACT

Consumers make choices not only for themselves but for others. For example, parents make a variety of food choices each day for themselves as well as for their children. Prior research has examined the effects of a healthy or unhealthy personal choice on one's own subsequent choices (e.g. Vohs et al. 2008; Vohs and Faber 2007). It has also examined how making a choice for others differs from choices made for the self (Zaleska and Kogan 1971; Beisswanger et al. 2003; Laran 2010; Polman 2012). Our work extends research in this area by examining a novel question: i.e., how do choices made for others affect a decision maker's subsequent choice for the self?

When choosing for others, individuals can accommodate in order to maintain one's bonds with others or to avoid conflict (Schwartz 1967). Yet, decision makers often seek to impose their preferences on others to force them to make a virtuous or "correct" choice. We propose that individuals' personal choices after choosing for others can be affected by whether the preferences of the target are accommodated or the preferences of the decision maker are imposed on the target. We hypothesize that when a choice outcome is controlled by and attributed to the self but not to others, the individual gains a sense of control. A heightened sense of control increases the tendency to approach rewards and gratification (De Charms 1968). Thus, we predict that imposing one's preferences on others make individuals susceptible to self-indulgent choices. Further, feelings of power are expected to mediate the relationship between imposing one's preferences on another person and subsequent personal choices. Power is essentially related to one's capacity for voluntary movement and controlling the movement of others (Winter 2010). Therefore, an individual is expected to feel more powerful while imposing a choice on another person than simply going along with the other party's preferences. We hypothesize that when individuals impose a choice on others (vs. accommodate) they feel more powerful and consequently seek immediate gratification because power activates an approach orientation toward rewards (Galinsky, Gruenfeld and Magee 2003; Keltner, Gruenfeld and Anderson 2003). Three experiments test our novel hypotheses.

### Study 1

The first study examines how imposing a choice on a target versus accommodating the target's preferences impacts an individual's subsequent personal choices in the food domain. This lab study used a mixed 2 (choice for the other party: imposing vs. accommodating) x 2 (type of food: healthy vs. indulgent) design. The first factor was manipulated between subjects and the second factor was within subjects. 74 participants were assigned to a managerial role, asked to make a training location choice for their employees and write an e-mail explaining their choice. The choice was either in line with or against the employees' preference. Two bowls including healthy (dried prunes, apricots) and indulgent (Kisses, gummy bears) snacks were left in the cubicles. The number of snacks participants consumed during the study was the dependent variable.

Participants' e-mail responses to their subordinates (coded by two independent judges) in the imposition condition revealed greater

imposition, whereas the responses in the accommodation condition were more accommodating ( $p < .001$ ). Importantly, as we hypothesized participants in the imposition condition consumed a higher number of indulgent snacks compared to those in the accommodation condition ( $p < .05$ ).

### Study 2

The aim of this study was to test the role of power as a process mechanism. The study design is a 2 (snack the child requests: healthy vs. indulgent) x 2 (parent's snack choice for the child: healthy vs. indulgent). One hundred and fourteen students completed the study. Participants were asked to imagine themselves babysitting a relative's child, and choosing either a healthy (fruit salad) or indulgent (chocolate cake) snack for the child after the child has indicated his or her snack preference. Next, they were asked to rate how appealing they found the same snack options for their own consumption. Finally, they were asked to indicate how powerful (Rucker et al. 2011) they would feel after making the snack choice for the child. A moderated mediation analysis (Zhao, Lynch and Chen 2010) revealed a significant interaction effect of the snack requested and given on power ( $p < .001$ ), and feeling powerful after imposing a food choice on the child increased the appeal of the unhealthy chocolate cake for the participants ( $p < .07$ ). Successful mediation was observed as the corresponding bootstrap confidence interval did not include zero (95% CI = -.9122 to -.0147).

### Study 3

Using the parenting context, this study further tests the mediating role of power. We used the same experimental design and procedures as in Study 2. Only the scenarios were modified to reflect the parenting situation. 119 parents participated in this online study. As expected, the two-way interaction between the snack given and snack requested had a significant effect on feeling powerful ( $p < .001$ ). Furthermore, feeling powerful significantly increased the appeal of the chocolate cake ( $p < .03$ ). The bootstrapping procedure confirmed our hypothesis that when a choice was imposed on the child (e.g. the child requested the chocolate cake but received the fruit salad), parents felt more powerful and consequently they found the chocolate cake more appealing to consume (95% CI = .0023 to .4902).

**Conclusion and Contributions:** Three studies demonstrate that imposing a choice on another individual not only affects how powerful decision makers feel, but also makes them susceptible to indulgences in a following consumption occasion. These findings make important contributions to the literature. Specifically, we extend the growing literature on sequential choice by investigating an overlooked aspect of consumption; the personal effects of choosing for others. This research contributes to the literature in this domain by being the first to examine this phenomenon in a dyadic decision making context and using the Approach-Inhibition Theory of power (Keltner et al. 2003) as the theoretical framework. Finally, our research has important practical implications for consumers such as parents and for those who make decisions on behalf of others.

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# Choosing How to Choose: Can People Choose the Best Choice Architecture?

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## EXTENDED ABSTRACT

Choice architecture tools have a large impact on the decisions people make and can produce better outcomes for both decision-makers and society (e.g., Choi et al. 2012; Johnson and Goldstein 2004; Johnson et al. 2012; Johnson et al. 2013; Langer and Fox 2005; Lichtenstein and Slovic 1971; Martin and Norton 2009; Thaler and Benartzi 2004; Thaler and Sunstein 2008). Because of their potency, there are concerns about whether choice architecture tools are excessively influential or paternalistic (Hausman and Welch 2010; Mitchell 2005; Schlag 2010), especially in public policy. This debate raises the question: Is it possible to use choice architecture tools without compromising people's freedom of choice?

To explore this question, we conduct three studies offering people the choice between a typical choice environment and a simplified choice environment that incorporates choice architecture tools, such as defaults. We ask: (1) Will people choose the choice environment that will help them make the best decision?; and (2) Will people correctly estimate how much they were helped by this choice? We explore these questions in the context of online choice of health insurance plans (a la the Health Insurance Exchanges created by the Affordable Care Act), an important decision where people struggle to choose the best option and where choice architecture tools help people make better choices (Johnson et al. 2013; Quincy 2012).

### Study 1

Tests whether a simplified choice environment helps participants make better decisions and whether people appreciate the impact of this environment. Participants (N = 306) used an online decision aid to select a hypothetical health insurance plan. Participants were randomly assigned to a typical choice environment that mimicked existing health insurance decision aids and was described as a way to see more information to help choose a plan, or to a simplified choice environment that featured a series of choice architecture tools and was described as a simpler way to choose a plan. After answering questions about their insurance needs, participants compared plans and selected their preferred plan from a set of six plans. In the typical environment, more information was displayed and plans were organized alphabetically. In the simplified environment, only key information was displayed and plans were organized from best to worst based on a combination of key features (e.g., price and quality). Finally, all participants completed a post-choice questionnaire.

### Study 2

All participants were equally engaged (i.e., spent equal time choosing a plan), but participants using the simplified environment made significantly better choices. Specifically, they chose plans that met significantly more of their self-identified insurance priorities. Although the choice architecture tools in the simplified environment helped participants make better decisions, participants' post-choice ratings did not reflect this and, if anything, participants in the typical environment had more positive ratings.

Study 2 gave participants a choice between environments to ask whether participants would choose the simplified environment and, if so, would they recognize the impact of this environment on their

plan choice? Participants (N = 284) followed the same procedure as in Study 1 except that they chose their preferred choice environment upfront. The majority of participants (69%) chose the simplified environment over the typical environment. The simplified environment showed the same advantages as in Study 1: Participants choosing the simplified environment spent equal time choosing a plan, but demonstrated significantly higher choice efficacy by choosing plans that met significantly more of their insurance priorities. However, participants did not rate the simplified environment as more helpful or easier nor did they express greater confidence.

In Study 3, we made it easier for participants to switch between environments at any point during their choice. We also simplified the choice by providing a usage scenario and making plans differ on cost dimensions alone so that there was a single best (most cost-effective) plan. Participants (N = 112) were randomly assigned to a typical or simplified environment. The typical environment did not calculate total yearly cost and ordered plans randomly, whereas the simplified environment calculated total yearly cost, ordered plans by total yearly cost, and made the cheapest plan the default option. When switching environments was encouraged, less than a quarter of participants (21%) stayed with their assigned environment and the majority (59%) chose the simplified environment in the end. Participants choosing the simplified environment were equally engaged in the task (i.e., spent equal time choosing a plan), but were significantly more likely to choose the most cost-effective plan. However, this benefit was once again not reflected in participants' post-choice ratings, even though most participants explored both environments.

Across three studies, people were given the opportunity to choose how to choose. We consistently found that people can select the environments that help them perform better, but they underestimate the impact of this choice. These results underline the importance of evaluating choice architecture tools based on their impact on choice efficacy rather than subjective indicators, such as decision confidence. They also suggest a powerful alternative to concerns that choice architecture robs people of choice (Smith, Goldstein, and Johnson 2013). Giving people a choice of how to choose preserves their autonomy and helps them make better choices. The theoretical mystery remaining is how people choose how to choose correctly implicitly, without conscious awareness.

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# The Dual Influence of the Number of Prior Ideas on Solvers' Creative Performance in Open Ideation Contests

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## EXTENDED ABSTRACT

In ideation contests, solvers generate ideas for innovation problems and hereby compete for financial rewards provided by the seekers based on the quality of the ideas (Boudreau, Lacetera, and Lakhani 2011; Girotra, Terwiesch, and Ulrich 2010). Such contests integrate external sources to find ideas with a high degree of novelty and customer benefits (Berthon et al. 2007; Jeppesen and Lakhani 2010; Poetz and Schreier 2012). Frequently, these contests are open with public visibility of all submitted solutions. Although companies are increasingly using platforms like Crowdspring.com, 99Designs.com, or Atizo.com to host open contests, within contest dynamics are not well understood.

In this project, we investigate the role of prior ideas in open ideation contests and their influence on the creative performance of solvers. Our research is related to an emerging stream of literature that is concerned with the optimal design of ideation contests. This stream mostly emphasizes financial rewards (Cason, Masters, and Sheremeta 2010; Terwiesch and Xu 2008; Toubia 2006) or nonfinancial aspects such as the optimal number of participants (Boudreau et al. 2011), the optimal duration of a contest (Yang, Chen, and Pavlou 2010), or how solvers should receive feedback from seekers during the contest (Wooten and Ulrich 2011). Research focusing on the interdependence of solutions is more closely related to our work. By comparing blind and open contests, Wooten and Ulrich (2013) find that holding open contests can increase the number of submissions but at the same time they decrease the variance among submissions. Our research contributes to this literature in that we specifically investigate how prior ideas of others influence creative performance of solvers.

Conceptually, we propose that prior ideas can both stimulate and hinder creative performance and that the number and presentation of prior ideas determines how they influence creative performance. First, consider the stimulation effect. Prior ideas can stimulate creative performance by triggering access to memory. According to SIAM (search for ideas in associative memory) theory, ideas cannot be generated ex nihilo but based on previously stored knowledge that needs to be activated and retrieved first. After knowledge is activated, it can be combined or applied to a new domain (Nijstad and Stroebe 2006; Nijstad, Stroebe, and Lodewijkx 2002).

At the same time, however, individuals might become less capable to think freely and fix their ideas more closely to prior viewed ideas as a result. This effect is known as fixation. It describes a blocking of idea generation, creative problem solving, or remembering (Smith 2010; Smith and Blankenship 1989; Urbany et al. 1997). Further, a motivational factor arises from the competitive information prior ideas convey. As some levels of competition typically stimulate motivation (Harris and Vickers 1987; Raina 1968), it suffers in situations of strong and controlling competitions (Reeve and Deci 1996; Ross 1975; Ryan 1982; Shepherd et al. 1995).

We propose that these discussed effects depend on the number of prior ideas a solver views before generating his or her own idea. More prior ideas stimulate broader access to memory but at the same time they increase the risk for negatively perceived competition that

enhances the degree of fixation and decreases task motivation. We investigate this possibility in four studies.

In a first study, we use clickstream data from the European open ideation platform Atizo.com that allows us to investigate the effects prior ideas have on the quality of submitted ideas in a real environment. We analyze 2,594 ideas in 20 ideation contests and use clickstream information to identify the prior ideas viewed by solvers before generating their own ideas. We measure idea quality based on seeker's evaluation of the idea. Data reveals that the number of prior ideas is positively related to idea quality but this effect reduces with increasing numbers of prior ideas viewed. Controlling for alternative explanations, such as strategic entry of solvers, allows us to narrow down the possible explanations for this effect. We proceed with more rigorous testing of the underlying causality in an experimental study.

In Study 2, we find that the competitive environment can hinder prior ideas to stimulate creative performance. If the respondents do not compete against the presented prior ideas, creative performance increases significantly with increasing numbers of prior ideas. We fail to find such a positive effect when respondents compete against the prior ideas. Measures of the controlling nature of competition provide evidence for the possible processes underlying this effect, which we investigate in a next study.

Study 3 explicitly separates the stimulation from the competition effect. We manipulate stimulation by the number of prior ideas presented to the respondent (2 vs. 10 prior ideas). To manipulate competition, we distinguish between the objective winning chances (low vs. high) and how competition is framed (neutral vs. competitive). First, we find a positive effect of high winning chance on the creative performance. Further, we find for the neutral presentation conditions that participants' creative performance is higher when they are highly stimulated compared to a low stimulation. However, for the competitive framing conditions, there is no positive effect of a higher number of prior ideas. Our results suggest that controlling aspects of competition can undermine positive stimulation arising from prior ideas, but only at larger numbers prior ideas.

In a last study, we show that idea aggregation is a possible remedy for this negative impact of prior ideas. Displaying prior ideas in an aggregated form can maintain stimulation while at the same time it reduces the perceived competitive pressure in ideation contests.

These results offer novel insights into within contest dynamics that have both theoretical and practical implications.

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# What Will They Think of Me? Anticipated Impressions and Product Decisions

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## EXTENDED ABSTRACT

Individuals' purchase decisions are often influenced by the desire to create or avoid particular impressions (e.g., White & Dahl 2006). Much of the research on this topic assumes that these are adaptive decisions (Leary, 1995; Schlenker 1975). Individuals are generally assumed to be quite good at adjusting their behaviors (e.g., by selecting or avoiding particular products) to create favored impressions and avoid unfavored ones. It is difficult to generalize from such conclusions, though, because the research has not explicitly investigated *how* consumers anticipate their impression and, therefore, when they are likely to be accurate (vs. not). Moreover, there is work in other domains that has highlighted considerable discrepancies between how individuals think others view them and how they are actually viewed (e.g., Epley & Caruso, 2009; Gilovich et al., 2002; Savitsky et al., 2001; Shrauger & Schoeneman, 1979).

This paints a somewhat contradictory picture of individuals' impression management abilities. On the one hand, impression managers are portrayed as adaptive decision makers, capable of choosing behaviors that create optimal impressions. On the other, it seems that they may often fail to understand exactly how they come across to other people. The current work attempts to shed light on this apparent contradiction by investigating the processes by which individuals form beliefs about the effects of their consumption behaviors on others.

The current research is based on the idea that individuals are likely to be heavily influenced by their own perspective when contemplating others' reactions (Epley & Caruso, 2009; Ross, Greene, & House, 1977). This has potentially important implications for impression management behaviors, as it suggests that at least part of how individuals determine the effects of their impression management attempts on others might be by referring to their own perceptions of the attempt. In terms of the impression consumers' anticipate creating, because the product is likely to be very much more salient to a potential purchaser than it would be to an observer of a product user, we expect consumers to generally overestimate how much a considered product will contribute to their impression. In contrast, how favorably individuals expect to be evaluated by others – ultimately, the basis of their impression management decisions – should depend on their own evaluation of the impression, which is likely to depend on their unique self-presentation goals. Because observers are unlikely to know or care about the particular ways in which individuals would like to be seen though, we predict that consumers will be most inaccurate about the favorability of others' reactions when the impression is highly relevant to consumers' self-presentation goals.

Three experiments examined these ideas, using a product that was expected to contradict some consumers' self-presentation goals, but not others. Specifically, we used the color pink as a product feature designed to be relevant to an impression of femininity (Frasanito & Pettorini, 2008), which we expected to primarily contradict male consumers' self-presentation goals. We predicted both male and female consumers would tend to overestimate the effect of the product on their impression, but that only men would foster mistaken beliefs about how favorably they would be evaluated by others.

## Experiment 1

Experiment 1 examined men and women's reactions to a product associated with a feminine impression (vs. a neutral impression), and compared these reactions to those of observers. Participants were asked to either consider a pink (Feminine) or black (Neutral) MP3 player for their own use or they were shown a picture of a male consumer (using either a pink or black MP3 player) and asked to respond to it. We found that both male and female consumers overestimated how feminine they would look relative to observers' actual impressions. However, only men overestimated how negatively observers' would perceive them (see Figure 1).

## Experiment 2

Experiment 2 was designed to investigate the reason consumers overestimated the impact of a product impression on their own impression. We predicted that consumers would anchor on the product impression when considering their own, and adjust insufficiently for other features of their person to which observers would also be exposed. We tested this by priming other features of consumers' person to increase the likelihood that consumers would adjust for these features. When other features of consumers' person were primed, we found that both men and women expected to create a less feminine impression. As expected, this helped alleviate men's impression concerns, but not women's (because they did not expect others to react negatively anyway).

## Experiment 3

Experiments 3 was designed to extend the findings to judgments related to consumers' actual impression management decisions – in this case, product attitude and valuation – and to a different type of product (luggage in this case vs. an MP3 player previously). Participants bid on either a pink or black duffel bag and answered questions about their anticipated impression, the product impression, and their impression concerns. We found that men bid substantially less for the pink (vs. black) bag, and that this was due to their impression concerns. Women's bids were unaffected by the color of the bag. We also found that both men and women appeared to infer their own outward impression from their impression of the bag, making hardly any adjustment.

## Discussion

Consumer choices are frequently and importantly impacted by beliefs about the impressions that products will create. Yet existing research has largely overlooked the origin and accuracy of these beliefs. The current research was based on broad ideas that individuals frequently come to understand others' reactions by consulting their own. In the context of product-related impression management decisions, we reasoned that consumers' would rely on their own beliefs about how a product would make them appear and their own evaluation of the favorability of that impression when assessing others' reactions. Consistent with this, we found that consumers overestimated how much a product impression would affect their impression, and, under certain circumstances, misjudged how negatively others would evaluate them. These (unwarranted) concerns affected product attitudes and valuation.

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# How People Underestimate The Financial Risks of Home Buying

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## EXTENDED ABSTRACT

Buying a house involves serious financial risks. Volatility of home prices is one of the important sources of risk. A decrease in home prices wipes out many homeowners' life savings. People buy homes that they would not normally consider in anticipation of increasing home prices. This often leads to losses because home price changes are not very predictable. Many potential homebuyers see that they are priced out of the market when home prices rise.

A sharp decline in home prices often catch people by surprise, as it did in 2008. Between 2005-2008, home prices fell by 32% on a national basis. In 2008 alone, home prices fell by 18%. Such sharp price adjustments are in fact very common, and every time they happen, they cause great financial distress for many homeowners.

Buying a home is the biggest financial decision most people ever make. It is extremely important for household finance as well as the national and global economy. U.S. home ownership rate stands at 67.3 percent; 81.9 percent of household debt is related to residential property. If we better understand home-buying decisions, we can improve people's lives through better informing consumer decisions and devising better market arrangements. Yet, our knowledge about bigger consumer decisions, such as home buying, is very limited.

How do people assess the risks of buying a house? The purpose of the current research is to empirically test for an underestimation of home-buying risk.

Experiment 1 shows that on average people erroneously predict that the price of a particular home is less volatile than an index fund following S&P 500, which is a diversified financial asset that is tied to the U.S. market. Even when well diversified, people seem to think of stocks as more risky investments than homes. Experiment 2 shows

that diversification has different effects on risk perception, depending on whether the diversified asset is a home or a stock. As expected, a mutual fund of stocks was perceived to be less risky than a single stock. In contrast, diversifying in the real estate domain via a real estate investment trust increased perceived risk. A diversified portfolio of homes feels like another intangible asset; so the perceived risk actually increases. A moderated mediation analysis with assessments of tangibility as the mediator was consistent with this explanation. In Experiment 2, people evaluated the riskiness of assets separately. We suspected that, in joint evaluations too, people would pick a single home as the safer option. Experiment 3 confirmed our prediction. When given the option to pick either a home or a real estate investment trust, people tended to pick the home when their objective was to make a safe, low risk investment. They tended to pick the real estate investment trust when their objective was to make a high return investment and they tolerated risk.

Our results suggest that people underestimate the risks involved in buying houses and the underestimation stems from the tangibility of homes. When the tangibility is lost, e.g., in a real estate investment trust, perceived risk increases even if a rational assessment requires a reduction in risk. We believe that these insights might inform the regulation of the housing markets, which are plagued by deep and frequent downturns.

The same price volatility causes higher risk for homebuyers because houses are such big purchases, and as assets, houses are much less liquid than many other assets such as stocks. For instance, when the prices are going down, it is often impossible to immediately sell one's property. This makes the underestimation observed in our experiments conservative tests of underestimation.

# Effects of Design Symmetry on Perceptions of Brand Personality

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## EXTENDED ABSTRACT

In the classification of visual stimuli, a fundamental dimension utilized by laypersons, artists, and researchers alike is symmetry – i.e., the extent to which an object can be divided into matching halves by drawing a line through the center. In the realm of aesthetics, it is well established that symmetry has a widespread and robust influence on stated preferences for both real-world and abstract objects (e.g. Pinker 1997; Etcoff 1999; Reber et. al 2004). Given this influence, it is not surprising that marketing research has focused on the benefits of symmetric design, particularly for attracting consumer attention and instilling favorable attitudes (Veryzer and Hutchinson 1998). In the present research, we argue that symmetry in visual brand elements plays a role beyond that of aesthetic preference. Specifically, we demonstrate that the presence or absence of symmetry is assimilated into impressions regarding the brand itself. To capture these effects, we draw on Aaker's (1997) five-factor model of brand personality (*sincerity, competence, excitement, ruggedness, and sophistication*).

Based on principles from visual processing, aesthetics, and design, we propose two complementary hypotheses relating visual symmetry to brand perceptions. First, seminal work by Berlyne (1971, 1974) and others has shown that complex visual patterns elicit uncertainty in perceivers, which in turn contributes to heightened arousal. Given that asymmetry is a key driver of visual complexity, we speculate that the inclusion of asymmetrical visual elements will bolster perceptions of brands as *exciting* (i.e., daring, trendy, or up-to-date). Second, a common theme in artistic and visual design is the value of symmetry for enhancing perceptions of beauty and aesthetic pleasure (Reber et al. 2003); e.g., symmetry in classical art is employed to connote harmony, beauty, perfection (Weyl 1951). Extending this logic to brand imagery, we speculate that the inclusion of symmetrical visual elements will tend to bolster perceptions of brands as *sophisticated* (i.e., luxurious, prestigious, and tasteful).

We tested the predictions of our model with three laboratory experiments. Study 1 incorporated a within-subjects design with visual artwork as the target stimuli. In a cover story, participants were told that they would be selecting imagery for use by a sunglasses manufacturer in launching two new brands: one positioned as 'exciting,' and the other positioned as 'sophisticated.' For each of the two brands (counterbalanced), participants were presented with 14 pairs of artwork, each containing one symmetric image and one asymmetric image. They were asked to select from each pair the artwork that they considered most appropriate for the brand. Consistent with predictions, analyses revealed that symmetric artwork was chosen more often for the sophisticated brand ( $M=7.94$ ) than the exciting brand ( $M=6.64$ ,  $t(118) = -4.264$ ,  $p < 0.01$ ).

A second study utilized a between-subjects design similar to that of Study 1, with two primary differences. First, target stimuli included logos instead of artwork; the key advantage of this approach was that symmetry could be manipulated directly, while holding other design characteristics constant. Second, as an initial exploration of underlying process variables, we added a questionnaire assessing participants' interpretations of various characteristics of the logos. As before, analyses of participant choices revealed that symmetric logos were chosen more often for the sophisticated brand ( $M=7.21$ ) than for the exciting brand ( $M=4.25$ ,  $t(103) = 5.890$ ,  $p < 0.01$ ). Follow-up examination of potential process variables suggested that the observed effects of symmetry on perceptions of sophistication and excitement were trig-

gered by impressions of aesthetic quality and arousal. Specifically, symmetric logos were assigned higher values than asymmetric logos for 'artistic quality' ( $M = 5.36$  vs.  $4.81$ ,  $t(103) = 4.09$ ,  $p < 0.01$ ), but asymmetric logos were assigned higher values than symmetric logos for 'energy' ( $M = 5.21$  vs.  $4.64$ ,  $t(103) = -5.35$ ,  $p < 0.01$ ).

Our third study extended the investigation to a less structured setting. The cover story was similar to that of studies 1-2; however, instead of choosing between pre-existing brand imagery, participants were asked to actually create their own logos for both the sophisticated brand and the exciting brand. As the primary dependent measure, we coded the degree of symmetry present in the participant-created logos for each brand, using a 4-pt scale. Consistent with our framework, analyses revealed that participants produced more symmetric logos for the 'sophisticated' brand ( $M=2.9$ ) than the 'exciting' brand ( $M=2.6$ ,  $t(179) = 3.93$ ,  $p < 0.01$ ). Moreover, follow-up analysis of open-ended items indicated that the effect was strongest among participants who specifically mentioned utilizing symmetry in their drawings.

Consumer researchers have long emphasized the importance of design in conveying brand personality (Johar et al. 2005). Our work contributes to this area by presenting evidence for a heretofore unexplored connection between symmetry, a fundamental dimension of visual imagery, and consumer inferences regarding brand personality. We improve upon existing understanding by providing a theory-based rationale for the effects of visual symmetry on consumer response. At a more pragmatic level, our findings provide straightforward implications for marketers seeking to utilize visual design as a means of strengthening brand personality, differentiating their offerings, and enhancing brand equity.

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# Ashes to Ashes or Ashes to Coral?: Alternatives to Traditional Burial Rituals and Their Implications for Consumption, Ritual Transformation, and Sustainability

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## EXTENDED ABSTRACT

Rituals play a crucial role in both simple and extraordinary portions of human life. Whether they are daily procedures, holiday celebrations, or markers of pivotal life events, rituals shape the actions taken and meanings constructed by consumers. Consumer researchers have studied rituals because of their relationship to symbolic consumption (Rook 1985; Wallendorf and Arnould 1991), gift-giving (Sherry 1983), and exchange (Belk, Wallendorf, and Sherry 1989). We know that ritual practices help individuals make sense of their physiological, social, and moral experiences (Turner 1969). We also know that rites of passage and ritual practices influence individual, social, and cultural identity trajectories (Schouten 1991; Van Gennep 1908).

The current research seeks to contribute to ritual theory through enhanced understanding about circumstances when consumers feel compelled to break away from conventional rituals, and their practices ultimately may alter consumption patterns associated with ritual traditions. It explores why consumers relinquish traditional ritual practices in order to opt for more environmentally sustainable alternatives. Finally, it examines what interventions consumers employ to resist or alter consumption norms related to rituals.

The study context was chosen to highlight shifts away from traditional rituals, such as those associated with conventional funerals and burial, to alternative rituals, such as those associated with sustainable burial. To understand ritual transformation, our focus is on two environmentally sustainable alternatives to conventional burial, conservation burial and reef ball burial. With conservation burial, consumers are buried using no embalming fluids, caskets, artificial flowers, or other manmade products for hand-dug gravesites in a forest, prairie, or other natural area. With reef ball burial, cremated remains are mixed with environmentally-safe concrete to create a form that mimics natural real formations, which is then placed on the ocean floor to create new wildlife habitats.

Consumers who had selected one of the two burial options either for a deceased loved one or for their own pre-need arrangements were interviewed. Thirty-one depth interviews were conducted with thirty-two consumers who had used the services of three different service providers of alternative burial. These phenomenological interviews (Thompson, Locander, and Pollio 1989) included questions about personal funerary experiences, end-of-life preferences, the decision making process, funerary expenses, and environmental values. The first author also attended a three-day ceremony for a reef burial service and visited one of the conservation burial sites. In both instances, field notes and photographs were produced.

Interview data exhibits seven emergent themes regarding the selection of alternative ritual experiences: (1) perceived impracticality of current ritual; (2) aversions to current ritual; (3) fit of alternatives with identity; (4) positive outcomes for self, others, and environment; (5) opportunities for adaptation of symbols; (6) freedoms afforded and constraints imposed by norms, rules, and regulations; and (7) desire to exert control.

The interview data exhibited that impracticality of current ritual, aversions to current ritual, and constraints imposed by norms, rules, and regulations seemed to facilitate the ability to break away from the existing ritual. Conversely, fit of alternatives with identity, positive outcomes, opportunities for symbol adaptation, freedoms

afforded by prescribed norms, rules, and regulations, and desire to exert control seemed to be catalysts for allowing consumers to approach alternative rituals.

This data also demonstrates that some American consumers are not willing to simply accept rituals at face value, especially if they have difficulties finding value in them. Individuals use rituals as tools for important processes, such as identity construction, memory maintenance, rites of passage, sense-making, meaning construction, coping, celebration, and connection to the sacred. These processes are critical to consumers, who desire agency and do not allow prescribed norms to dictate how they will use rituals. Instead, they may move away from traditional ritual practices and services that do not fit with their identity and values toward alternatives that will.

From a business standpoint, firms who offer products and services that facilitate ritual experiences should be certain to maintain a close watch on consumer trends and cultural values. Because there are so many traditions and norms associated with rituals, it is easy for a ritualistic business to believe it can carry on as it always has, but this is not the case. Americans, who are well-connected and educated consumers, will not tolerate a ritual that is performed a certain way simply because convention prescribes that they do so. Instead, they desire value and meaning from their ritual experiences, and the companies who are willing to cater to those needs are the ones who will be rewarded with profitability and longevity.

Some consumers chose a sustainable burial for reasons other than environmental concern. Therefore, if governments and businesses wish to pursue environmental goals, they should consider offering sustainable options that make appeals to those individuals who do not embrace environmental values. While not every individual will embrace concern and passion for the natural environment, there is something that they find valuable. It is important for organizations to pinpoint their values and provide meaningful offerings to these consumers in a way that also support environmental goals. Coupling environmental appeals and appeals to other values will not only facilitate achievement of environmental efforts but will also attract multiple consumer groups for diverse reasons.

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# Incentivized Persuaders are Less Effective: Evidence from Fundraising Experiments

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## EXTENDED ABSTRACT

Extrinsic incentives sometimes have perverse effects. For activities that provide their own inherent reward, the introduction of an external motivator can displace intrinsic motivation (Deci, Koestner, and Ryan 1999). External incentives have been shown to backfire across a wide range of prosocial behaviors, from blood donations to volunteer efforts to environmentally-friendly behavior.

Studies of this “crowding out” effect typically examine and quantify effort, persistence, monetary contributions, or rates of participation as the primary outcomes (Gneezy and Rustichini 2000; Meier 2007). However, for many tasks, effort is not the only determinant of prosocial outcomes. In the present research, we investigate whether, above and beyond quantitative measures, incentives affect the *quality* of work in perverse ways. Specifically, we investigate whether incentives will have a direct negative effect on an individual’s ability to persuade others to support a cause.

We predict that, *ceteris paribus*, the best advocates for a cause are those whose motives are pure. Without any incentive, a caring individual will express his true concern for a cause in a way that appears genuine to others. However, when an incentive is introduced, the same action becomes disingenuous—impeding an individual from effectively communicating that they care. Thus, we predict that by tainting their motives with self-interest, incentives will hinder persuaders’ ability to convey sincere concern for the cause.

Further, we expect that others will be able to detect these qualitative differences in the sincerity of persuaders’ motives. Altruism is inherently about selfless concern for others and is normatively inconsistent with benefits to the self (Darwin 1871; MacIntyre 1967; Batson 1990). As a result, individuals place a strong emphasis on perceptions that prosocial actors are sincere (e.g., Szykman, 2004), and are suspicious of possible ulterior motives (e.g., Fein and Hilton 1994 Critcher and Dunning 2011; Lin-Healy and Small 2013; Newman and Cain 2013). Building on this evidence that people are highly sensitive to the motives underlying others’ prosocial behavior, we predict that donors will be less generous when persuaders have been incentivized to solicit donations—even without knowing that incentives were present—because incentivized persuaders will be seen as less sincere.

We test our predictions in a two-part field study in which supporters of charitable causes attempted to influence others to donate. In phase one, 93 students from community service groups were recruited as persuaders to make a pitch on video for a charity organization of their choice. Students were randomly assigned to one of two groups. In both conditions, persuaders read that someone would subsequently view their video and have a chance to donate to their organization. In the *Incentive* condition, persuaders also read: “As a bonus, for every \$10 that the potential donor gives to your charity organization, we will send you a \$1 reward.” In the *No Incentive* condition, this statement was omitted. Research assistants who ran the study were hypothesis-blind.

Phase two consisted of a separate online sample of 465 target donors who watched one recorded charity appeal (5 donors per video). After watching the appeal, target donors read that they would receive additional money on top of their participation fee, which they could keep or donate any portion to the cause advertised in the video. Target donors also rated the persuader who made the appeal on 6 items: sincerity, genuineness, caring about their cause, commitment to their cause, emotionality, and expressed feelings (averaged to form an overall composite measure of *perceived sincerity*;  $\alpha = .94$ ).

As expected by random assignment, there were no differences in gender composition across conditions (mean female: 64.5%). In addition, there were no differences across condition in the length of the appeal (Median<sub>incentive</sub> = 77.0, Median<sub>no incentive</sub> = 71.5;  $t(91) = -.37$ ,  $p = .71$ ), the proportion of persuaders who mentioned that they volunteered for the cause (incentive: 51%; no incentive: 43%;  $c^2(1, N = 93) = .46$ ,  $p = .54$ ), and the proportion that spoke about another personal connection, such as a loved one who had suffered from the misfortune that the cause seeks to alleviate (incentive: 21%; no incentive: 24%;  $c^2(1, N = 93) = .76$ ,  $p = .81$ ). Further, there were also no significant differences in how much the persuaders reported putting effort into their charity appeals ( $t(91) = -.14$ ,  $p = .89$ ), how sympathetic they felt towards their cause ( $t(91) = -.51$ ,  $p = .61$ ), and how uncomfortable they felt while making their charity appeals ( $t(91) = -.25$ ,  $p = .80$ ).

Consistent with our key hypothesis, incentives significantly affected donation amounts ( $F(1,372) = 11.53$ ,  $p < .001$ ,  $\eta^2 = .120$ ). Participants donated less money when the persuader had received an incentive ( $M = 8.45$ ,  $SD = 10.07$ ) than when the persuader had not received an incentive for soliciting donations ( $M = 11.95$ ,  $SD = 11.95$ ), even though the target donors were unaware of the existence of any incentive.

Similar analyses revealed significant effects on judgments of the individual’s perceived sincerity ( $F(1,372) = 7.52$ ,  $p < .01$ ,  $\eta^2 = .051$ ). Participants judged the persuader to be less sincere when he received an incentive ( $M = 4.71$ ,  $SD = 1.37$ ) than when he had not received an incentive ( $M = 5.03$ ,  $SD = 1.28$ ).

We predicted that perceived sincerity would mediate the effect of incentive condition on donation amount. Using bootstrap analyses (Hayes, Preacher, and Myers 2011; MacKinnon, Fairchild, and Fritz 2007), we find that the 95% bias-corrected confidence interval for the size of the indirect effect excluded zero (Indirect Effect =  $-.85$ ,  $SE = .34$ ; 95% C.I. [-1.57, -.14]), such that incentives decrease the perception that the persuader sincerely cares about a cause ( $a = -.32$ ), which in turn decreases how much target donors give to their cause ( $b = 2.66$ ).

In sum, incentives may affect individuals in ways not previously investigated: by crowding out their sincerity of expression and thus undermining their ability to persuade others’ support for a cause.

# The Monetary Value of Conversational Value

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## EXTENDED ABSTRACT

Firms are increasingly aware of the importance of conversational value of the objects and experiences they offer to consumers. We take a novel perspective of consumer conversation and investigating whether conversational value helps explain why certain purchases (experiential purchases) are less affected than others (material purchases) when their prices go up.

### Study 1

**Procedure:** One hundred and seventy participants from an online pool were randomly assigned to one of the two conditions (material vs. experiential purchase) and were asked to ‘think and write, in some detail, about an object (or experience) you intend to purchase some time in the future’. Next they answered a five-item measure on conversational value and a one-item measure on price sensitivity (based on a 40% price increase).

**Results:** Our ANOVA shows that, when faced with an equivalent price increase, experiential participants are more likely to go ahead with the purchase ( $M=4.08, SD=1.80$ ) than are material participants ( $M=3.40, SD=1.72$ ;  $F(1,169)=6.27, p=.013$ ). A bootstrap analysis indicates that this effect is mediated by the conversational value of the purchase (indirect effect:  $\beta=.18, SE=.09, CI(95\%)=.03, .41$ ).

### Study 2

Study 2 has two objectives. First, it retests our model with a substantially higher and more intuitive price increase (double price) and directly evaluates the importance consumers give to the conversational value of a purchase by assessing whether material and experiential consumers react differently to the hypothetical situation of not having any opportunity to share about the purchase with others.

**Procedure:** Eighty-five MBA students were randomly assigned to the material or experiential purchase condition and asked to recall and write about a previous purchase they had made. Next we assessed conversational value, price sensitivity (‘I would have purchased that object/experience even if its price were twice what I actually paid for it.’; 1=Strongly Disagree, 7=Strongly Agree), and the importance of conversational value of the purchase (‘Let’s imagine that right before purchasing that object/experience you learned that you would not be able to tell any family members or friends about it. In other words, you would not be able to share about your object/experience with anybody. As a result of that, how likely is it that you would have decided **not** to purchase that object/experience?’ (1=Not at all likely; 7=Very much likely).

**Results:** An ANOVA shows that, in a situation where price doubles, experiential participants are more likely to make the purchase ( $M=4.07, SD=1.61$ ) than are material participants ( $M=2.88, SD=1.62$ ;  $F(1,84)=11.45, p=.001$ ). Results also support the conversational value mediation (indirect effect:  $\beta=.30, SE=.15, CI(95\%)=.04, .66$ ). Finally, ANOVA results indicate that, if denied of opportunity to share, experiential participants are significantly more likely to not make the purchase ( $M=3.95, SD=1.73$ ) than are material participants ( $M=2.67, SD=1.50, F(1,84)=13.13, p<.001$ ).

An important concern with our previous studies is the nature of the purchases participants intend to make (study 1) and recall (study 2). Study 3 addresses this concern by keeping the focal purchase constant.

### Study 3

Here we keep the focal purchase constant (i.e., BBQ grill) and manipulate only the way participants frame it (i.e., as an object vs. an experience). Besides addressing the aforementioned concern, this procedure adds method novelty to the present work.

**Procedures:** Seventy-three students were randomly assignment to one of the two experimental conditions (BBQ grill framed as: a material object vs. an experience). Next, we assessed conversational value ( $\alpha=.96$ ), price sensitivity, and the importance of conversational value with items similar to those of study 2.

**Results:** Participants who frame the BBQ grill as an experience are marginally more likely to make the purchase ( $M=2.21, SD=1.71$ ) than those who frame it as an object ( $M=1.63, SD=1.08; F(1,69)=2.77, p=.101$ ). Additionally, the indirect effect of purchase type via conversational value is statistically significant (indirect effect:  $\beta=.57, SE=.25, CI(95\%)=.20, 1.22$ ).

Another ANOVA reveals that, if denied of opportunity to share about the BBQ grill, participants who frame the purchase as an experience are more likely to not make the purchase ( $M=4.00, SD=2.30$ ) than participants who frame it as an object ( $M=2.64, SD=2.08, F(1,69)=6.65, p=.012$ ).

Conceptually, results from studies 1-3 imply that the difference in price sensitivity between material and experiential purchases should be attenuated or eliminated when the two purchase types have similarly high (or low) conversational value. Study 4 tests this possibility

### Study 4

**Procedures:** Two hundred and thirty-five participants from an online pool were randomly assigned to one of the six experimental conditions in a 2(purchase type: material vs. experiential) x 3(conversational value: high vs. control vs. low) between-subjects design. Participants were asked to recall either an object or an experience they had purchased. High and low conversational value was manipulated experimentally (e.g., this purchase (does not) makes for a nice conversation), however, participants in the control condition were not presented with information related to the conversational value of the purchase. Next, participants answered an item similar to that in study 1 designed to assess price sensitivity (50% increase).

**Results:** An ANOVA with purchase type (material vs. experiential) and conversational value (high vs. control vs. low) as independent variables and price sensitivity as dependent variable yields significant effects of purchase type ( $M_{exp}=4.07, SD=1.89$  vs.  $M_{mat}=3.19, SD=1.84, F(1,225)=5.71, p=.018$ ), conversational value ( $M_{high}=3.94, SD=1.75$  vs.  $M_{control}=3.65, SD=2.03$  vs.  $M_{low}=3.16, SD=1.89, F(1,225)=3.95, p=.020$ ), and the interaction of purchase type by conversational value ( $F(1,225)=8.99, p<.001$ ). Decomposition of the interaction reveals that, when faced with a price increase, consumers are marginally more likely to make experiential versus material purchases that have high conversational value ( $M_{exp}=4.29, SD=1.70$  vs.  $M_{mat}=3.59, SD=1.74, F(1,76)=3.16, p=.079$ ), significantly more likely to make experiential versus material purchases under normal conditions (control condition) ( $M_{exp}=4.44, SD=1.94$  vs.  $M_{mat}=2.59, SD=1.64, F(1,95)=24.28, p<.001$ ), and equally likely to make experiential and material purchases that have low conversational value ( $M_{exp}=2.65, SD=1.49$  vs.  $M_{mat}=3.42, SD=2.03, F(1,57)=2.22, p=.141$ ).

## General Discussion

Results reveal that consumers react more favorably to an equivalent price increase of experiential purchases (e.g., a musical concert) than that of material purchases (e.g., an electronic gadget); an effect underlined by the higher conversational value of experiences (vs. objects).

Thus, this work brings forward the concept of conversational value of purchases and offers a novel framework on how this abstract attribute carries monetary value. Whereas price sensitivity has been widely studied, less has been known about how consumer's opportunity to share about the purchase influences their reaction to price increases.

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# All You Need is Love: Focusing on Brand Attachment Self-Affirms against Social Loss

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## EXTENDED ABSTRACT

Consumers routinely experience the psychological pain of losing others. Neighbors move, loved ones pass, and friends exclude; the pain from severed social ties mirrors physical pain (Eisenberger et al. 2003; Panksepp 2003), and the resulting distress encourages consumers to rely on existing relationships for support (Baumeister and Leary 1995; Cohen and Wills 1985). Given similarities between interpersonal and brand relationships (Batra et al. 2012; Fournier 1998; Park et al. 2010; Sirianni and Lastovicka 2011), it is likely that brand attachment serves a palliative function in instances of social loss. Thus the primary goal of this research is to understand the role of brand attachment in the context of social loss.

Specifically, authors examine two possible functions of brand attachment, whether it is self-affirming (buffering) and socially fulfilling (remedying) in the context of social loss. Cohen and Wills (1985) classify socially supportive strategies as preemptive (i.e., buffering) or reactive (i.e., remedying). Interpersonal relationships can preempt the pain of social loss by affirming the self, thus increasing one's ability to tolerate pain; likewise, interpersonal relationships can react to the pain of social loss by fulfilling comfort and companionship needs. Because consumer researchers find a positive correlation between brand relationships and interpersonal deficits (Sirianni and Lastovicka 2011, p. 334), and since brand relationships are posited to be more than 'merely metaphorical' (Dunn and Hoegg 2014), authors consider the potential buffering and remedying functions of focusing on brand attachment, which is "the strength of the bond connecting the brand with the self" (Park et al. 2010, p. 2).

Results of this research offer three primary contributions. First, though previous research suggests brand relationships can "compensate for interpersonal deficits" (Lastovicka and Sirianni 2011, p. 325), authors find brand relationships differ from interpersonal relationships in at least one meaningful way: they are self-affirming but not socially fulfilling in the context of social loss. Supporting this, authors find in study 1 that brand attachment only reduces pain when consumers focus on attachment before loss. This order effect was not observed for interpersonal attachment. As a second contribution, authors find that focusing on brand attachment (vs. brand quality) in conditions of social loss enhances brand performance (i.e., purchase intention, word-of-mouth). However, absent social loss, brand performance does not differ whether consumers focus on brand attachment or brand quality. Furthermore, authors find these moderated effects are mediated by pain reduction in conditions of social loss. Accordingly, authors identify an important moderator—social loss—that influences the effect of brand attachment on performance. As a third contribution, authors find that mobility across the United States enhances the effect of brand attachment on loyalty, thus replicating our findings from studies 1 using a national sample. Aside from tethering effects observed in a controlled experiment to variables freely available to brand managers (i.e., mobility data), authors also demonstrate an important role of mobility—a heretofore under-explored phenomenon—in consumer research. Overall, authors add to the literature by explicating the role of brand relationships in the context of social loss across two studies.

In study 1, authors conduct an experiment with a 2 (brand attachment: high vs. low) x 2 (social loss: high vs. low) x 2 (task order: brand attachment first vs. second) design. After completing the pretested tasks in random but recorded order, participants com-

pleted measures of psychological pain, purchase intention, and word of mouth. Analyses revealed a significant three-way interaction on purchase intention ( $p < .01$ ) and a marginally significant three-way interaction ( $p < .07$ ) on word of mouth. Decomposing these interactions, we found two significant ( $p < .01$ ) interactions within the social loss condition but no significant interactions in the control condition. The significant order x attachment interaction indicated that respondents were more likely to purchase and recommend attached brands when they focused on brand attachment prior to social loss, but not after. Furthermore, the indirect effects of brand attachment on purchase intention and word of mouth through pain reduction were significant ( $p < .05$ ) only when focusing on brand attachment occurred prior to social loss, suggesting brand attachment is self-affirming but not socially fulfilling in the context of social loss, and consumers reward attached brands with increased purchase intentions and recommendation when they offer self-affirming value. Then, in study 2, authors extend results observed in study 1 by testing whether social loss at a county-level enhances the effect of brand attachment on brand loyalty. They do this by drawing on four national datasets that include consumer brand ratings and county-to-county migration data. A hierarchical model reveals that social loss (outflow migration) from consumer  $i$ 's county enhances the effect of consumer  $i$ 's brand attachment on brand loyalty, thus conceptually replicating results from study 1 showing that brands offer self-affirming value in the context of social loss, and that consumers reward brands for this value with higher loyalty.

In conclusion, the current research examines the role of brand attachment in the context of social loss from a social support perspective. Fifteen years ago, Susan Fournier (1998, p. 359) found that the relationships consumers build with brands can "provide perceived self-efficacy and self-esteem" that allow consumers to resolve "feelings of marginality" and maintain an "expression of autonomy." Authors' findings suggest the way brand relationships achieve this is through self-affirmation, which authors demonstrate is especially valuable to consumers in conditions of social loss who then reward attached brands. Additionally, authors find brand relationships are imperfect substitutes for interpersonal relationships, since brand relationships are not socially fulfilling in the context of social loss. Furthermore, authors find mobility across the U.S. influences the effect of brand attachment on brand loyalty, consistent with our experimental results.

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# Shopping While Nonwhite: Racial Discrimination in The Marketplace

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## EXTENDED ABSTRACT

*When New Yorker Denise Simon goes shopping, she is always on guard. She carries a small bag, keeps her hands visible whenever possible, and makes an effort to be overly friendly to sales clerks. She doesn't have any reason to be wary except for one thing -- she happens to be black. And if she doesn't take these precautions, she fears she will once again fall victim to racial profiling (Norman 2009).*

This particular incident is one of many that have surfaced in the last few years. For example, an African American teen was accused of theft recently after purchasing a belt at an expensive NYC department store, Oprah Winfrey has complained that a Swiss retail employee denied her the opportunity to purchase a designer purse, and President Barack Obama stated that he was watched in stores prior to his current international fame (Washington 2013). Instances like these are not limited to African Americans; such negative marketplace interactions also happen to other racial groups. A report prepared by Stony Brook University's Center for Survey Research (2008) revealed that Hispanic Americans suffered from multiple forms of discrimination, including being stopped for questioning because of their racial identities. Additionally, the U.S. Department of Housing and Urban Development found that all minorities, from African Americans to Asian Americans to Hispanic Americans, continue to receive unequal treatment in the housing market, but face less blatant forms of bias than in the past (Gonzales 2013). The convergence of findings across contexts suggests racial discrimination is an issue faced by nonwhite citizens in their consumer relationships (Blank, Dabady, and Citro 2004).

Instances of racial discrimination toward minorities in exchanges have been widely reported in the popular press for many years. Whether such incidences are rare or common occurrences has yet to be determined but cannot be answered without empirical validation. Unfortunately, scholars and practitioners have conducted limited research on general perceptions of consumer discrimination across races to date, leaving the issue to be adjudicated using anecdotal evidence. With the return to a reflection on race concurrent with election of Barack Obama as president and contention that we may now live in a post-racial America (Valentino and Brader 2011), it seems an apt time to revisit this issue. Reconsideration of these concepts allows for a contemporary examination of issues regarding shopping while "nonwhite" (Baker and Meyer 2011; Bennett, Hill, and Oleksiuk 2012). To this end, we ask the following questions to guide our discovery: How widespread is racial discrimination in the marketplace, how does it manifest, and how is it perceived across minority and majority consumers?

Ultimately, we find that minorities perceive that they, or people like them, experience more marketplace discrimination than their majority counterparts. Across general and more specific marketplace experiences, evidence shows that consumers from minority groups identified for this research encountered more racially based discrimination than do white consumers. Additionally, marketplace experiences of minority consumers across groups were relatively similar, and juxtaposed against white consumers, minority consumers believed that non-white others experience more marketplace discrimination.

Though results support our hypotheses, there are a few notable exceptions. Study of general experiences show that discrimination by advertisements perfectly aligned with the hypotheses while there was a slight deviation in the results on discrimination in stores. When asked about discriminatory experiences perpetuated by advertisements, expected differences between the minority groups and their majority counterparts were evident, and there were no differences among Asian, Hispanic, and African Americans. The same was primarily true for experiences in a retail store and making a purchase, with the exception that African Americans perceived even greater levels of discrimination than the other two minorities. When a specific set of marketing contexts were considered, findings reveal the pattern that emerged previously of significant differences in discrimination between minorities and the majority appeared, with the only outlier a similarity between Hispanics and Caucasians for barriers preventing in-store purchases. The final portion of our results demonstrates that belief in level of discrimination toward nonwhites was significantly higher between all minorities and majority, though this result appears to have been driven by perceptions of African Americans.

These deviations from expectations assume a subtle pattern. Specifically, in rare occasions when there are differences in experiences or perceptions within minority groups, they occur because of data provided by African Americans. Our evidence suggests that African Americans believe that they are more often subject to discrimination than do other minority groups. They also believe that it is more rampant than do the other minority groups. These differences may be driven by any of a number of factors. Consistent with the historic nature of their subjugation in the U.S. and mistreatment in the marketplace, African Americans may still be disproportionately targeted. It may also be the case that participation in conversations and exposure to media coverage on "shopping while black" created a more developed ability to identify marketplace discrimination as well as greater sensitivity to subtle nuances. It is also possible that members of other minority groups process differently the overall impact of discrimination. When asked about very specific marketplace experiences, however, African Americans reported similar levels of discrimination to other minority groups. Disentangling the nature and source of differences in global perceptions versus actual experiences may be worthy of future research.

# Just Me Versus We: How Feelings of Social Connection During Positive and Negative Experiences Impact Memory

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## EXTENDED ABSTRACT

Previous research has shown that autobiographical memory is usually biased in favor of pleasant information (Walker et al. 2003), and that positive memories are more accessible than negative memories (Lishman 1974). This positivity bias has been hypothesized to occur because of the evolutionary benefits of remembering positive events, such as maintaining a positive self-image (Talarico et al., 2009; Taylor, 1991). Our research seeks to add to this literature by examining the moderating effects of social connection on consumer memory. Specifically, we show that individuals remember their shared experiences more easily and accurately compared to their individual experiences and that these shared memories are more strongly associated with positive affect. Hence, we document a “social bias” in memory recall that promotes memory accessibility for shared experiences as compared to individual experiences. Further, we examine the role of need to belong as a moderator and document that the positivity bias holds for individuals who are low on need to belong, but the social bias holds for individuals who are high on need to belong. Based on our theorizing, we predict that shared memories are more accessible than individual memories and that people associate shared (individual) memories more strongly with positive (negative) affect. Further, consumers high (low) in need-to-belong place more value on the social (valence) aspect of memories, and therefore recall memories primarily based on degree of social connection (valence).

Study 1 (N = 26 MTurk respondents). Participants were asked to recall all of the memorable events that they had experienced during their time in college. They were then shown all of the thoughts that they had listed and asked to categorize each event as shared or individual and as positive or negative. The proportion of each type of memory (shared vs. individual, shared-positive vs. shared-negative) formed our dependent measure.

The 26 participants listed a total of 142 thoughts. A chi-square analysis ( $\chi^2(1, 142) = 6.50; p = .01$ ) revealed that shared / positive memories were the overwhelming majority of listed thoughts at 56.3% ( $n = 80$ ). Thus, in line with our predictions, a larger proportion of shared (62.6%) memories than individual memories (37.4%) were listed supporting H1. Further, shared and positive memories (56.3%) outweighed shared and negative memories (6.3%), partly supporting H2 and suggesting that shared memories are correlated with positive rather than negative affect.

Study 2 (N = 81 MTurk respondents) was a 2 (Valence: Positive vs. Negative) x 2 (Social Connection: Shared vs. Individual). Our key dependent variable was response time to agree or disagree with one of the following statements “Over my lifetime, I have had a lot of shared (individual) memories that are positive (negative).”

An ANCOVA revealed a significant interaction between social connection and valence ( $F(1, 68) = 3.797; p = .056$ ). Planned contrasts show a significant effect of social connection in the negative condition ( $M_{\text{individual}} = 3.388, M_{\text{shared}} = 4.203; F(1, 31) = 6.874, p = .015$ ) indicating that for negative memories, individual experiences are more accessible than shared memories. An analysis of the response time for the thought listing revealed a marginally significant interaction between social connection and valence ( $F(1, 63) = 2.731; p = .10$ ). Planned contrasts show a significant effect of valence in the shared condition ( $M_{\text{negative}} = 2.76, M_{\text{positive}} = 1.88; F(1, 61) = 4.35, p = .04$ ) indicating that for shared memories, positive experiences are

more accessible than negative experiences. Other contrasts do not reach significance ( $p$ 's  $> .10$ ), but are in the anticipated directions.

In study 3 (N = 75 MTurk respondents) participants were instructed to recall and list all of the memorable events that they had experienced over their lifetime. We then showed them the memories that they had listed and asked them to categorize each memory as only one of the following categories: Individual, Shared, Positive, or Negative. This process allowed us to test whether the social bias or the positivity bias dominates memory retrieval. We also captured response time to list the first memory. Finally, participants filled out the need to belong scale (Leary et al. 2013).

An analysis of the response time to categorize the first memory as either shared, individual, positive, or negative revealed a significant moderating effect of the need to belong. We recoded the data to indicate whether each thought was initially categorized based on a social aspect (i.e. shared or individual) or on a valence aspect (i.e. positive or negative) and used this variable as our categorical variable. Recoding the data in this manner allowed us to get a sense for the aspect of memory that is most important in memory categorization.

A regression with response time as the dependent variable, need to belong as the continuous variable, and method of classification as the categorical variable, as well as their interaction as predictor variables, and response time for the practice questions as covariates yielded a significant interaction ( $\beta = 6.22, t(33) = 1.68, p = .03$ ). A spotlight analysis revealed that people who are low in need-to-belong were quicker at categorizing their first thought based on affect, compared to categorizing based on social connection ( $\beta = -13.14, t(33) = -2.95, p = .006$ ), but no significant differences emerged for participants that were high in need-to-belong.

Our research contributes to the literatures on memories and social identity by documenting that social memories may be as accessible as positive memories, i.e. a social memory bias in addition to the positivity bias in memory. Further, individual differences in need to belong can moderate the importance that people place on the social connection versus the valence of a memory and impact how people recall their memories. Our findings provide greater insight into how people remember consumption experiences and advertisements, and may help us to determine which aspects of an experience will be remembered and potentially used for forming attitudes towards products and services.

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# Judgments of Virtue in Consumer Behavior

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## EXTENDED ABSTRACT

Research on consumer behavior is thick with moral connotations: virtues and “shoulds” benefit a future self, whereas vices and “wants” benefit the present self. Yet theories of morality involve helping or harming others, and would not consider many of these decisions to be moral, in spite of the moral subtext. In the current research, we explore how people understand the meaning of virtue across high-morality and low-morality decisions.

In doing so, we focus on two key determinants of virtue: (1) willpower (i.e. an ability to exert self-control to overcome temptation) and (2) purity of character (i.e. not feeling tempted by a vice). We propose that for low-morality decisions (e.g. whether to cheat on a diet), willpower signals virtue: someone who resists temptation will be seen as more virtuous than someone who is not tempted by a vice. However, for high-morality decisions by a vice will be seen as more virtuous than someone who resists temptation.

In Study 1, participants read scenarios involving two individuals who each choose a virtue over a vice. However, only one individual felt tempted by the vice, while the other did not feel tempted by the vice. In one condition, the scenarios included low-morality decisions (cheating on a diet; procrastinating schoolwork; avoiding exercise) whereas in the other condition, the decisions were all highly moral in nature (committing adultery; stealing office supplies; failing to donate a kidney).

Participants directly compared the two individuals on a Relative Virtue scale centered at zero, whereby positive numbers indicate that the person who resisted temptation was considered more virtuous, and negative numbers indicate that the person who did not feel tempted was considered more virtuous. Results show that for low-morality decisions, the person who exerted willpower and overcame temptation is judged to be more virtuous than the one who was not tempted by the vice (Low-morality  $M_s > 0.30$ ;  $t_s > 2.3$ ,  $p_s < .023$ ). However, for high-morality decisions, the person who overcame temptation is judged to be less virtuous than the one who was not tempted by the vice (High-morality  $M_s < -0.65$ ;  $t_s < -4.99$ ,  $p_s < .001$ ).

In Study 2 we directly measure perceptions of willpower and purity to provide mediation evidence of our theory. We also test the robustness of our effects in Study 2 by having participants only read about a single individual rather than comparing two individuals directly. In addition to contrasting individuals who are and are not tempted by a vice, we further examine a new situation whereby an individual used to feel tempted by a vice, but has since eliminated their unwanted urges, and no thus longer feels tempted by it. We refer to this person as being reformed.

For low-morality decisions, we argue that judgments of virtue are based on willpower. Individuals who are reformed are likely to be seen as strong willed, and will be considered more virtuous than

those who have never felt tempted by a vice. For high-morality decisions we argue that judgments of virtue are primarily based on purity of character. Individuals who are reformed will have eliminated their desire for a vice, and will be seen as more pure than those who still feel tempted by a vice. However, their previous immoral thoughts still reflect an underlying impurity. Thus, we predict that for high-morality decisions, those who are reformed will be considered more virtuous than those who resist temptation, but less virtuous than those with a natural distaste for the vice.

In this study, we conducted a 2 (Morality: Low, High) x 3 (Temptation Level: Tempted, Not Tempted, Reformed) between subjects design. Specifically, an individual named Kevin was faced with either a highly moral decision (cheating on a spouse or not) or a low-morality (eating a dessert or not). Kevin was either described as feeling tempted by the vice (Tempted condition), not feeling tempted by the vice (Not Tempted condition), or as being formerly tempted by the vice, but no longer (Reformed condition). In all cases he chose the virtuous option.

A two-way ANOVA showed a significant morality x temptation level interaction ( $F(2, 216) = 26.75$ ,  $p < .001$ ). Follow up analysis examines the Low Morality and High Morality conditions separately.

*Low Morality:* Replicating our previous findings, participants in the Tempted condition ( $M = 6.56$ ,  $SD = 1.37$ ) rated Kevin to be more virtuous than those in the Not Tempted condition ( $M = 4.58$ ,  $SD = 1.77$ ;  $t(72) = 5.55$ ,  $p < .001$ ). Further, participants in the Reformed condition ( $M = 6.68$ ,  $SD = 1.41$ ) rated Kevin to be more virtuous than did those in the Not Tempted condition ( $t(73) = 5.94$ ,  $p < .001$ ). Ratings of virtue did not significantly differ between the Tempted condition and the Reformed condition ( $t(71) = 0.33$ ,  $p = .74$ ).

*High Morality:* Replicating our previous findings, participants in the Not Tempted condition ( $M = 7.35$ ,  $SD = 1.08$ ) rated Kevin to be more virtuous than did those in the Tempted condition ( $M = 5.69$ ,  $SD = 2.12$ ;  $t(72) = 4.23$ ,  $p < .001$ ). Further, participants in the Reformed condition ( $M = 6.53$ ,  $SD = 1.72$ ) rated Kevin to be more virtuous than those in the Tempted condition ( $t(71) = 2.14$ ,  $p = .034$ ) but less virtuous than those in the Not Tempted condition ( $t(73) = 2.10$ ,  $p = .038$ ).

In addition to these results, we further show mediation evidence that judgments of virtue for low-morality decisions are driven by willpower whereas judgments of virtue for high-morality decisions are driven by purity of character.

In sum, we show how the meaning of virtue differs across low- and high-morality decisions. When a decision is highly moral, individuals look towards purity of character when evaluating virtue, but when a decision is low in morality, individuals look towards willpower to evaluate virtue.



# Keeping Consumers in the Red: Hedonic Debt Prioritization within Multiple Debt Accounts

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## EXTENDED ABSTRACT

The current studies extend the stream of research on debt account aversion (Amar et al. 2011) by investigating how people manage multiple debts and how they prioritize their debt repayment depending on the type of debt (referred to as ‘debt type’ hereafter) and timing of debt occurrence. In particular, we demonstrate that when debt is incurred for a hedonic purchase (as opposed to a utilitarian purchase), customers with multiple credit card debts are more likely to reduce the number of debts by prioritizing small debt repayment rather than decrease the total cost of debt across accounts. Thus, we explore the effect of ‘debt type’ on ‘debt account aversion.’

When consumption benefit depreciates over time (Gourville and Soman 1998), continued payment feels more like a pure loss since there is no corresponding benefit to buffer the pain of repayment. Kivetz and Simonson (2002) demonstrate that the pain of payment is more pronounced for hedonic consumption than for utilitarian consumption. Also, individuals quickly adapt to an enjoyable consumption, since hedonic experiences depreciate more quickly than utilitarian experiences (Wang, Novemsky, and Dhar 2009). Thus we predict that hedonic debt will motivate consumers to pay down smaller balance debt accounts faster than an equivalent debt for a utilitarian purchase and that this effect is mediated by the degree to which the consumer feels consumption enjoyment will be impacted by debt. When the smaller debt has a high APR (thus aligning account aversion with optimal overall debt reduction), we predict and find no differences between hedonic and utilitarian debt.

Study 1 manipulated both debt type and APR. Participants were presented with two debt accounts (hypothetical credit cards) that varied in outstanding amount and corresponding APR. Subjects had \$600 in their savings that could be allocated entirely (or partially) toward one (or both) credit card balance(s). Participants could completely pay off (close) one of the debt accounts if they desired. Half the participants saw credit card M with \$600 balance and 12% APR and credit card S with \$1200 balance and 18% APR. The order of APR assignment for the other half of the subjects was reversed, such that credit card M had \$600 and 18% APR and credit card S had \$1200 balance and 12% APR. Across all conditions, the \$1200 balance on credit card S was due to everyday purchases. Debt type was manipulated by telling one half of the participants that the \$600 debt on credit card M was incurred because of a luxury (technology) package upgrade to the current vehicle. Proportion of savings allocated to the smallest balance served as the dependent variable. The results (Table 1) of this study revealed that in the 12% condition, hedonic debts were prioritized and repaid faster than utilitarian debts. No differences were observed in the 18% condition. As hypothesized, hedonic debt reduced anticipated consumption benefit, which mediated the debt type-repayment relationship.

Study 2 manipulated anticipated consumption enjoyment by utilizing temporal construal (Trope and Liberman 2003) in a 2 (hedonic v. utilitarian) x 2 (12% v. 18%) x 2 (debt timing: recent past v. distant past) design. If retaining consumption benefit is the motivation behind repayment of hedonic debt, debts occurring in the distant past should be prioritized over debts occurring in the recent past. This is because the elapsed time between consumption benefit and payment reduces the utility of hedonic purchases much more than that of utilitarian purchases (Kivetz 1999). The APR manipulation

was similar to that in Experiment 1. Depending on the type and timing of debt, participants were told that the card M debt was incurred because they had purchased a laptop for a fun-oriented purpose such as gaming (work-oriented purpose such as office tasks) last month (last year). Results revealed a significant three way interaction such that in the 12% condition, hedonic debts were prioritized over utilitarian debts—especially those occurring in the distant past. Debtors were more likely to repay hedonic debt due to the diminished consumption enjoyment, further amplifying debt account aversion effects. The anticipated consumption enjoyment provides process evidence and is consistent with research that shows that elapsed time between the consumption benefits and payment (e.g., “decoupling”) reduces the utility of hedonic purchases much more than those of utilitarian purchases (Kivetz 1999; Patrick and Park 2006).

Study 3 tests the proposition that people are more willing to pay off the debt associated with past hedonic consumption than future hedonic consumption, as consumers tend to be overly optimistic when forecasting future behavior (Dhmi, et al. 2006; Khan and Dhar 2007). Wang, Novemsky, and Dhar (2009) demonstrate that consumers are unable to accurately predict diminishing hedonic enjoyment because they fail to account for adaptation. The design was similar to that of study 2, but replaced recent/distant past with past/future in a 2x2x2. Results again revealed a significant three way interaction such that in the 12% past condition, hedonic debt was prioritized over utilitarian, however future debts were treated equally. As in both prior studies, no differences emerged in the 18% condition. Mediation analysis again supported the proposition that hedonic debt negatively affects anticipated consumption enjoyment, which increases the likelihood of closing out the smaller account despite it having the lower interest rate.

Overall, these results reveal the detrimental effects on consumers’ ability to reduce overall debt; the temptation to pay off past, hedonic debts may override optimal allocation intentions and keep consumers in debt longer than necessary.

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# Congruent Attributes in Complementary Consumption: The Role of the Experience's Social Context

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## EXTENDED ABSTRACT

Often in assessing complementary consumption experiences (e.g., wine and cheese), consumers must consider their evaluations of each individual item and their perceived congruence of the pairing. Yet, little is known about how consumers weigh these considerations. We address this gap by offering a framework that incorporates alternative-based (vs. attribute-based) processing (Payne, Bettman, and Johnson 1993). We show how the experience's social context influences processing style, which in turn influences preferences for complementary pairs.

Research on complementary consumption has mainly focused on understanding the heuristics that consumers use to form preferences for product pairs. Some past work has suggested that preferences for pairings are based entirely on maximizing the combined, separate evaluations of the two individual items (e.g., Adams and Yellen 1976; Schmalensee 1984), but more recent work has proposed that consumers also desire items that appear to belong together (Veryzer and Hutchinson 1998), such as by matching on brand name (Rahinel and Redden 2013). Often in these situations, a single attribute, like country-of-origin, brand name, or source, is a basis for perceived congruence (e.g., wine and cheese from the same region). We develop a framework to explain how consumers weigh perceived congruence when forming preferences in these situations. More specifically, we argue that a greater utilization of attribute-based (vs. alternative-based) processing leads to greater reliance on congruent attributes in assessing complementary consumption experiences.

Further, our contention is that these distinct ways of processing information are triggered by the experience's social context. According to recent research (Bhargave and Montgomery 2013), when experiencing alone (with others), consumers think more analytically (holistically). Analytic processing involves viewing an experience in a piecemeal manner, with a greater emphasis on its individual attributes and lesser emphasis on the context in which it is embedded (Nisbett 2003; Nisbett et al. 2001). In contrast, holistic processing involves viewing an experience globally, with lesser emphasis on individual attributes. From these key distinctions, we assert that when consumers assess complementary experiences, they will utilize attribute-based processing relatively more in solo (vs. social) contexts, and conversely they will utilize alternative-based processing relatively more in social (vs. solo contexts).

In turn, the processing style that is brought about by the experience's social context influences preferences for complementary pairs that are consumed in that social context. When assessing complementary pairs, concern that they match on a congruent attribute (e.g., country-of-origin, brand name, source) should be greater in solo contexts, when consumers are more likely to attend to individual attributes. In contrast, in social contexts, consumers will be less concerned about a match on congruent attributes, since alternative-based processing leads consumers to view each item in the pair globally. We tested these contentions in five studies.

The pilot study was designed to show that social context influences product evaluation strategies. Participants completed three choice tasks. In each choice task, one option was superior on a non-alignable attribute whereas another option was superior on an alignable attribute. Greater preference for the alignable-superior option indicates more attribute-based processing (Su and Gao 2014). For

each domain (TV, microwave oven, water pitchers), participants indicated their relative preference on a 5-point scale. In a between-subjects manipulation, participants were either asked to imagine making the choice for themselves (solo) or for consumption with another person (social). Consistent with our predictions, preference for the alignable-superior option was greater in the solo context ( $M=3.39$ ) than in the social context ( $M=2.98$ ,  $p<.05$ ).

In Study 1, we used the same social context manipulation as the pilot study, and participants were asked to imagine consuming two items together in four domains that had a potential match on an attribute: (1) wine and cheese, matched on country-of-origin, (2) chicken and rice, matched on region, (3) two pieces of art matched on artist, and (4) art experience and music matched on era. Participants indicated their relative preference for the pairing, between two options—either with or without the match on the attribute. Consistent with our predictions, across all domains, preference for a congruent attribute was greater in the solo context ( $M=3.61$ ) than the social context ( $M=3.25$ ;  $p<.05$ ).

In Study 2, participants were asked to choose between two pairs of art posters to place on a wall. During the task, they were seated either alone or with others. One poster pair had the same artist, whereas the other pair had different artists. In this study, source (artist) was the potentially congruent attribute. In another between-subjects manipulation, participants were or were not provided labels with the artist names throughout the task. When labels were provided, the artist match pair was preferred more in the solo (74.19%) than the social context (43.75%;  $p=.01$ ), but this effect of social context did not occur when labels were absent (solo=45.45%, social=50%).

Study 3 involved a chip-and-salsa taste and rating task, adapted from Rahinel and Redden (2013). Participants ate a chip-and-salsa combination that was either described as being from the same brand or different brands in a between-subjects manipulation. In this study, the brand was the potentially congruent attribute. We varied the social context of the experience, such that participants ate either alone or with others. In the solo context, enjoyment was greater with a brand match ( $M=86.65$ ) than a mismatch ( $M=79.27$ ,  $p<.05$ ). However, in the social context, enjoyment was greater with a brand mismatch ( $M=84.48$ ) than a brand match ( $M=77.04$ ,  $p<.05$ ). Further analyses revealed that consumers viewed the chips and salsa as individual items more positively when they were from different brands, and this may explain the reversal in the social context. Study 4 replicated these same results; we showed that participants' feelings of connection with others (as an individual-difference variable; Lalwani 2009) moderated preference for a brand match in chip-salsa pairings.

Taken together, these results enhance our understanding of how consumers choose complementary products and, in particular, the role of social context and processing style.

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# Eyes in the Sky: New Narratives in Consumers' Technology Consumption

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## EXTENDED ABSTRACT

When and why would consumers eschew a *particular* technological product despite its relative advantage? Extant theorizations on consumers' perceptions of technology suggest that such a behavior could perhaps arise from consumers' perceiving technology to be a de-naturalizing force (Kozinets 2008) or from consumers using avoidance as a coping strategy to assuage the anxiety and conflict that technology's perceived paradoxes engender (Mick and Fournier 1998). Yet these theorizations are inadequate to explain IBM (a technology company) recently banning SIRI from all of its offices. The current study argues that today's consumers might eschew certain products when they perceive those products and/or services not as stand-alone products, but as assemblages of several self-subsistent components, each of which is capable of exerting agency in the network that forms each assemblage.

## Theoretical underpinnings

An assemblage (Deleuze and Guattari 1980/1987; DeLanda 2006) is "a collection of heterogeneous parts and acts that form contingent relations across time to produce an emergent whole." (Sellar 2009). Assemblages can be anything – nation states, social movements, even an organism (DeLanda 2006, p. 5-6, 11). The heterogeneous parts of an assemblage are self-subsistent, and the properties of the whole is not a given, but instead emerge from the interactions of the parts (DeLanda 2006, p. 5), making an assemblage always "a process of formation and not a form" (Sellar 2009). Within an assemblage, the roles that components or actors can play range along a material – expressive axis. Components may also engage in territorializing or deterritorializing processes that can change the assemblage itself (Shanafelt 2009). Echoing the central tenets of Assemblage Theory, Actor Network Theory too draws attention to the various networked material actors and actants---both natural and man-made, human and non-human--- that exert agency and can "authorize, allow, afford, encourage, permit, suggest, influence, block, render possible, forbid, and soon" any act in that network (Latour 2005, p71-72)

Drawing on these theoretical concepts, the current study seeks to understand:

1. How do today's consumers perceive the complex technologies they possess, especially when current technologies are capable of emergent capabilities?
2. When and how do consumers attempt to navigate the network that their complex technologies are embedded in?

## Method

In situ phenomenological interviews were carried out among technology savvy internet and cellphone consumers in India who were recruited through convenience sampling. "Grand-tour" questions (McCracken 1988), specific probes and metaphor elicitation techniques were used to obtain responses to the research questions. 11 depth interviews were taken before the point of data saturation was reached. All interviews conducted were audio taped and transcribed. Data analysis followed a grounded approach, coding data iteratively to seek themes both within and across informants. Codes and themes were refined as patterns among the data emerged (Strauss and Corbin 1998) in terms of the ways and means of consumers' construction of actors/actants and the practices they engage in to avoid being part of someone else's network

## Findings

The data showed consumers who (possibly unconsciously) envisage a technological product as a collection of actors (a main actor and some sub-actors) in an assemblage. There is a prevalence of a cost-benefit analysis oriented behaviour towards the product/service assemblage, where consumers weigh the benefits of being part of the assemblage against the cost of losing privacy. Consumers seem to have a mental "snoopable-data" index in that they differentiate between appropriate leakage (for example snooping by institutions to safeguard a country) and inappropriate leakage (for example, snooping by individuals on private videos and pictures uploaded onto the net).

When the perceived benefits of being part of an assemblage outweigh the costs, consumers choose to become a part of the technological assemblage. When some consumers perceive the costs to outweigh the benefits, they engage in cautious practices to avoid being part of such an assemblage. In this, the existence of a single non-preferred actor in an assemblage might be enough to make a consumer try and avoid being part of that entire assemblage altogether and even choose a sub-par (in terms of perceived benefits) assemblage to be a part of, instead.

In situations, when costs and benefits are perceived as being equally important, consumers engage in several practices to utilize the assemblage without being territorialized by it. In such situations, the practices -- used either in isolation or in combination--- that consumers engage in are:

1. An active choosing of the assemblage to be a part of: In this practice, the consumer proactively draws on different sources to make sense of the constituent actors' and/ or actants' intentions, looks for alternative yet very similar assemblages and then chooses an assemblage to be part of, based on where s/he perceives that benefits can be received with no cost at all or at the least costs.
2. An active modification/structuring of the assemblage he chooses to be a part of, drawing in preferred actors and tossing out non-preferred ones: In an action-reaction interplay, the consumer draws on actor/s from outside the assemblage and uses it/them to replace an existing sub-actor (especially when it becomes an amorphous actant) in the assemblage, as counteracting moves to the "main actor's" perceived territorializing moves.
3. Using leakage as a resource: Here the consumer proactively allows the leakage through the assemblage to occur when the leakage helps him in some manner.
4. Actively toning the leakage up and down as required: This is exemplified by a consumer's recruiting the "leaking actors" more frequently when he wants to and recruiting them less frequently when he does not require their service as much.

## Contribution

The findings of the current study shed light on tech-savvy consumers' perceptions of technology in networked conditions. That much of technology is networked has been overlooked by extant theorizations of consumers' technology perceptions. The current study also empirically substantiates academic theorization of privacy being a tradable commodity and highlights the complex practices through which consumers conduct this trade. Finally, the current study also

unearths conditions under which consumers might eschew technological products with greater relative advantage and opt for something sub-par instead.

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# Probabilistic Scarcity: Processing Disfluency Increases Attractiveness by Reducing Subjective Probability

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## EXTENDED ABSTRACT

A large body of research has documented that the ease with which information is processed (i.e., processing fluency) enhances evaluation (Schwarz 2004). More recently, researchers have examined whether and when processing disfluency may signal value to consumers (Briñol, Petty, and Tormala 2006). We add to this recent stream of literature by studying the impact of (dis)fluency on subjective probability, and in turn on attractiveness. In so doing, we reveal an indirect effect of (dis)fluency in contrast to prior research that focused predominantly on its direct effect on judgments via naïve theories (e.g., Pocheptsova, Labroo and Dhar 2010) or the affective reactions it elicits (e.g., mood or emotions).

The current experiments provided participants with a numerical probability associated with an outcome, and examined the impact of (dis)fluency on their subjective probability and attractiveness ratings. Although precise, numerical probabilities are directionally ambiguous in that they may be interpreted positively (i.e., suggesting occurrence of the outcome) or negatively (i.e., suggesting non-occurrence of the outcome; Teigen and Brun 1995). A positive interpretation tends to increase subjective probability relative to a negative interpretation (Bilgin and Brenner 2013). We propose that disfluency (vs. fluency) would encourage a negative interpretation of an otherwise directionally ambiguous numerical probability, decreasing its subjective probability. A misattribution of processing difficulty associated with disfluency to the difficulty of the target outcome occurring motivates this proposition. Hence, the locus of the effect is predicted to be at the level of interpretation of a directionally ambiguous numerical probability. Resulting reduction in subjective probability due to disfluency is proposed to increase perceptions of unattainability, enhancing perceived attractiveness (Cialdini 1993).

We expected that the predicted effects should only hold when the perceived diagnosticity of the (dis)fluency experience remains intact. For example, revealing the true source of the processing (dis)fluency should eliminate its diagnosticity and effect on judgments (Schwarz 2004). Also, (dis)fluency becomes diagnostic when the judgment context affords a certain level of ambiguity (Haddock et al. 1999). The directional ambiguity in the interpretation of numerical probabilities naturally varies across the probability scale. High numerical probabilities, which are almost exclusively interpreted positively, are less directionally ambiguous than low numerical probabilities (Teigen and Brun 1995). Hence, the proposed effect of (dis)fluency should be more prominent for low than high numerical probabilities. One can also eliminate directional ambiguity experimentally by forcing participants to interpret a numerical probability in one direction (Bilgin and Brenner 2013). In this case, (dis)fluency should be non-diagnostic to a subjective probability task.

The current experiments used an office-drawing scenario in which participants were told that their current office is 70-square feet and has one window. They were then told that they may get a larger office (100-square feet) with two windows depending on the outcome of a drawing (adapted from Bilgin and LeBoeuf 2010). In all experiments, the fluency manipulation involved presenting the scenario in either easy-to-read font, or difficult-to-read font. We collected mood measures (Winkielman and Cacioppo 2001), and dread and eagerness measures to control for participants' reactions to the drawing (Bilgin 2012).

In experiment 1 ( $n=99$ ), participants were told that they had a 30% chance of moving into a larger office with two windows. Participants were randomly assigned to one of three conditions: fluent, disfluent, and disfluent with source attribution. Participants in the source attribution condition were informed that the information may be difficult to read because of the font (adapted from Novemsky et al., 2007). After reading the scenario, participants rated their confidence in drawing a larger office with two windows (0 = not confident at all; 10 = certain). We expected to find no reliable differences between the fluent-font and source attribution conditions, and expected both to be reliably higher than the disfluent-font condition. Planned contrasts confirmed our predictions, supporting a misattribution account of our findings.

In experiment 2 ( $n=89$ ), we utilized the natural variance in directional ambiguity across the probability scale. Participants were randomly assigned to one cell of a 2 (processing fluency: fluent vs. disfluent)  $\times$  2 (objective probability magnitude: 30% vs. 70%) between-subjects design. Roughly half of the participants were told that their chance of moving to a larger office was 70%, while for the other half this was 30%. We found that disfluency (vs. fluency) reduced subjective probability only when the numerical probability was 30%, and thus was directionally ambiguous, but not when it was 70%, as expected.

Experiment 3 ( $n=83$ ) utilized a forced-interpretation manipulation that asked participants to write down why the outcome was unlikely to be a larger office. Participants in the no-forced interpretation condition skipped this part, and all participants rated subjective probability and attractiveness (the order in which these two questions appeared was counterbalanced). Participants were randomly assigned to one cell of a 2 (processing fluency: fluent vs. disfluent)  $\times$  2 (directional interpretation: forced-negative vs. no-forced interpretation) between-subjects design. Disfluency reduced subjective probability in the no-forced interpretation condition, replicating our central finding. The effect failed to arise, however, when forced interpretation of a numerical probability in one direction eliminated directional ambiguity, rendering (dis)fluency non-diagnostic to the judgment. The findings for attractiveness mimicked subjective probability ratings as expected: attractiveness of a larger office was higher insofar as its subjective probability seemed lower. This interaction suggests that the locus of the effect of (dis)fluency on subjective probability is at the level of interpretation. Findings also support the probabilistic scarcity effect, with reduced subjective probability enhancing attractiveness.

Our findings contribute to subjective probability, metacognition and scarcity literatures. They identify processing (dis)fluency as a factor that cues a direction of interpretation for otherwise directionally ambiguous numerical probabilities. They also add to the recent stream of metacognition research that suggests disfluency may enhance attractiveness (e.g., Pocheptsova et al. 2010), and document an indirect effect of (dis)fluency on judgments. They also suggest that eliminating directional ambiguity of numerical probabilities is a novel way to block the unwanted effects of (dis)fluency on judgments. Finally, we find that probabilities may induce a sense of scarcity, thereby affecting consumer evaluations.

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# “Talk is Cheap”: The Discrepancy between Self and Next-Of-Kin Organ Donation Decision

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## EXTENDED ABSTRACT

The medical demand for human organs suitable for use as transplants far exceeds the supply. Policy makers are trying to increase donation rates; despite the efforts to better understand individuals' decision-making process and to increase donation rates, the percentage of the people whose organs are donated post mortem remains relatively low.

In this project, we adopt a new perspective to the study of organ donations, and suggest that in order to increase post mortem organ donations, we should shift our focus away from the individual, and consider instead those who have the final word—the individual's family members. Specifically, we propose that there is a discrepancy between individuals' willingness to sign up as organ donors, and their willingness to donate organs of their loved ones. Importantly, we postulate that people are more likely to agree to donate their own organs than they are to donate the organs of their deceased relatives, and set out to find factors that can diminish this gap.

Generally, most individuals express positive attitudes toward organ donation (Moloney & Walker, 2002; Radecki & Jaccard, 1997; Singh, Katz, Beauchamp, & Hannon, 2002). There is evidence that a wide range of beliefs potentially underlie donation decisions, and that these beliefs largely fall into one of the categories of religious, cultural, knowledge, altruistic, and normative beliefs. However, an important problem is that the final decision whether to donate an individual's organs after his or her death is in the hands of someone else (close family), this requires that we consider the importance of these individuals in the decision making process. The fact that the actual donation decision is made by other people might explain the discrepancy between positive attitudes towards organ donation and the actual donations. Even when a patient has a signed organ donation card, the Organ procurement organization (OPO) often seeks family permission to proceed with donation. The Uniform Anatomical Gift Act (1968, revised 1987) established that a signed organ donation card is sufficient to proceed with donation, and it has been confirmed recently that such documents function legally as advance directives. In the United States, however, it is customary for the OPO to request permission from the next-of-kin due to fear of litigation (Hanto, Peters, Howard & Cornell, 2005).

Research on medical decisions shows that what may seem reasonable for one may be seen differently when acting on behalf of another, even when beliefs and values are similar (Raymark, 2000; Zikmund-Fisher, Sarr, Fagerlin and Ubel, 2006).

We conducted two studies to test whether the proposed gap between individuals' willingness to donate her organs and her willingness to donate organs of her relatives, exists. We also used this study to explore potential factors that could drive this discrepancy. In the first study we asked two different groups of participants to provide their attitudes and preferences with respect to donating their (Self), or their relatives (Relative) organs. Participants in the second studies were asked to provide responses for both Self and Relative organs.

### Study 1

In this study, we randomly assigned participants (108 undergraduate students in a major Israeli university) into one of four experimental conditions that manipulated decision type (Choice vs. Advice) and perspective (Self vs. Relative). First, participants read

an introductory neutral text about organ donations. Next, they faced simulated organ donation decisions.

The findings support our initial hypothesis in that participants' willingness to register as a donor was significantly higher than their willingness to consent donating a relative's organs (81% vs. 68%, respectively;  $F = 4.475, p < .01$ ). In contrast, participants were equally and highly likely (both 96%) to advise a friend they should register as donors and consent to donate a relative's organs. A series of binary logistic regressions revealed that of a host of potential predictors of likelihood to register/recommend organ donation, only prior discussion of the topic with family member was significant.

### Study 2

In the second study, we measured participants' ( $N = 117$ ; MTurk) willingness to register as organ donors and the likelihood they would agree to donate organs of a close relative. Interim findings show that 29% of respondents who were not already registered as organ donors (49%), are willing to register, 58% are undecided, and only 13% refuse. More importantly, consistent with the findings of Study 1, our data revealed a gap between participants' willingness to donate their organs and their willingness to donate the organs of their relatives/close others. While refusal rate to register as donors was at a mere 13%, refusal to consent to donate a relative's organs was higher, at 22% ( $\chi^2 = 19.53, df = 1, p < .001$ ). Interestingly, 23% of individuals that have already registered as organ donors or expressed willingness to do so stated that they will refuse to donate a relative's organ after his or her death.

In sum, the findings presented herein provide good evidence for our assumptions and initial predictions. We found that there is a significant difference in individuals' willingness to donate their organs and their willingness to donate organs of their loved ones. This finding has major implications for anyone wishing to increase the number/percentage of organ donations, as the relatives of the deceased individuals often have the final word. There are various factors that could underlie the observed discrepancy, some of which are highlighted by our findings (e.g., religious beliefs, education). Additional research is required in order to better understand the relative impact each of these factors play in decreasing willingness to donate a relative's organs, and to further explore other potential factors such as uncertainty about one's preferences and predicted regret. Identifying the barriers to organ donation would allow us to prescribe potential approaches and interventions that could help health practitioners and policy makers increase the number of organ donations.

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# Moments of Truth: Nudges at the Point of Consumption in an Office Setting

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## EXTENDED ABSTRACT

Three field studies tested the effects of temptation salience on consumption of free food, nudging employees in a technology company to make healthier choices at the office. Study 1 examined the effects of proximity and waiting time on the tendency to take snacks with a beverage. Study 2 tested three serving size manipulations in an effort to reduce candy consumption. Study 3 encouraged the trial of unappealing vegetables. All studies were conducted in a technology company providing free and delicious food all day. The food program is a cherished benefit that also creates unique challenges to healthy eating. The studies we report here offer a number of ways in which workplace food policy and practices might better support employees in feeling their best and achieving peak performance.

### Study 1: Mindless consumption of snacks with a beverage

Study 1 was intended to test and extend the results of promising preliminary research on the salience of temptation by Wansink, Painter and Lee (2006). They suggested that people may eat more candy when it is within reach, and when it is more visible, based on observations of how many chocolates were consumed when proximity of a candy dish (within reach or 6 feet away) and visibility of the candy (opaque vs. transparent dish) were manipulated. Their findings warrant further investigation for a number of reasons. First, their sample size is very small ( $N=40$ ), and findings based on small samples are notoriously unreliable (Button, et al. 2013). Second, the behavior of their sample should not automatically be assumed to represent the general population: all 40 participants were female secretaries who self-selected into a “candy study” and reported eating at least three pieces of candy per week. Without any men in the sample, we cannot guess whether men would behave similarly or differently—however, this is an important question. Third, the reported results might represent the upper bound for the potential effect of salience on the consumption of tempting treats because the sample represents the type of person most likely to eat more candy when they notice it is available: they are candy lovers who have enough slack at work to enroll in a study, and because they sit at a desk nearly all day, the candy on their desk will be within their field of vision the entire time they work. Fourth, interpretation of the findings is complicated by the inability to know how many of the candies were consumed by others. Although the secretaries were instructed not to share due to “cost constraints,” social norms dictate that candy in a dish on a secretary’s desk is a gesture of hospitality and designated for general consumption, so a secretary declining to share it would be considered rude. Therefore, we find it hard to imagine secretaries slapping eager hands away or calling out a warning. Furthermore, the observed differences could be explained by other employees being unaware of candies further away from the desk or in an opaque container. Finally, the within-subjects design of this study entailed changing and moving each secretary’s candy dish four times in four weeks without a cover story, making the researchers’ hypotheses “transparent” to the participants. For all these reasons, we felt a new, larger, more general, and less intrusive study was warranted.

We built on this research with an unobtrusive observational study testing the effect of snack proximity on whether employees in a break area took a snack along with their beverage. We also recorded gender, to see whether men and women responded differently

to temptation, and we tested whether waiting time would further increase the likelihood of taking a snack along with a drink, since waiting in the presence of a temptation depletes self-control (Baumeister and Tierney 2011). We expected to replicate the main effect reported by Wansink, Painter and Lee, that proximity would increase snack consumption, we expected waiting time to increase snack consumption, and we expected that if gender differences were observed, women would be less affected by the environmental cues because they are more likely to have rules about eating and snacking (e.g. “no snacking before noon,” or “no sugar”) (De Bourdeaudhuij and Van Oost 1998).

### Method

This study was run at a large and busy “microkitchen” containing two beverage stations, one 6 feet 5 inches from the snack bar (“near”), and one 17 feet 6 inches from the snack bar (“far”) (see Figure 1). Both beverage stations had a refrigerator containing bottled beverages and a brewing station for hot drinks. Hot drinks needed to be brewed individually, requiring a wait time of 30-60 seconds. The snack bar contained a variety of snacks such as nuts, crackers, candies, dried fruit, and cookies.

During seven days, five research assistants sat near the microkitchen, unobtrusively observing and recording for each employee who entered the microkitchen, whether they took a beverage and whether they used the near or the far beverage station, whether they took a snack, and their gender. Research assistants were blind to the hypotheses. The final sample was comprised of the 1,167 employees (378 female, 787 male, and 2 unknown) who took a beverage during that time period. The number of days of data collection was determined in advance and based on a power analysis taking into account initial findings from the pilot study, assumptions regarding what would constitute a meaningful effect in this situation, and budgetary considerations.

### Results and Discussion

Of the 1,167 employees who consumed a beverage, 198 (17%) also consumed a snack. Supporting our main hypothesis that proximity to snacks would induce drinkers to succumb to temptation and consume more snacks, we found employees who took their drink from the beverage station near the snack bar ( $N=435$ ) were 50% more likely to take a snack than those who took their drink from the beverage station far from the snack bar ( $N=732$ )—21% vs. 14%,  $\chi^2(1, N=1,167) = 9.57, p = .001$ .

Excluding the employees who took both types of beverages, we compared snacking between hot beverage drinkers ( $N=786$ ) and cold beverage drinkers ( $N=351$ ). Hot beverage drinkers, who had to wait for their coffee or tea to brew, were twice as likely to take a snack as were cold beverage drinkers, who could grab and go, 24% vs. 12%,  $\chi^2(1, N=1,137) = 14.22, p < .001$ . Both near and far beverage stations showed a similar effect of wait time-- there was no interaction between wait time and proximity. Given that beverage type (hot vs. cold) served here as a proxy for wait time, we hesitate to draw a strong conclusion that wait time affected snack consumption. It is possible that employees perceived snacks to be more compatible with tea and coffee than with bottled beverages.

Comparing genders, we found women were less affected by proximity than men. The proportion of women snacking was ap-

proximately the same between the near (18%) and far (15%) beverage stations,  $\chi^2(1, N=377) = .48, p = .29$ . For men, proximity had a dramatic effect—14% of those choosing a beverage from the near station versus 23% of those who took a beverage from the far station also snacked,  $\chi^2(1, N=785) = 10.22, p = .001$ . Waiting time predicted a marginal difference in snacking for women, 18% took snacks with hot beverages versus 12% with cold beverages,  $\chi^2(1, N=368) = 2.01, p < .10$ ; and a significant difference in snacking for men, 20% took snacks with hot beverages versus 10% with cold beverages,  $\chi^2(1, N=764) = 12.83, p < .001$ . Again, there may be other reasons for this difference than waiting time, but the results suggest that men may be more likely to act on feelings of temptation and succumb to mindless snacking.

Assuming that snacks average 150 calories (a low estimate), keeping in mind that there are approximately 250 work days in a year, and estimating that an extra 3,500 calories yields a pound of body fat, we can extrapolate the potential effects of proximity on body weight in this setting. Brewing coffee at the station near the snacks means that each cup of daily coffee can yield an increase in body fat of three-quarters of a pound per year. For men, the estimated increase is one pound of fat per year resulting from each daily cup of coffee.

## Study 2: Fun Packs

The free and delicious food provided at this firm, as in many technology companies and other workplaces, creates a temptation not only to snack frequently but also to indulge in large portions. Most microkitchen snacks are served from bulk containers with four ounce cups provided for convenience, and previous research has found people tend to consume the amount of food that fits the bowl, plate, or package (Lawless, Bender, Oman, and Pelletier 2006; Wansink 1996; Wansink and Cheney 2006; Wansink, van Ittersum, and Painter 2006). Consistent with this research, we noticed during our Study 1 observations that many employees taking bulk snacks seemed to be filling the four ounce cups. Study 2 attempted to reduce serving size by making it more salient, presenting serving size information in three different formats. We tested a salient numeric cue, a visual cue, and a physical barrier.

Eighty percent of supermarket shoppers find nutritional information labels confusing (Lempert Report 2010), and one of their difficulties is in converting a serving size in ounces to a quantity of actual food. So the first intervention we used was revising the nutritional label to change serving size to pieces, and to simplify the information.

To draw more attention to the label and make it even easier to translate serving size to a quantity of actual food, we also used visual serving sizes—diagrams of how full to fill a cup. Public health officials encourage people to use visual cues for portion control, for example by applying rules of thumb such as “vegetables should cover half your plate” or “a serving of meat should be no bigger than a pack of playing cards.” No matter how useful and persuasive these messages are, however, their success depends on attention, the conscious processing of information, a congruent goal (in this case, to limit food consumption), and sufficient willpower to follow through with an intent to resist temptation.

We wanted to compare the first two high-involvement treatments with a third, low-involvement treatment, so we chose to replace bulk candies with small packages of candy. We hypothesized that replacing loose M&Ms in bins with individually wrapped Fun Packs would reduce M&M consumption because the Fun Packs would allow people to “mindlessly” consume less. In a pilot study ( $N = 98$ ), we had compared the approximate number of calories

consumed when employees snacked on loose M&Ms to the calories consumed when they snacked on small individual pieces of wrapped chocolates, and had found they ate 80% fewer calories per serving (64 vs. 323 calories) from wrapped rather than loose chocolate candies. Previous investigation into the effects of the 100-calorie snack pack has yielded mixed results (Scott, Nowlis, Mandel and Morales 2008; Stroebele, Ogden and Hill 2009), but we surmised that small package interventions might work especially well for candy if a small serving of candy is perceived to fulfill the goal of enjoying a sweet treat (rather than trying to fulfill the goal of satisfying hunger).

## Method

We compared the effect of numeric, visual, and prepackaged serving sizes on M&M consumption in three office microkitchens. We selected M&Ms because they were the most popular snack, so a reduction in M&M consumption could make a meaningful difference in a person’s overall calorie intake.

Before the experimental intervention began, research assistants unobtrusively observed the frequency and quantity of M&M snacking in the three microkitchens on 16 days during a 3-month baseline period ( $N=756$  observations), recording which M&Ms were taken (peanut or regular), approximately what proportion of the cup was filled (1/8, 1/4, 1/2, 3/4, 1 cup, 2 cups, etc.), and the snacker’s gender. All the bulk M&M containers had signs approximately 4 inches by 3 inches displaying serving size (1.69 ounces for regular M&Ms, 1.74 ounces for peanut M&Ms) and nutritional content per serving (calories, fat, carbohydrates, a variety of vitamins, etc.)

The three experimental treatments took place simultaneously in the three microkitchens over a one month period, with research assistants observing and recording consumption as they had in the baseline period, during nine days matching the baseline observation days of the week as closely as possible ( $N=572$  observations). Research assistants were blind to the hypotheses. In the first microkitchen, we replaced the existing nutritional labels with simplified information (only calories, fat, carbohydrates, sugar, and protein) and most importantly, with the suggested serving size translated to pieces, and reduced relative to the baseline condition (.55 ounces/18 candies for regular M&Ms, .65 ounces/8 candies for peanut M&Ms).<sup>1</sup> In the second microkitchen, we replaced the existing nutritional labels with labels containing the same simplified nutritional information as in the first kitchen, but adding a colored diagram showing how the suggested serving size would look in the provided cup: the suggested serving size (1/8 snack cup for regular M&Ms; 1/5 snack cup for peanut). Finally, in the last break area, we replaced loose M&Ms with M&Ms in “Fun Packs,” providing a very salient serving size cue that would require no effort to process or follow. The number of days of data collection was determined in advance and based on a power analysis taking into account initial findings from the pilot study, assumptions regarding what would constitute a meaningful effect in this situation, and budgetary considerations.

## Results and Discussion

For ease of interpretation, we have converted serving sizes into estimated calories. During the baseline period, M&M serving size did not differ between the three microkitchens (319 calories, 319 calories, 308 calories),  $F(2,603) = .20, p = .82$ , indicating that any differences in consumption observed between microkitchens in the treatment period can be attributed to the intervention and not to different types of people using three kitchens. During the treatment pe-

<sup>1</sup> Reducing the suggested serving size on the label between baseline and treatment was undesirable, but we chose to do this in order to match serving size between the three treatment conditions, so we were limited by the “fun pack” serving size sold by the manufacturer.

riod, consumption was greatly reduced in the Fun Packs treatment condition, from 308 calories to 130 calories,  $t(279) = 10.70, p < .001$ . Consumption did not decrease in the other two conditions (311 calories in the numeric condition and 319 in the numeric condition and 326 in the visual condition, both  $ps > .6$ ).

However, we did observe an effect of gender: whereas the numerical and visual serving size interventions had no effect for men ( $ps > .2$ ), there was a significant decrease in M&M consumption for women for the numerical serving size intervention, from 299 to 224 calories,  $t(161) = 3.29, p < .001$ . This finding is consistent with the notion that women may have a stronger conscious goal to avoid snacking than men and pay more attention to serving size labeling, however it does not explain why visual serving sizes would not also affect women's consumption for the same reason.

### Study 3: Vegetable of the Day!

Whereas Studies 1 and 2 measured consumption of snacks with the intention of reducing consumption, Study 3 documented an attempt to use salience to increase the likelihood of eating a healthy food. We investigated the effect of point-of-consumption promotion to encourage trial of healthy dishes with relatively unappealing vegetables as their main ingredient. Research with children has shown that learning to enjoy unfamiliar foods can require many exposures (Berman 2010) therefore it seems hopeful that adults too can learn to enjoy disliked or less-preferred healthy foods if they continue to sample them.

#### Method

Five target vegetables were selected, based on being commonly disliked and seasonally available: Brussels sprouts, parsnips, beets, cauliflower, and squash. For each of the target vegetables, chefs selected a recipe for a hot dish and a recipe for a cold salad containing that vegetable as the dominant ingredient. During a baseline period of five Mondays, chefs made the hot and cold dishes for one vegetable each week. For example, warm roasted Brussels sprouts with candied chestnuts were served on the same day as shaved Brussels sprouts salad. These dishes were served simultaneously in the two largest cafeterias in this location, which offer a cornucopia of free food, buffet-style. During the five week experimental period, the same pairs of hot and cold dishes that had been served in the baseline period were served again in both cafes, and were advertised in only the treatment café with large colorful "Vegetable of the Day!" posters displaying an elegant picture of the raw vegetable and a bit of trivia, such as, "Did you know that Brussels sprouts originate from the same plant as cabbage, collard greens, kale, kohlrabi, cauliflower, and broccoli?" (Trivia was intended to be uninformative regarding taste and nutrition.) The control café was used to measure seasonal variation in fresh vegetable consumption, which was expected to decline during the study, which ran from October to December. During the five baseline and five treatment days, a team of ten research assistants unobtrusively recorded the number of people who entered each café, the number of people who took some of any of the target dishes, and their approximate serving size (1/4 scoop, 1/2 scoop, 3/4 scoop, 1 scoop, 2 scoops, etc). The hypotheses were not discussed with the research assistants. The number of days of data collection was determined in advance and based on observations of foot traffic in the cafes, feasibility for the chefs, assumptions regarding what would constitute a meaningful effect in this situation, and budgetary considerations.

#### Results and Discussion

Eight thousand four hundred fifty-three cafeteria visits were recorded, and the Vegetable of the Day campaign was a success. Pro-

moting the unappealing vegetables in the treatment café dramatically increased the percentage of employees eating those vegetables in the hot dishes at the treatment café (from 10% during baseline to 17% during the campaign), even as the proportion decreased by 2% in the control café. The Vegetable of the Day campaign also increased the serving size for the target vegetable at the treatment cafe (from .17 scoops to .28 scoops). Adjusting for the seasonal decline in vegetable consumption in the control cafeteria (26% decline for the hot dish and 29% for the salad), we observed a 125% increase in the number of servings of the hot dish and a 27% increase in the number of servings of the salad as a result of the advertising intervention. Overall, advertising at the moment of choice more than doubled consumption of a hot vegetable dish placed at an already popular location in the treatment cafeteria. However, we saw an increase of only 27% in salad consumption when adjusting for the decline in consumption in the control café and a small raw decrease in consumption. The cold salads were placed farther away from the Vegetable of the Day signage, in a less-trafficked area, which also reduced the salience of the message.

#### Limitations

The three large field studies reported here explore the effect of nudges at the moment of consumption on motivating healthier eating behaviors at the office. Ecological validity is likely to be high, since all results were gathered through unobtrusive observations and the research hypotheses were not discussed with the research assistants collecting the data. However, these experiments are not without their limitations. One limitation of this work is that the average age of employees at this firm (late 20s) is younger than the average age at most firms, and the education and income levels are higher. As with any experimental findings, those intending to apply them to their own situation would be served by conducting their own small-scale experiments to test their applicability in the new environment.

#### Implications

Our findings suggest a number of procedural changes that an employer might consider, to nudge people toward healthy eating, and these can be applied at home as well. The coffee maker can be moved away from the kitchen, and snacks can be hidden from view in the microwave area, to reduce mindless snacking while waiting. Treats can be divided into small packages or cut into small servings, and potentially unattractive dishes could be treated as special. Overall, increasing the salience of healthy foods and decreasing the salience of unhealthy foods can help us take small steps toward health.

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# “Look!! I’m not the Same Person !” The Role of Clothing in Consumers Escapism

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## EXTENDED ABSTRACT

The symbolic role of products is a huge topic in the consumer behavior literature (Solomon 1983). Symbolic products are not necessarily purchased for functional benefits, they are used to express and communicate identity (Escalas and Bettman 2005). Among symbolic products, clothing is considered by the literature as a product particularly full of sense, not just seen as protection. Clothing helps consumers define their identity. Through their fashion style, consumers express not only how they want to be seen, but also how they see themselves (McCracken and Roth 1989; Crane 2012). Thus, the relationship between clothing as a symbolic product and consumer’s identity is relatively well established in the literature. However, we still know no nothing about the role of clothing in situations where the consumers try to lose its identity. Indeed, because modern society does not allow the release of negative feelings, consumers are seeking extraordinary consumption experiences to live strong emotions and to escape from their everyday life (Arnould and Price 1993; Tumbat and Belk 2011). According to Addis and Holbrook (2010), alienating experiences such as work or unpleasant life experiences put people in need of escaping. They try to transcend their normal existence and to live experiences as catharsis (Kozinets 2002). Extraordinary consumption experiences are aimed at creating a break with the habits and daily stress and are experienced by consumers like rituals (Tumbat and Belk 2011). But during rituals, consumers leave their identity to completely surrender to the experience (Van Gennep 1909). Consumers involvement in the experience is combined with a visual transformation (Shankar and Goulding 2011), but the role played by clothing in the loss of their identity remains unexplored.

To answer this question, we investigated rock music festivals as a ritual experience in which clothing are meaningful. We conducted in 23 depth semistructured interviews. The interview guide dealt with the dichotomy between the everyday clothing style and the clothing style at rock music festivals, and the meaning associated with both of them. The resulting sample was comprised of a diverse group of participants in terms of sex, age and education levels. Data were analyzed manually, using an iterative process to identify central themes in the narratives.

First, results show that consumers use clothing to lose their identity. Symbolically, individuals leave their identity through clothing. They leave their everyday clothes that are work or school-related to incorporate new clothes related to other meanings. The fact to wear dress far from the ordinary life acts like a metaphor meaning to leave everyday problems with everyday clothes. Moreover, the adoption of clothing in stark opposition to the everyday fashion style is experienced by the informants as a way to enter the festival. Second, consumers use clothing to escape from their everyday life. Consumers wear clothes that they cannot put in the everyday life where dress codes are much more rigid. This freedom is perceived by informants as an important source of hedonic gratification. Consumers have fun when they adopt eccentric clothes and this contributes to the feeling of escapism. Clothes in themselves carry this tensions release dimension. And third, our findings suggest that consumers use clothing to enter the ritual experience community. The festival is a social and collective experience. The fact that the festival-goers wear similar

clothes is one of the foundations of community. Clothing brings people together and participates in putting them all on the same footing.

The paper presents two contributions. First, we propose a new role of clothes. We show that clothing also plays a role in situations where consumers want to lose their identity. By the adoption of clothing in stark contrast to the daily life, consumers make a break with the stresses and concerns of ordinary reality. They enter a new body. Thus, our article shows that clothing has not only a social function, but also an individual function which is escapism. Second, our research contributes to the literature dealing with consumer immersion in experience. Previous research has shown that consumers immerse themselves completely in consumption experiences (Pine and Gilmore 1999). But we still know little about how consumers access to the immersion. Our research suggests that the consumer accesses gradually to the experience through a separation phase (Van Gennep 1909). This preparation is important because it affects the emotional release that consumers will achieve. We show that the clothes, through the visual transformation it allows, is an important part of the preparation to the consumption ritual.

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# Fostering Advocacy: How the Underlying Constructs of Attitude Certainty Affect Persuasion Intentions

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## EXTENDED ABSTRACT:

What drives people to advocate on behalf of their own beliefs? When, and why, do people try to persuade others? On a daily basis, we are exposed to countless advocacies generated by individuals. One person might advocate for stricter gun control after learning of a school shooting, whereas another might endorse a new product based on recent personal experience with it. Despite a voluminous literature on attitude change and persuasion, we know very little about advocacy.

One thing we do know about advocacy is that attitude certainty appears to be an important determinant (Akhtar, Paunesku, and Tormala, 2013). Attitude certainty refers to the subjective sense of conviction with which one holds one's attitude (Rucker, Tormala, Petty, and Briñol, 2014). According to past research, attitude certainty is the catalyst that transforms attitudes into action (Tormala & Rucker, 2007). For instance, Barden and Petty (2008) found that high attitude certainty increases willingness to vote and sign petitions. In addition, Visser, Krosnick, and Simmons (2003) found that high attitude certainty encouraged people to seek to persuade others. More recently, Akhtar et al. (2013) found that greater attitude certainty was associated with greater intentions to persuade others to one's viewpoint.

According to Petrocelli, Tormala, and Rucker (2007) attitude certainty can be construed in terms of either *attitude clarity*, "the subjective sense that one knows what one's attitude is," or *attitude correctness*, "the subjective sense that one's attitude is correct or valid." The aim of this research is to offer greater insight into the certainty-advocacy relationship by investigating which construct, clarity or correctness, is the primary driver of advocacy.

Our central hypothesis is that advocacy depends more on correctness than it does on clarity. Indeed, feeling clear about one's own attitude does not necessarily imply that others should share it, but feeling that one's attitude is correct might suggest that others should share it. To the extent that people feel that they have the correct opinion, we suspect that they will be more likely to express an inclination toward advocating.

Study 1 used a correlational design to provide initial evidence that clarity and correctness could be statistically differentiated in how they predict advocacy behavior. Participants were presented with five policy issues and asked about their attitudes, certainty, clarity, correctness, and advocacy. We hypothesized that correctness would be a much better predictor of advocacy than would clarity. For each policy item we considered the partial correlations for correctness with advocacy (controlling for clarity and global certainty) and the partial correlations for clarity with advocacy (controlling for correctness and global certainty). The results across all five issues for our partial correlations show that correctness consistently and significantly predicted advocacy, whereas clarity did not.

Study 2 aimed to establish a causal path for the effect uncovered in study 1. Following the attitude measurement, all participants were exposed to a consensus manipulation where they were informed that their score was either similar to or dissimilar to the majority of other survey takers responses. We predicted that participants in the high consensus condition would feel higher levels of attitude correctness, but not attitude clarity, leading them to be more likely to exhibit advocacy behavior than those in the low consensus condition.

Participants were asked to report their attitudes toward a statement on gun control after which they completed all of the same items as in study 1. We found an effect of consensus on our correctness index ( $a = 0.85$ ),  $t(402) = -3.20$ ,  $p = 0.001$ , such that participants exposed to the high consensus condition ( $M = 7.02$ ,  $s.d. = 1.65$ ) felt significantly more correct than those in the low consensus condition ( $M = 6.46$ ,  $s.d. = 1.85$ ). We then found a marginal effect of consensus on our clarity index ( $a = 0.94$ ),  $t(402) = -1.80$ ,  $p = 0.072$ , such that participants exposed to the high consensus condition ( $M = 7.81$ ,  $s.d. = 1.46$ ) felt marginally more clarity than those in the low consensus condition ( $M = 7.52$ ,  $s.d. = 1.73$ ). Finally, we found an effect of consensus on our advocacy index ( $a = 0.94$ ),  $t(402) = -2.79$ ,  $p = 0.006$ , such that participants exposed to the high consensus condition ( $M = 4.66$ ,  $s.d. = 2.28$ ) did express stronger intentions to advocate than those in the low consensus condition ( $M = 4.03$ ,  $s.d. = 2.23$ ). Next, to provide direct evidence that correctness and not clarity, mediated the relationship between consensus and advocacy, we employed a mediation analysis. Results for correctness indicated a CI ranging from .14 to .56, suggesting correctness played a mediating role in the advocacy effect, while Clarity's CI crossed zero, suggesting no mediation. The results of study 2 were consistent with our predictions.

Study 3 aimed to provide evidence for the absence of clarity's effect on advocacy. Following the attitude measurement, participants were randomly assigned to either the high repeated expression condition or the low repeated expression condition. Those in the high condition repeated their attitude five times, while those in the low condition only expressed their attitude once. We predicted that participants in the high (low) repeated expression condition, would feel higher (lower) levels of attitude clarity, but not attitude correctness, and that because there was no effect on correctness this would not lead them to exhibit advocacy intentions. To examine this prediction, participants in both conditions completed all of the same items as in study 1. We found no effect of condition on our correctness index ( $a = 0.90$ ),  $t(393) = -1.42$ ,  $p = 0.16$ . However, we found an effect of condition on our clarity index ( $a = 0.93$ ),  $t(393) = -2.00$ ,  $p = 0.046$ , such that participants exposed to the high repeated expression condition ( $M = 7.73$ ,  $s.d. = 1.45$ ) felt more clarity than those in the low repeated expression condition ( $M = 7.40$ ,  $s.d. = 1.85$ ). Finally, we found no effect of condition on our advocacy index ( $a = 0.91$ ),  $t(393) = -.25$ ,  $p = 0.80$ . The results of study 3 were consistent with our predictions.

Across 3 studies, we found evidence for the proposed advocacy hypothesis. Specifically, we found that attitude correctness does have a significantly stronger relationship with advocacy than does attitude clarity. As hypothesized, we observed correctness mediating the relationship with advocacy. In contrast, attitude clarity appeared to play no role. Implications for understanding and eliciting advocacy in consumer contexts will be discussed.

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# Rating with Confidence: How Rating Scales Affect Future WOM Behavior

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## EXTENDED ABSTRACT

It is fairly well accepted that WOM impact the *receivers* of social information, however there has been far less research to understand its effect on the information *providers*. How might the process of providing a product rating affect one's subsequent behavior? For example, will product reviewers behave differently if they offer their rating score on a 2-pt vs. on a 5-pt rating scale?

We propose that rating scale can affect senders' future WOM behavior as different scales may influence how certain they feel on the ratings score they assign. For example, given a satisfactory consumption experience, consumer may feel confidence to rate the product as 4 on a 5-point scale, but feel less confident to rate it as 12 on a 15-point scale. Such a belief about one's rating process, which we refer to "rating certainty", is defined to reflect raters' certainty belief regarding the score. As the rating certainty level is higher, it implies that their evaluation is more likely to be valid, therefore is more predictable on their evaluation-consistent behavior, such as future WOM.

Any belief or thought can be held with subjective levels of confidence (Berger and Mitchell 1989). When a belief is about one's own personality or traits, the certainty belief refers to self-certainty (Clarkson et. al 2009). When a belief object is one's attitude, the certainty belief refers to attitude certainty. While belief is a first-order cognition, certainty judgment is considered a second-order cognition (or metacognition) that is attached to the first-order cognition and reflects thoughts about one's own thoughts or thought process (Jost, Kruglanski, and Nelson 1998). Analogously, when rating a product rating task and offering a rating score (first-order cognition), a second-order cognition is expected to occur. We refer to this second-order cognition as rating certainty, which reflects the extent to which a rater subjectively believes that the provided rating score can precisely capture her underlying utility. Since rating certainty is a type of certainty belief, it is expected to follow similar properties as other constructs in this class. In particular, a belief with higher certainty is more likely to predict belief-associated behavior (Fazio and Zanna 1978). Therefore, when raters are more certain that the assigned rating score is accurate, they are more likely to engage in behavior that is consistent with the rating- in this context, WOM communication.

One factor that may affect one's rating certainty level may be the choice of rating scale. For instance, Komorita and Graham (1965) suggest that a scale with fewer scale points may not provide sufficient discrimination by consumers, however a scale with too many scale points may go beyond consumers' ability to discriminate one point from the other. This suggests that one's rating certainty level may be affected by the number of scale points: a rater may be less certain about her rating when the scale design is not capable of reflecting her true underlying utility. In order to examine whether scale points can affect rating certainty, we choose two of the most commonly used scale formats, 2-point (as in "thumbs up" and "thumbs down" or "helpful" and "not helpful," etc.) and 5-point scales. We predict that a 2-point scale may not fully capture one's product evaluation, compared to a 5-point scale, because of its limited discrimination and meaningfulness (Viswanathan, Sudman, and Johnson 2004)). We conducted three studies to examine our hypotheses.

Study 1 aims to examine whether different product rating scales can affect rating certainty and, in turn, WOM intention. Given that rating certainty is close to attitude certainty, an important and valid concern is the extent to which we are able to distinguish between

these constructs. This represents an important secondary goal of the study. We conducted a 2 (rating scale: 2-pt, 5-pt) x 2 (counterbalancing order: attitude certainty before rating certainty or vice versa) between-subjects design. One-hundred twenty two Mturk participants were recruited and were randomly assigned to treatments. They first watched a two-minute video. Then, depending on their conditions, about half of the participants first rated the video, assessed their rating certainty, and then reported attitude certainty. The other half first reported attitude certainty, and then rated the video and provided rating certainty.

Rating score with two different scales (2-pt, 5-pt), which had the same end-point anchors: "awful" and "excellent." Rating certainty was captured by four questions ( $\alpha=.95$ ): ("How sure are you that the rating score [x] you assigned is precise?", "How definite is your rating score [x] of the video?", "The rating score [x] I assigned was clear", and "The rating score [x] I assigned was precise, from "disagree" to "agree"). Next, we measured attitude certainty via two items ("How certain [sure] are you of your opinions toward the video?";  $r=.94$ ). WOM intention was captured by three seven-point questions ("I am likely to tell my friends about this video in the next week/ to forward this video at least to one person in the next week/ to share the video on any social network such as Facebook or Twitter in the next week; 1= "strongly disagree," and 7 = "strongly agree"). We average the three items to formulate one WOM intention index ( $\alpha=.96$ ). As predicted, rating certainty significantly predicted WOM intention in a regression model ( $\beta=0.24$ ,  $t(119)=3.83$ ,  $p<.001$ ). In addition, we found that participants in the 5-point scale showed higher rating certainty level ( $M_5=7.64$ ) than those in the 2-pt condition ( $M_2=6.41$ ;  $F(1,119)=10.10$ ,  $p<.01$ ). A mediation analysis further confirmed that rating certainty drove the impact of scale on WOM. Attitude certainty, on the other hand, was not affected by scale condition.

Study 2 aimed to replicate study 1 and to examine an alternative explanation that self-efficacy (Wood and Bandura 1989), rather than rating certainty, drives the effect. Sixty-one Mturks were randomly assigned to either a 2-pt scale condition or a 5-pt scale condition. The study procedure was similar to study 1, except we employed a different video and collected general self-efficacy measures using 10 items (Schwarzer and Jerusalem 1995). Similar to study 1, a regression model revealed a positive relationship between rating certainty and WOM ( $\beta=0.31$ ,  $t=3.22$ ,  $p<.01$ ). Also, participants in the 5-point scale showed higher rating certainty level ( $M_5=7.63$ ) than those in the 2-pt condition ( $M_2=6.20$ ;  $F(1,57)=16.27$ ,  $p<.001$ ). However, self-efficacy level was not affected by scale condition ( $M_2=7.85$ ;  $M_3=7.90$ ).

Study 3 attempted to make rating certainty less salient to raters by removing the measure. We measured WOM decision immediately after participants reported their evaluation on either a 2-pt or 5-pt rating scale. Consistent with the first two studies, while 32.4% of the participants under 5-pt condition decided to share the video, only 18.6% of those under 2-pt condition chose to share ( $\beta=-.88$ ,  $\chi^2(1)=4.70$ ,  $p=.03$ ). These results were further evidence that rating scale could affect WOM likelihood, even when rating certainty was not made salient.

Taken together, this research propose a new construct, rating certainty, and show that it mediates this impact of rating scale on WOM. We not only demonstrate a novel and exciting phenomenon, but also highlight the importance of rating certainty in driving WOM behavior.

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# When paying \$92 plus \$5 shipping is acceptable but paying \$97 is not: The Role of Justification on the Effectiveness of Partitioned Pricing

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## EXTENDED ABSTRACT

Partitioned pricing that consists of a base price and mandatory surcharges has become a widely used pricing strategy as online transactions become more widespread and different types of surcharges are developed (Morwitz, Greenleaf, Shalev, and Johnson 2009). Consumers are likely to perceive the total cost to be lower when a price is partitioned than combined because they tend to underestimate surcharges (Morwitz, Greenleaf, and Johnson 1998, Clark and Ward 2008). The rationale for the favorable effect of partitioned pricing is based on the theory of anchoring and adjustment (Tversky and Kahneman 1974); people anchor on a base price to establish price perception and do not pay enough attention to surcharges to sufficiently adjust for them (Morwitz et al 1998).

Although previous research shows that attention to surcharges moderates the impact of partitioned pricing, it is unknown whether ignoring surcharges is the default. Lewis, Singh, and Fay (2006) found that free shipping promotions are very effective in increasing demand, suggesting that consumers pay a great deal of attention to surcharges. Therefore, despite the important research that has been done on partitioned pricing, the boundary conditions for this pricing strategy have yet to be fully explored. In the present research, we propose that purchase motivation is an important predictor of whether partitioned pricing will be effective because it affects how closely consumers pay attention to surcharges.

People tend to intentionally avoid unwanted information and are less likely to pay attention to information that is expected to make them feel uncomfortable (e.g., Brock and Balloun 1967, Yantis 1996). People also regulate attention depending on their behavioral goals (Yantis 2000). If the effectiveness of partitioned pricing depends on the extent to which consumers pay attention to surcharges, consumer's purchase motivation might influence the impact of partitioned pricing. Specifically, hedonic and utilitarian motivations are assumed to influence attention to surcharge information differently. Consumers who have a hedonic (vs. utilitarian) motive to consume are more likely to find ways to justify their purchase because of anticipated negative feelings (Okada 2005). These consumers find ways to justify their purchase, such as by perceiving the product to be a better deal than it actually is. Thus, we expect people with a hedonic motive to consume will be less likely to pay attention to surcharges because extra charges, in this case, are unwanted information that could aggravate negative feelings. In other words, people considering making a hedonic (versus utilitarian) purchase are motivated to justify their purchase by perceiving the price to be inexpensive, and ignoring surcharges can help them reach this goal. On the other hand, purchasing a needed item is unlikely to require such justification; people considering making a utilitarian purchase are not motivated to ignore surcharges and should focus on all components of the price. The effectiveness of partitioned pricing should be reduced for these consumers.

If people ignore surcharges because they do not wish to be exposed to undesirable information, the effect of partitioned pricing on purchase likelihood should be attenuated when other external justifications for purchase are available. Price discount was found to be effective in reducing anticipated guilt associated with hedonic purchases (Khan and Dhar 2010). Therefore, if such an external justification already exists, people will be less motivated to justify their purchase

in other ways such as by ignoring surcharges. Hence, pricing type (partitioned vs. combined pricing) will not affect purchase likelihood for hedonic purchases when the offer price is already discounted.

In Study 1, we test how purchase motivation (hedonic vs. utilitarian) influences the effectiveness of partitioned pricing. We used a 2 (price: partitioned vs. combined) x 2 (goal: hedonic vs. utilitarian) between subjects design, and advertisement for premium headphones was used as the stimulus. Hedonic and utilitarian motives were manipulated by imagining scenario, which has been used in previous research (Choi et al. 2014). Purchase likelihood was measured after participants viewed their randomly assigned advertisement. As predicted, partitioned (vs. combined) pricing significantly increased purchase likelihood when participants had a hedonic motive to consume, but not when they had a utilitarian motive to consume.

In Study 2, we test the impact of the presence of another external justification. If there exists an external justification for purchase, such as a price discount, the impact of partitioned pricing is expected to be reduced. We used flowers as a product for a hedonic stimulus, which was determined as a hedonic product in the pretest. A 2 (discount type: discounted price vs. regular price) x 2 (pricing type: partitioned pricing vs. combined pricing) between subjects design was used. In the discounted price condition, participants were told the regular price of the bouquet as well as the discount price. Participants were asked how likely they were to purchase the flowers; purchase likelihood was measured using the same scale from Study 1. Consistent with our previous findings, pricing type influenced purchase likelihood in the regular price condition. However, price discount erased the effect of partitioned pricing.

In Study 3, we examined whether people actually perceive partitioned pricing to be more inexpensive than combined pricing for a hedonic product, and whether this lower price perception serves as a mediator of pricing type on purchase likelihood. Participants were assigned to one of two pricing conditions. We used the same flower stimuli in the regular price condition of Study 2 but modified the pricing information to obtain more conservative test results. We measured perceived price and we purchase likelihood. The results of a t-test showed that partitioned pricing (vs. combined pricing) significantly increased purchase likelihood. Partitioned pricing was perceived to be lower than combined pricing. We used bootstrapping (5,000 regenerated) to test the mediation relationship and found the indirect effect was significant (Preacher and Hayes 2008).

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# The Social Consequences of Envy

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## EXTENDED ABSTRACT

Be it a more successful colleague or a more well-to-do neighbor, many individuals in their everyday lives compare themselves with others who are superior. Such comparisons often provoke feelings of envy, leading to the realization of one's own inferiority and relative deprivation (Heider 1958; Ortony, Clore and Collins, 1988). Envy is defined as the emotion that arises when one compares his or her own outcome with those of a relatively successful, similar person on a self-relevant attribute (Salovey and Rodin 1988; Smith, Kim and Parrott 1988).

We propose that individuals who experience feelings of envy are more likely to distance away from a direct comparison with the envied target, building upon work on the psychological impact of envy (Smith and Ki, 2007). This effect is stronger among those who are inclined to attend to their own feelings (Salovey et al. 1995). Consequently, we find that envy makes people perceive themselves to be less similar to the envied target (Experiment 1) and to pursue values that are different from those of the envied target (Experiment 2). Furthermore, envious individuals tend to prefer unique products to regular products in order to reinstate their self-concept and to differentiate themselves from others (Experiment 3).

In **Experiment 1**, 102 M-Turk participants read a story about another M-Turk worker who had made a profit from a stock investment. They were randomly assigned to one of two conditions: the *envy* condition in which the profit was \$3,400/month, or the *no-envy* condition in which the profit was \$180/month. Controlling for income and education, participants in the *envy* (vs. *no-envy*) condition who are dispositionally inclined to attend to their feelings perceived themselves to be less similar to the envied target ( $p < .05$ ).

**Experiment 2** conceptually replicated the findings in experiment 1. Eighty-six students were randomly assigned to one of 4 conditions (envy: yes/no  $\times$  mirror: yes/no). Participants first described either a target they envied or a control target (Cohen-Charash, 2009). Instead of using the attention-to-feelings scale, we exposed half the participants to a mirror to situationally induce greater attention to feelings (Schiere 1976; Wicklund and Duval 1971). Next, participants were given the definition of nine universal values (Schwartz 1987), predicted the weights that their described target would put on the nine values by distributing 100 points, and indicated the weights they themselves would put on the values. Consistent with our hypothesis, compared to participants in the *no-envy* condition, those in the *envy* condition were more likely to indicate that the values they pursued were different from those of their target ( $p = .05$ ). The effect was more pronounced among participants who were exposed to a mirror and who presumably were more attentive to their own feelings ( $p = .05$ ).

In **Experiment 3**, 96 participants were randomly assigned to one of four conditions (envy: yes/no  $\times$  mirror: yes/no) as in experiment 2. However, after the essay-writing task, participants were asked to choose a gift-wrapped bag of jellybeans among six available flavors as a reward for their participation. Three of these were classic flavors (e.g., Raspberry) and the other three were more unique flavors (e.g., French Vanilla). The results show that participants in the *envy* (vs. *no-envy*) condition were more likely to choose one of the unique flavors, especially those in the mirror condition who were more attentive to their feelings ( $p = .03$ ). These results suggest that

envious individuals, in an attempt to reinstate their self-worth, may exhibit a greater momentary need for uniqueness.

This research contributes to the envy literature in several ways. First, to the best of our knowledge, this is the first paper that examines how envy may lead an individual to cognitively and behaviorally distance oneself from the envied target. Prior research on envy has largely focused on the conceptualization of envy (Feather and Sherman 2002; Smith et al. 1996) and people's "active" reaction to "pull down" the envied target or to improve the self (Van de Ven et al. 2009; Heider 1958). We suggest a third, more "passive" way that people may respond to feelings of envy: social distancing. Previous work on escape behavior in response to external threats mainly focused on animal behavior (Seligman et al. 1967; Padilla et al. 1970). The present work expands this view by arguing that escape behavior not only exists in physical environments, but can also occur in the face of psychological threat that envy induces. Second, we believe that this escape behavior is also different from prior social psychology research on social comparison. The social comparison literature shows that individuals can change their perception of the specific domain(s) in which they compare themselves with the envied target (Tesser 1991). In contrast, our findings suggest that envy may lead to unexpected downstream consequences on product choice in a seemingly unrelated domain. In experiment 3, in particular, participants who were envious of a specific target individual were more likely to choose unique jellybean flavors even though the jellybeans were irrelevant to the specific domain(s) in which participants felt inferior compared to their envied target.

To further examine these experimental results, we plan to investigate several factors related to the basic effect in one or more future studies. First, we hope to compare the consequences of envy not only with a control baseline condition, but also with other emotions such as sadness, frustration, and admiration. Second, we question to what extent envy can spur the consumption of products that are not only unique in design, but also preference for customizable products (e.g., Converse shoes, Nike shoes) or limited-edition products. Last but not least, we hope to investigate how these results may apply to the effectiveness of celebrity endorsements in traditional advertising and brand building as well as within contemporary consumption environments driven by the growing importance in social media.

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# Top or Bottom of the Screen? Vertical Position as a Representation of Rationality and Emotionality

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## EXTENDED ABSTRACT

When connoting whether a person acted rationally in a situation or if he gave in to his emotions, we often invoke the concept of verticality. Thus, we say things like, “from the bottom of my heart,” “falling in love,” “I raised it back up to the rational plane,” “we had a high-level intellectual discussion.” In this research, we explore if these metaphors are just linguistic figures of speech or if they are conceptual metaphors linked to bodily sensations.

Lakoff and Johnson (1980) argue that some abstract concepts are conceived only because we connect them with concrete sensory experiences (such as “hot,” “cold,” “up,” and “down”). Without such connection, concepts would lack reference to the physical world and they would be more difficult to elaborate and communicate. Several studies provide evidence that people need sensory-based metaphors to understand abstract concepts (see Landau, Meier, and Keefer, 2010). We explore the metaphorical link of rationality with “up” and emotions with “down” and its effect on consumer behavior through four studies.

Our studies consistently show (i) that people do, indeed, associate up with rational and down with emotional, which (ii) results in differential perceptions of the same information depending on its spatial placement. This metaphorical link is (iii) bidirectional and spatial placement can influence perceptions of rationality vs. emotionality, much as the rational vs. emotional quality of material influences its preferred spatial placement. Importantly, these metaphorical associations have downstream consequences and (iv) the same material is evaluated more positively when its vertical placement matches its rational vs. emotional content.

In study 1, we sought to determine whether people implicitly associate “up” and “down” with rationality and emotions, respectively, through the use of an Implicit Association Test (IAT; Greenwald et al., 1998). The IAT results show that participants were faster at categorizing rational-related words when they were paired with “up”-related words and emotional-related words when they were paired with “down”-related words, rather than when these pairings were reversed. Study 1 mapped the basic association between rational-emotional and “up”-“down.”

Study 2 shows that the position of an object (“up” or “down”) gets linked with rationality/emotionality, i.e., people give to an object an interpretation that matches its position. In this study, each subject (N: 30) was asked to evaluate 5 Chinese pictograms, one by one, in a random order. Each pictogram was shown for 1,000 milliseconds. After that, each subject was asked to respond as quickly as possible if that pictogram was more likely to be a Chinese brand name for a statistical website or for a dating website. The position (top/bottom) of the pictogram was a significant predictor of subject’s decision – subjects were more likely to think the pictogram was for a statistical (dating) website when it placed on top (bottom) of the screen.

Study 2 showed that the physical placement of a stimulus along the vertical dimension can influence its interpretation along the metaphorically related rational-emotional dimension. In study 3, we tested whether the metaphorical association of verticality and rationality/emotionality can also exert an influence in the opposite direction: Do the rational vs. emotional connotations of a stimulus affect its spatial placement?

To test this, we asked 47 subjects to place two sections of a website (Music and Science) onto an empty screen. In a pretest, Music had been connected with emotionality and Science with rationality (other website sections considered were Entertainment, Food, Style, Art, Technology, Culture, Business, and News). A second pre-test showed that neither Music nor Science had any conscious association with “up” and “down” and they did not differ in terms of positive/negative valence. In the main study, participants were told that they would be evaluating a website. Next, each participant was randomly assigned to view one of two sections: “Science” or “Music.” The name of the section was presented in the middle of a computer screen. Then, they were asked to think of the empty screen as a possible website, and to click with the computer mouse in a position where they would place the section. Results show a significant difference in placement, with “Science” being placed higher than the “Music” session.

Study 4 tested another implication of the “rational is up and emotional is down” connection – placement of political slogans. The study used a 2 (rational/emotional political slogan) X 2 (“up”/“down”) between-subject design. Subjects rated either a rational or an emotional political slogan, which was placed either on the upper or on the lower part of the screen (i.e., rational slogan in the higher part of the screen, rational slogan in the lower part of the screen, emotional slogan in the higher part of the screen, and emotional slogan in the lower part of the screen). Participants were then asked for their attitudes toward the slogan, the slogan relevance, and their intention to vote for the candidate. We found support for our hypothesized effect: the rational slogan was evaluated more favorably (on all the three scales) when it was presented high rather than low on the screen; conversely, the emotional slogan was evaluated more favorably (on all the three scales) when presented low rather than high on the screen.

To summarize, our first study revealed that people implicitly associate rationality and emotions with “up” and “down,” respectively. Our second study showed that people interpret ambiguous information (Chinese pictograms) in a way that matches the spatial position. Our third study demonstrated that this metaphorical link is bidirectional. Furthermore, it showed people’s tendency to recreate the match in physical space. Finally, our fourth study indicated that the match between the rational-emotional leaning of a slogan and its placement affects consumer attitudes and preferences.

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# The Benefits of Behaving Badly: Successful Regulation by Planned Deviation

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## EXTENDED ABSTRACT

Is it smart to have a chocolate cake when you are on a diet to lose weight? Is it a good idea to spend money on something feeble today when you are trying hard to save money for a larger purchase next month? Most people would answer these questions negatively, thinking they should always try to control the desires that conflict with an important current goal (Dholakia et al. 2006). Indeed, there seems to be a general belief that activities that deviate from the focal goal should be avoided since they are detrimental to goal attainment (Fishbach and Shah 2006). In contrast to this general belief, we propose that including *planned* goal-deviation activities may actually be beneficial for long term goal attainment, such as by having a chocolate cake every now and then when on a diet. These goal deviations can enhance consumers' motivation to persist in goal-striving, help replenish consumers' self-regulatory ability- fundamental to persist with successful inhibitions, improve emotional state and ultimately reduce the likelihood of final goal failure. Support for this idea would show when "it is good in the long run to behave badly on occasion in the short run".

## Predictions and Set-Up of the Studies

Obviously, a plan that comprises only goal interruptions is a bad plan. Yet, planning for short moments of "being bad" in the context of a larger sequence of "being good" we believe is advantageous. More formally, we propose that "intermittent goal-striving," that is, goal-striving that takes place in larger blocks, interspersed by the possibility of engagement in small planned goal-deviation activities, enhances the likelihood of final goal attainment, through a combination of multiple helpful means: replenish of self-regulatory resources, which contribute positively to other factors that aide goal attainment, such as the motivation to proceed towards the goal, the experience of positive emotions, and the ability to develop coping strategies. The following set of hypotheses is tested:

*Hypothesis 1: As compared to having unplanned goal deviations and straight goal pursuit, including planned goal deviations in a plan increases consumers' self-regulatory resources to proceed with set of regulatory tasks and thus the likelihood of goal attainment.*

*Hypothesis 2: Including planned goal deviations in the goal-striving plans, as compared with straight goal pursuit, increases consumers' motivation to proceed with goal-pursuit, with consumers' experiencing a boost in emotional state experienced.*

*Hypothesis 3: Including planned goal deviations in the goal-striving plans, as compared with straight goal pursuit, improves consumers overall subjective well-being (measured as boost in positive affect), positively influencing consumers' ability to generate coping strategies to deal with unexpected or stressful events.*

## Studies

Experiment 1 and 2 focused on a weight loss goal. We chose this because "eating is one of the most commonplace, yet least well understood, self-regulation domains" (Vohs and Baumeister 2004, p. 7), and because dieters tend to interrupt their weight loss goals many times (Heatherton and Baumeister 1991). Experiment 1 used a role-playing task where participants simulated a dieting experience by making food choices for seven consecutive days. In experiment 2, we searched for extra support of findings of experiment 1, but this time participants actually followed different diet-plans. For two weeks, we assessed daily measures of the main variables. One month later participants' evaluation of the different goal-striving plans was also assessed.

## Main Results

The findings from experiment 1 (59 paid students, two-group design: intermittent-striving vs straight-striving) supported our hypotheses, with participants in the intermittent-striving condition showing higher expected self-regulatory ability, than participants in the straight-striving condition ( $M_{\text{intermittent}} = 4.25$ ,  $M_{\text{straight}} = 3.73$ ,  $F(1, 57) = 4.35$ ,  $p < .05$ ), indicating that goal-deviation moments were perceived as facilitators to proceed with self-regulation. Moreover, in line with our H3, participants in the intermittent goal-striving condition generated more different coping strategies to overcome temptations than participants in the straight-striving condition ( $M_{\text{intermittent}} = 6.43$ ,  $M_{\text{straight}} = 5.10$ ,  $F(1, 57) = 6.40$ ,  $p < .05$ ).

Consistent with our findings from experiment 1, results from experiment 2 (23 participants, two-group design: intermittent-striving vs straight-striving, conducted over one month and a half) indicated that participants in the *intermittent striving* condition significantly increased their self-regulatory ability before and after the diet period (MWeek0 = 1.98, MWeek2 = 2.38,  $t(11) = -2.66$ ,  $p < .05$ ), as opposed to participants in the *straight striving* condition (MWeek0 = 2.20, MWeek2 = 2.28,  $t(10) = .77$ , *n.s.*). Regarding affect measures, results support our H2. When repeated measures analysis were conducted separately for positive and negative emotions, results indicated a marginally significant interaction effect of time and condition for positive emotions for the whole dieting period ( $F(13,273) = 1.734$ ,  $p = .054$ ) mainly due to an increase in the emotions experienced from week 1 to week 2 from participants in the *intermittent striving* condition ( $M_{\text{week 1}} = 5.54$ ,  $M_{\text{week 2}} = 5.93$ ,  $t(11) = -1.98$ ,  $p = .073$ ).

## General Discussion

We proposed and found strong support across two experiments that when goal-deviation behaviors are planned, that is, are part of the long-term plan, they actually may help rather than hurt successful goal pursuit. This reveals the importance of flexibility in goal pursuit, and that it can be good in the long-run to behave badly in the short-run, when this is part of the plan.

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# Carrots By Default: Are Healthy Defaults a Blessing or a Curse?

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## EXTENDED ABSTRACT

Dietary behaviors are linked to heart disease and cancer, leading causes of death in the US (Mokdad et al. 2004), yet few methods have shown consistent effects on what people choose to eat. Recent research in psychology and behavioral economics has identified the default effect as a powerful, low cost method to “nudge” people towards optimal behavior in a variety of domains including retirement savings (Choi et al. 2003), consumer purchases (Brown and Krishnam 2004), buying green electricity (Pichert and Katsikopoulos 2008), vaccination (Chapman et al. 2010), and end of life decisions (Kressel and Chapman 2007). But no research has examined the default effect in dietary behavior. In this paper, we test how implementing healthy defaults in dietary settings can affect what people eat. In addition, we investigate the effect of healthy default on sales, and examine the mechanism of this effect.

A default option is “the choice alternative a consumer receives if he/she does not explicitly specify otherwise” (Brown and Krishna 2004), and the default effect refers to the tendency for people to stick to the default option instead of selecting an alternative option.

*Hypothesis 1: When a healthy alternative is set up as the default option in dietary settings (compared to when an unhealthy alternative is set up as the default), consumers will be more likely to choose the healthy option.*

It is possible that while healthy defaults can nudge people towards healthy choices, they could also drive away potential consumers from making a food purchase. Park et al. (2000) found that when consumers with low commitment to buying a car were presented with a default car model that was expensive and loaded with many fancy features they were less likely to buy a car. This finding suggests that consumers may be driven away from making a purchase if the default option presents barriers to buying. In the above car purchase study, the barrier is high price. In dietary behavior, the default food option may also present barriers to purchase if consumers perceive the default as too unappealing—for instance, when the default is a healthy, but unappetizing option.

*Hypothesis 2: When a healthy alternative (compared to an unhealthy alternative) is set up as the default option in dietary settings, consumers will be less likely to make a purchase.*

Why would healthy defaults drive away customers, who could easily opt out of the default if they do not like it? One reason could be that a healthy default deprives the customer if she accepts the healthy default of feeling virtuous (as she did not actively choose it) and makes the customer feel particularly guilty if he selects the indulgent option (as he went out of his way get it). These feelings about virtue could drive people away from making purchases when the default option is a healthy but unappetizing alternative.

*Hypothesis 3: Customers who stick with a healthy default will be judged (by self and others) as less virtuous than those who opt out of an unhealthy default. Similarly, consumers who opt out of a healthy*

*default will be judged (by self and others) as less virtuous than those who stick with an unhealthy default.*

*Hypothesis 4: The impact of healthy defaults on perceived virtue results in healthy defaults driving away sales.*

The current research includes six studies that examined the influence of defaults on consumer dietary choices.

## Study 1a

Most cafés have a default milk type (the milk used if the customer does not request otherwise). For example, at Starbucks®, the default milk type is 2% milk. In this study, we observed consumers’ choice of milk in espresso coffee drinks at two coffee shops, which had different defaults for the type of milk used in such drinks.

## Methods

A researcher surreptitiously observed the milk type used in the espresso drinks that customers ordered at two coffee shops. In coffee shop #1 (Starbucks®), the default milk is 2% milk, and in coffee shop #2 (PJ’s coffee®), the default milk is whole milk. In both coffee shops, the barista used the default milk type for all hot Cappuccino and Latte drinks unless the customer requested another milk type. The observations occurred during a single 2.5-3.5 hour period at each coffee shop to avoid recording repeat customers.

## Results and Discussion

At Starbucks®, where 2% milk was the default milk used in hot espresso drinks, 53% of such drink orders used 2% milk, and no one ordered whole milk; conversely, at PJ’s coffee®, where whole milk was the default milk, 55% of the drink orders used whole milk and only one order (3%) used 2% milk. At Starbucks®, orders with other milk types included 17% with skim milk, 27% with soy, and one order (3%) with 1% milk; at PJ’s coffee® orders with other milk types included 39% with skim milk, one order (3%) with soy milk, one order (3%) with 2% milk, and none with 1% milk. The difference in choice of different milk types between the two coffee shops was significant (Fisher’s test = 44.07,  $p < .001$ ).

The drinks observed at Starbucks® had marginally lower fat calories than drinks at PJ’s coffee® ( $M_{\text{Starbucks}} = 43.75$  vs.  $M_{\text{PJ's}} = 63.55$ ,  $t(59) = 1.88$ ,  $p = .07$ ). However, the fat calorie count in Starbucks® was inflated because most consumers who opted out of the default in Starbucks® chose soy milk, while opt-outs at PJ’s coffee® chose mainly skim milk (soy milk has higher fat content than skim milk). If calories from the healthy, plant-based fat in soymilk is excluded, this difference in fat calories is be more extreme.

This study provides evidence in support of Hypothesis 1, that is, a healthier default option leads to healthier milk choices among coffee drinkers. However, the observational nature of the study entails that participants are not randomly assigned to conditions, and therefore, self-selection may have caused people who are more concerned with dietary health to purchase coffee at a coffee shop that offers healthy options as the default. To address this issue, we conducted Study 1b.

### Study 1b

In this field study, a team of researchers set up a coffee stand on a university campus during a campus-wide event, offering a free cup of Cappuccino in exchange for filling out a survey. During the study, the default type of milk used in the Cappuccinos was experimentally manipulated to further test Hypothesis 1.

#### Methods

Three hundred and eighty-four students and visitors participated in the study. Participants ordered a drink from one of two research assistants stationed at either end of a long table. Default milk type was whole or skim milk, although participants could request skim, 1%, 2%, whole, or soy milk.

#### Results and Discussion

An overwhelming majority of participants in the whole milk default condition had a Cappuccino with whole milk (182 out of 183). Similarly, a vast majority of participants in the skim milk default condition had a Cappuccino with skim milk (196 out of 201). We categorized milk type into whole, skim milk, and other to test the effect on milk type of default condition, and results confirmed it was highly significant (Fisher's exact test = 513.54,  $p < .001$ ).

This study demonstrated a drastic default effect, replicating findings from study 1a in a field experiment. The default effect was much larger in study 1b than in study 1a, which could be attributed to several factors. Most notably, the Cappuccino drink was free in study 1b but not in study 1a, and people may have felt more reluctant to request a non-default option in study 1b because they did not want to appear picky and unappreciative of what they had been offered for free. Study 2 returns to a store setting.

### Study 2

In this field study we manipulated the default condition for an item that was available for purchase in a real store setting, with highly visible signage indicating the presence of an alternative option. In this way, we hoped replicate the effect of the default effect in a setting where participants are real customers spending their own money, and to explore how customers react to a less appealing default (Hypothesis 2).

#### Methods

This study was conducted in the student store of a large university. The store sells school-branded apparel, gifts, and office supplies, including university coffee mugs. During the study, mugs came with a free snack packed inside. For this study, we manipulated the default gift received with the purchase of a mug. Each mug available for sale was filled with a snack in a clear cellophane baggie. The two options were M&M'S®, an unhealthy snack (258 calories and 11 grams of fat per ¼ cup of snack) and a healthier fruit and nut mix (140 calories and 6 grams of fat per ¼ cup of snack).

The default snack packed in the mugs was alternated on a weekly basis for four weeks. A small placard was placed next to the mugs in each of the two places in the store where the mugs were displayed, indicating the other snack was also available.

#### Results and Discussion

During the two weeks in which M&M'S® were the default snack, 14 mugs were sold, all of which were sold with M&M'S® (100%). During the two weeks in which the fruit and nut mix were the default snack, 25 mugs were sold, only 8 mugs were sold with M&M'S® (32%) (Fisher's exact test  $p < .001$ ), demonstrating a default effect.

To examine whether the healthy default snack inside the coffee mug discouraged consumers from purchasing the mug (despite their

freedom to switch to the more appealing yet less healthy M&M'S® as the free snack), we analyzed mug sales adjusting for overall sales in the store. The analysis revealed significant effects of default condition on mugs sold per \$10 of revenue ( $F(2,59) = 6.58, p < .01, \eta^2 = .18$ ). Mug sales with M&M'S® as the default gift were significantly higher than mug sales with fruit and nut mix as the default gift ( $t(23) = 2.33, p = .03$ ).

This study demonstrates that default options can have a significant impact on behavior even in real retail settings in which customers are spending their own money to make real purchases. Although both the fruit and nut mix and the M&M'S® were available to customers who purchased a coffee mug, customers tended to take the default snack that was pre-packed in the mug. Additionally, the healthy default gift did reduce mug sales compared to the unhealthy default gift. Thus, customers did have a negative reaction to the healthy default compared to the unhealthy default, by selecting away from the item.

### Study 3

This study used hypothetical scenarios to test Hypothesis 2, and specifically, to investigate the impact of healthy default options on consumers' choices of restaurants.

#### Methods

Individuals recruited from Amazon Mechanical Turk ( $N = 352$ ) completed an online survey in exchange for a small payment. Each participant saw six restaurant scenarios in sequence. They were told to imagine they were trying out three types of new restaurants for lunch: Sandwich shops, pizza shops, and burger shops, and would visit two of each kind of restaurant and then be asked to select which one they would prefer to return to if they were going to eat that type of food again.

For each of the three types of restaurant, two alternative restaurants were presented to each participant, one with a healthy default and another with an unhealthy default. First, participants were shown a picture of a restaurant and the menu, with the default option listed on the menu, along with the information that the alternative could be requested. Participants were then asked to select an entrée and drink. There was a special request text box where participants could make requests, including the non-default option. After choosing their order, participants were shown a picture of their food, and then moved on to order lunch at the other restaurant within the same type, which had a different default. After ordering lunch at both restaurants of the same type they were asked to choose which one they would be more likely to return to.

Each restaurant type had a specific default food option manipulated: turkey or beef burger patties, whole or skim milk cheese on pizza, french fries or carrots as a side.

#### Results and Discussion

Each participant placed six lunch orders, one in each restaurant. These lunch orders show a strong default effect. We used choice of the healthier or less healthy alternative as the dichotomous dependent variable in a within-subjects logistic regression. The analysis indicated a strong default effect—a main effect of default condition on choice ( $\chi^2(1) = 324.44, \lnOR = 0.84, p < .001$ ).

We next examined whether default condition affected the choice of whether to return to the restaurant. We coded whether participants chose to return to the restaurant with the healthy default (coded as 1) or the one with the unhealthy default (coded as 0) in each of the three restaurant types and averaged across restaurant types to compute the percentage of times each participant returned to the restaurant with the healthy default. The mean score was 46%, which was reliably

less than 50% in a one-sample t-test ( $t(350) = 2.53, p = .01$ ). This indicates that participants were less likely to return to a restaurant with a healthy default than to a restaurant with an unhealthy default.

These results suggest that having a healthy default option may have a negative impact on restaurant choice in some situations. This was unlikely to be due to participants being reluctant to ask for the default, as 149 out of 352 participants (42%) made a special request on at least one of their six orders, and 14.5% of all orders contained special requests. Yet few of these special requests included a switch away from the default, as participants stuck with the healthy (95%) or unhealthy (93.5%) default an overwhelming majority of the time.

#### Study 4

We propose that healthy defaults prevent consumers from feeling virtuous about their choices. A consumer who sticks with the healthy default does not get to feel good about her choice, because she did not do anything active, and a consumer who opts out of the healthy default for a more indulgent selection may feel extra guilty for actively seeking an unhealthy alternative. In contrast, a consumer who opts out of an unhealthy default to request a healthy alternative gets to feel virtuous for his choice, and a consumer who sticks with an unhealthy default can enjoy his indulgent food relatively guilt-free because “I didn’t request this”. This leads to the counterintuitive hypothesis that unhealthy defaults allow consumers to feel more virtuous than healthy defaults, while still leading to the consumption of less healthy foods.

The purpose of Study 4 is to test whether participants judge consumers to be more virtuous when they make decisions in the context of an unhealthy default relative to a healthy default.

#### Method

Individuals recruited from Amazon Mechanical Turk ( $N = 202$ ) participated in an online study in exchange for a small payment. Each participant saw four restaurant scenarios in a randomized order. Each scenario described two restaurants that served the same food item. One restaurant used a healthy ingredient as default, and the other used an unhealthy ingredient as default, but both offered the same set of options for the food item, and customers could request the non-default ingredient. Each scenario described two customers, one of whom visited the healthy default restaurants and the other who visited the unhealthy default restaurant. Both customers ended up eating the same food item, but one customer received that food item by sticking with the default, while the other customer received the food item by opting away from the default. For each scenario, participants were randomly assigned to see a version where both customers consumed the less healthy item or a version where both consumed the healthier item. Participants indicated “Who is more virtuous?” using a 5-point rating scale.

#### Results and Discussion

We averaged each participant’s ratings across the four scenarios, to form one score for each participant and used a single sample t-test to demonstrate that this average score differed from zero ( $M = 0.14, SD = 0.47, t(187) = 4.21, p < .0001$ ). Of the 188 participants, 92 (49%) had mean scores of exactly zero, 28 (15%) had negative (counter-predicted) scores, and 68 (36%) had positive (predicted) scores. Thus, although half of the participants saw no difference between the two customers, those who did perceive a difference viewed the customer who went to the unhealthy default restaurant as more virtuous.

Finally, we subjected the virtue ratings to an ANOVA that included as independent variables food scenario (lattes, burgers, etc.), consumption (whether both customers consumed the healthy or un-

healthy item), and counterbalance order condition. The ANOVA showed no main effect of counterbalance order or food scenario, but there was a main effect of consumption, where the virtue effect was larger when the customers ate the healthy food than the unhealthy one (least square means 0.20 versus 0.09,  $F(1, 163) = 5.86, p = .02$ , see table 2). Apparently, switching away from the unhealthy default to choose the healthy alternative yields a large boost in perceived virtue; in contrast, switching away from a healthy default to an unhealthy alternative yields only a small decrease in perceived virtue.

These results support the notion that healthy defaults cause consumers to be judged as making less virtuous choices, whatever food option they choose. A consumer who sticks with the healthy default is judged as less virtuous than a consumer who opts out of an unhealthy default. To a slightly lesser extent, a consumer who opts out of a healthy default for a more indulgent food is also judged as less virtuous than one who merely sticks with an unhealthy default. Thus, regardless of whether one consumes the healthy or unhealthy food, doing so is judged as more virtuous in the context of the unhealthy default compared to the healthy default. This virtue effect is thus a potential explanation for the finding from studies 3 and 4 that healthy defaults drive away sales.

#### Study 5

The purpose of study 5 was to bring together the virtue effect and the phenomenon that healthy defaults drive away sales, examining whether perceived virtue by the consumers themselves differ when the default is a healthy option versus when it is an unhealthy option, and whether such difference underlies the drive-away-sales effect.

#### Method

Individuals recruited from Amazon Mechanical Turk ( $N = 200$ ) completed an online survey in exchange for a small payment. Participants read restaurant scenarios about a sandwich shop, a pizzeria, and burger restaurant. In each scenario, participants first indicated which of two options they usually purchased when patronizing that sort of restaurant (e.g., carrots or fries). Then they were asked to imagine that they purchased their usual item at a restaurant that used the healthy default and at a restaurant that used the unhealthy default. For each of these questions participants rated how good they felt about themselves. After completing these virtue ratings, participants indicated where they would go the next time they visited this category of restaurant: a restaurant that uses the healthy default or one that uses the unhealthy default.

#### Results and Discussion

We computed the difference in the rating of “how good do you feel about yourself” between the healthy default condition and the unhealthy default condition. A positive difference score (on a -7 to +7 scale) indicates that the participant felt more virtuous (for a given food order) at the restaurant with an unhealthy default. This virtue score was significantly higher than 0 for each of the three scenarios (all  $t(176)s > 4.13, ps < .0001$ ).

We next examined participants’ ratings of which restaurant they would patronize.

Most participants said they would go to the restaurant with the unhealthy default: Mean return ratings was above 0 (on a scale of -2 to +2, with positive values indicating preference for the restaurant with unhealthy default) for burger restaurant ( $M = 0.74, t(176) = 11.06, p < .0001$ ), pizza restaurant ( $M = 0.44, t(176) = 4.73, p < .0001$ ), and for sandwich shops ( $M = 0.96, t(176) = 11.68, p < .0001$ ).

These results demonstrates that, consistent with study 4, participants feel more virtuous in the context of an unhealthy default. And, consistent with studies 2 and 3, participants prefer to return to restaurants that have an unhealthy default. Of primary interest, study 5 shows a relationship between judgments of virtue and interest in patronizing a restaurant in the future. Specifically, participants who feel much more virtuous at an unhealthy default restaurant than they do at a healthy default restaurant say they will patronize the unhealthy default restaurant. In contrast, participants who show no virtue difference show little preference for which restaurant to patronize.

### General Discussion

Our studies demonstrated the default effect in consumer dietary choices (Hypothesis 1) and a negative effect of healthy defaults on sales (Hypothesis 2). We also show that this negative effect of healthy default on sales is linked to consumers' decreased feelings of virtue when they choose an option in restaurants with healthy defaults, whether their choice was a healthy or unhealthy option (Hypotheses 3 and 4).

Our studies suggest that people favor the default dietary option strongly over the alternative dietary option when making food or beverage choices. These studies included a variety of dietary stimuli—milk in coffee drinks, snack choices (M&M'S® or fruit and nut mix), and restaurant food choices (type of burger meat, type of cheese on pizza, French fries or carrots that came with sandwich orders)—spanning a variety of settings—coffee shops, a campus booth, a retail store, and hypothetical restaurants—and targeting both free products and products for purchase. A healthy default in all of these situations led to more healthy choices, indicating that a healthy default can have a powerful influence on dietary behavior across many domains and contexts.

The power of healthy defaults, however, is not limitless. Although healthy defaults increase the number of consumers who choose the healthy option, studies 3, 4 and 5 demonstrate that healthy can drive away sales, with studies 4 and 5 demonstrating that healthy defaults paradoxically make consumers feel less virtuous than they would had they consumed the same food but under a different default. Such feelings about virtue can lead to a choice not to patronize an eating establishment that uses a healthy default.

The negative effect that healthy defaults have on sales suggests that business owners should be cautious about implementing healthy defaults, and that calls for restaurants to implement healthy defaults for the good of their consumers should be tempered by concern about how such a switch may affect the bottom line.

There is a special category of food facilities where the negative effect of healthy default on sales may not manifest. In school lunchrooms and other dining facilities where the customers have few other options but to eat within the facility, implementing healthy defaults could provide large health benefits without affecting sales. We believe healthy defaults should be strongly encouraged in such environments, given the consistent default effect we have demonstrated throughout this paper.

One limitation of our studies is that behavior was measured as a one-shot choice. It is possible that people will stick to the healthy dietary default the first time they encounter it, but with time, the nudge from the default wanes and they will opt out and choose the more tempting but unhealthy option. However, for well-practiced behaviors such as ordering lunch or coffee at a familiar shop, past behavior can be a powerful predictor of current behavior (Ouellette and Wood 1998). Therefore, an initial healthy choice the first time someone walks into a dining establishment may have a long-lasting effect on dietary choices in the same setting.

Defaults can be a powerful tool to promote healthy dietary behavior. The current studies provide new evidence and insights into how healthy defaults work in various dietary contexts, and provide a warning that such defaults should be used with caution by business owners as they may have unintended negative consequences for the business.

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# Consumer Perceptions of Green Brands and Actual Corporate Environmental Performance

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## EXTENDED ABSTRACT

Consumer perceptions of the firm's greenness may not always line up with reality, that is, the firm's actual sustainability efforts and their consequences. Newsweek recently partnered with Landor Associates, a brand consulting and design firm, and Penn Schoen Berland, a research and communication firm, to survey consumer perceptions of green brands and firms' sustainability practices. The survey results spotlight a significant gap between consumer green brand recognition and the firms' actual environmental performance, using four brand categories of *unsung heroes*, *free passers*, *losers*, and *winner*s (Landor Associates, 2012).

- *Unsung Heroes*: Brands with strong green practices, but little public awareness
- *Free Passers*: Brands with limited green practices, but strong brand halos that drive their green reputation
- *Losers*: Brands with limited green practices that are publicly recognized for these limitations
- *Winners*: Brands with strong green practices that are publicly acknowledged

Consumer perceptions of firms' greenness are often inconsistent with the corresponding firms' sustainability practices/outcomes, causing consumer confusion in the marketplace with regard to firms and products that make environmental claims. The lack of close connection between consumer perceptions and firm behaviors underscores the importance of aligning consumer knowledge with firms' sustainability initiatives, particularly when the firm's actual green performance outweighs consumer perceptions of the firm's greenness. It also calls for the need for additional research on what drives the gap between perceived and actual sustainability. The present research attempts to meet this need. A better understanding of this issue will aid firms that are challenged with delivering both sustainable business practice and effective communication to stakeholders. On the other hand, having a better comprehension of the potential disparity between consumer perceptions of green brands and the firm's actual environmental performance will help consumers, investors, and policy makers accurately assess whether a firm's environmental claim is a case of greenwashing or a true reflection of environmentally responsible business practices.

To address our key question about firms' perceived sustainability and real sustainability, we develop two models. Our first model investigates whether corporate green brand reputation as perceived by consumers is significantly related to objective measures of corporate environmental performance. Our second model follows up by exploring the gap between corporate green brand reputation and corporate environmental performance, testing whether the gap can be explained by variations in information asymmetry, corporate environmental disclosure, and "halo" effects from general corporate reputation.

For green brand reputations, we used the Newsweek (Green) Reputation Score that was developed in 2012 by Landor Associates and Penn Schoen Berland through online survey of 251 companies with a sample of 8,743 American adults (Newsweek, 2012). Each respondent evaluated a random selection of 13-15 major brands with questions regarding the firms' various sustainability attributes such as "the firm is a green company," "the firm is an environmental lead-

er," and "the firm has environmentally friendly products." An objective measure of corporate environmental performance is adopted from the 2012 Newsweek Green Ranking Score, which is a composite measure of (a) actual environmental management practices, (b) actual environmental outcomes as measured by emissions and other harmful outputs, and (c) corporate environmental communication and disclosure efforts. Finally, since our firms are situated in twenty industry sectors, we cluster firms by industry when conducting the regression analyses.

The results revealed a positive relationship between green brand reputations and corporate environmental performance, mitigating the rapidly increasing public concerns about greenwashing to some degree. More important, we identified two factors that explain the gap between green brand reputations and corporate environmental performance, that is, the extent of firms' information asymmetry and the extent of firm-level environmental disclosure. We also find these two factors are significant predictors of "free passers" and "unsung heroes", respectively. The results showed that the level of information asymmetry (as proxied by the number of analysts following the firm) is a significant predictor of "free passers", suggesting that firms with higher levels of information asymmetry are more likely to be in this group. We also find that corporate environmental disclosure score is a significant predictor of "unsung heroes", suggesting that firms with lower levels of environmental disclosure are more likely to be in this category. Additionally, the "free passer" effect is heightened and the "unsung hero" effect reduced by a more favorable general corporate reputation (as proxied by the Fortune reputation score).

Our first contribution is demonstrating that at least in the case of "green" brand reputations, the brand reputation across our sample of large US firms is plausibly driven by objective corporate environmental performance, thus downplaying the role of greenwashing as an important alternative determinant of brand reputation. In addition to the consumer benefits noted above, this finding should help forestall perceptions and concerns over greenwashing from powerful stakeholders such as NGOs, environmental activists, and policy makers. While the results above were "on average" results for the sample as a whole, it remains the case that some firms benefit from apparently unwarranted green brand reputations ("free passers") while others suffer from lack of deserved recognition ("unsung heroes"). Our second contribution lies in explaining the gap that has intrigued recent media commentators on corporate green branding. We examine a prominent recent example of this gap, using the disparity data from Newsweek and demonstrate that the gap is related to the extent of information asymmetry and general corporate reputation (which evidently benefits the "free passers") and also the extent of general corporate reputation as well as firm-level environmental disclosure (lack of which evidently hurts the "unsung heroes"), two plausible and interesting explanations for this phenomenon. Thus, firms that have an image perception of "unsung heroes", for instance, might well choose to deploy more extensive communications about their environmental performance in an effort to reduce the gap. Consumer advocacy groups, NGOs, and environmental activists, on the other hand, should be wary of firms where levels of information asymmetry is high, either due to structural reasons or because insiders at these firms choose to keep outsiders in the dark, possibly due to self-interested motives.

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# Saying a Little, Saying a Lot: Response Length as a Deception Cue for Consumers

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## EXTENDED ABSTRACT

Effective methods for separating liars from truth-tellers have been considered in consumer-salesperson interactions, interpersonal relationships, criminology, and organisational settings. When should an individual be sceptical of a communicator? The stakes can be high. If a consumer is excessively cautious and does not believe a truth-telling salesperson, a good deal will be forfeited. If a consumer is overly trusting and believes a deceptive salesperson, the consumer can be duped into purchasing a product that does not work as promised.

One interesting factor that may affect the propensity to believe the communicator is the amount of detail the salesperson provides in response to a consumer's question. The goal of this research is to examine how response length influences veracity judgments in a sales setting. Canvassing lay beliefs and extant research on deception in general presents completely opposing predictions. Internet sites suggest that saying too much is a dead giveaway of deceit. For example, the *truthaboutdeception.com* provides advice to the liar by counselling him or her to say as little as possible because "people get suspicious if you say too much." Conversely, academic literature has tended to expect and find the opposite: liars say less. The reported results however, are somewhat mixed. DePaulo and Morris (2004) offer some evidence that liars say less and provide fewer details. In a meta-analytic approach, DePaulo et al. (2003) found no support for variations in talking time, but did find that liars provided fewer details. However, Vrij and Heaven (1999) found no effect for the amount of details provided by a liar. Although consumer research has not explicitly considered response length as a cue to deception, there has been research investigating when consumers believe a salesperson's claim using the Persuasion Knowledge model (Friestad and Wright 1994). Previous work has found consumers to assume that salespeople have ulterior motives (Main, Dahl, and Darke 2007) and therefore, are more likely to deceive. Others have reported that salespeople are less trusted when they offer unsolicited recommendations (Fitzsimons and Lehman 2004) and when they behave in a manner consistent with a negative 'salesperson' stereotype, such as providing flattery to a consumer (Guo and Main, 2012).

We suggest a salesperson associated with a negative stereotype may be mistrusted when they behave in a manner consistent with that stereotype. In other words, salespeople associated with a negative stereotype are not believed when they behave as expected. We also propose that a salesperson associated with a non-negative stereotype may not be believed when they behave in a manner inconsistent with their usual behavior (i.e. response length is inconsistent with the rest of the answers s/he provides). In other words, salespeople associated with a non-negative stereotype are not believed when they behave in an unexpected manner.

## Empirical Work

In study 1, we tested whether consumers believe the claim of a salesperson associated with a negative stereotype when more or less information is provided in response to a specific question (versus approximately what is 'normal'). We expected responses that are 'normal' in length to not be believed. We asked participants to imagine a scenario with a used car sales person who answered their question regarding the transmission with a response that was short (or long) when they expected a response to be short (or long). Responses

matching their expectations were least believed, particularly when the salesperson provided a long answer.

In study 2, we tested whether consumers are likely to believe a salesperson associated with a non-negative or neutral stereotype when s/he provides a response which is consistent in length with the rest of the conversation (versus more or less than the hairdresser usually says). We expect responses that are 'unusual' in length to not be believed. We found that responses that mismatched their expectations were least credible, particularly if they provided a short answer.

Of course, there are many differences between examples of salespeople with a negative stereotype (used car salespeople in this case) and salespeople with a non-negative stereotype (a hairdresser in this case). In study 3, we tested whether the results for a situation where a consumer visits a hairdresser on a one-off basis would be believed when they offered an 'unusual' or a 'normal' length of response. We found that responses that mismatched their expectations were least credible, particularly if they provided a short answer. It appears that the existence of a relationship was not driving the results.

## Discussion

We found that when the salesperson was associated with a negative stereotype, consumers evaluated the salesperson as least believable when they were expected to speak at length and they did speak at length. This finding is consistent with the lay beliefs communicated on internet sites. Interestingly, they refer to the long response in interpersonal relationships where negative stereotypes are likely to be less common. We also expected that a mismatch between expectations and the length of the salesperson's response would result in not believing salespeople that are not associated with a negative stereotype. We found that when a hairdresser (indicative of this category) was expected to speak at length about a product, but had relatively little to say, s/he was not believed.

We tested whether the difference in cues to deception between these two types of salespeople could be because there was an existing relationship or the potential for an existing relationship in study 3. We did not find support for that explanation. However there are still many differences between a car salesperson and a hairdresser. Since a hairdresser touches the head and hair of the client and tactile interaction has been found to affect consumer's reaction (Hornik 1992), future research could consider the influence of appropriate (and inappropriate) touch on deception cues.

This research contributes to the deception cue literature more generally as little work exists considering the moderation of the relationship between behavioral cues and suspicion. The only findings in the deception literature currently point toward shorter answers as the most likely response format for liars. Here we find that longer responses were a cue for deception for salespeople associated with a negative stereotype.

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# The Bittersweet Taste of Home: A Baudrillardian Interpretation of Nostalgic Food Consumption in Acculturation

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## EXTENDED ABSTRACT

Within consumer acculturation theory, the practice of eating food associated with home is currently seen as a positive mechanism for coping with intercultural mobility. Acculturating consumers have been shown to use nostalgic food consumption practices to symbolize and materialize the home left behind (Askegaard, Arnould, and Kjeldgaard 2005; Emonstpool and Kjeldgaard 2012; Lindridge, Hogg, and Shah 2004; Üstüner and Holt 2007) and to provide embodied comfort (Bardhi, Ostberg, and Bengtsson 2010; Thompson and Tambyah 1999). However, even though the double-edged character of nostalgia has been acknowledged in broader conceptualizations (Holak 2014; Loveland, Smeesters, and Mandel 2010), consumer acculturation theorists have paid less attention to negative experiences of nostalgic food consumption.

To address this current imbalance, this paper draws on Baudrillard's (1994) theory of the simulacrum, which is rooted in poststructural semiotics. Baudrillard (1994) traces four orders of simulation which represent an increasingly complex and confounded relationship between the simulacrum and the original, or between signs and the reality they purport to represent. Within this framework, it can be seen that current interpretations of nostalgic food consumption in consumer acculturation theory have implicitly rested within Baudrillard's (1994) first order of simulation, where the simulacrum ('home' food) is assumed to be a faithful reflection of the original (the idea of home). However, the deterritorialization of identities and cultural symbols in postmodern consumer cultures (Appadurai 1997; Oswald 1999; Üstüner and Holt 2007) may drive radical departures from this current assumption and, in turn, fundamentally affect how acculturating consumers experience the consumption of food associated with 'home'. Thus, how do consumers acculturating in such contexts understand and experience the relationship between the simulacrum ('home' food) and its implied original (the idea of home)?

This question is empirically explored through a hermeneutic analysis (Thompson 1997) of depth interviews with 26 Southeast Asian immigrant consumers in New Zealand. To enrich and deepen the consumer narratives, visual and reflexive methods were deployed. First, each participant was asked to select objects and photographs which represent their experiences of migration (Zaltman and Coulter 1995) and use drawings to represent their social networks and social identities (Bagnoli 2009). Second, each participant was interviewed twice in line with open narrative reflexivity (Marcus and Fischer 1986; Thompson, Stern, and Arnould 1998). In their second interview, participants were presented with the researchers' emerging interpretations and provided an opportunity to correct, qualify, or further deepen their initial responses. While participants shared rich descriptions of a wide range of food consumption practices and meanings, the consumption of food associated with the home country was frequently lensed through nostalgic language and constitutes the focus of this paper.

Participants conveyed a range of nostalgic food consumption practices in New Zealand which involved an interwoven set of dishes, nostalgic food sources, and social occasions. As summarized in Figure 1 and Table 1, these experiences were shaped by divergent interpretations and associated with conflicted feelings. On one hand, in line with Baudrillard's (1994) first order of simulation and

reflecting current assumptions in consumer acculturation theory, nostalgic food consumption practices were interpreted as symbolic representations of the home left behind and associated with feelings of comfort. Reinforcing Stamboli-Rodriguez and Visconti (2012), nostalgic food consumption enabled participants to cope with the emotional difficulties of being away from their country of origin.

On the other hand, it was also found that, in line with Baudrillard's (1994) second order of simulation, nostalgic food consumption practices were also interpreted as incomplete copies of the original experience in the home left behind, and therefore associated with feelings of disappointment. Even though many participants attempted to reconstitute the cuisine of home by buying imported ingredients, cooking the dishes themselves, or sampling ethnic restaurants and caterers in New Zealand, these 'copies' of home were often experienced as imperfect and disappointing substitutes. This is because missing tastes, missing people, and missing atmospheres contributed to differences between the experience of nostalgic food consumption in New Zealand and the memory of eating food 'at home' in Southeast Asia.

Because of these divergent interpretations and conflicting feelings, the practice of eating food associated with home was ultimately an ambivalent experience. Simultaneous feelings of comfort and disappointment were recurrently illustrated in conflicting consumer narratives (see illustrative cases in Table 1) and aptly summarized in Tommy's comment about eating Indonesian food in New Zealand: "It does cure your homesickness. But still it's not 100%." For acculturating consumers, nostalgic food consumption practices were found to be bittersweet: on one hand, symbolizing the comfort of home and on the other hand, underlining one's dislocation from home.

This study helps to advance consumer acculturation theory by introducing additional dimensions to current theories of nostalgic food consumption. An inquiry from a Baudrillardian (1994) perspective revealed that additional dimensions of incompleteness, disappointment, and ambivalence shape immigrant consumers' experiences of consuming nostalgic food. Even though nostalgic food consumption has been seen as a positive coping mechanism in acculturation, this study underlines the double-edged effects of nostalgic food consumption on the well-being (Block et al. 2011) of acculturating consumers.

Moreover, with the acceleration of various forms of intercultural mobility and the deterritorialization of identities and cultural symbols in postmodern consumer cultures (Appadurai 1997; Oswald 1999; Üstüner and Holt 2007), a Baudrillardian perspective provides a more nuanced framework which elaborates a middle ground between the default polarities of traditionalism (in which cultural signs connote a cultural origin) versus hyperreality (in which cultural signs carry no relationship to cultural origins). An intriguing result of this lens is that, despite postmodern claims that "individuals of our day are more and more consuming cultures rather than belonging to any one culture" (Firat 1995, 105), it was shown in this study that the idea of cultural origin continues to shape how consumers experience food as a cultural sign in both expected and unexpected ways.

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# Recoding the Boundary: The Code-Jamming Effects of Meta-Reflexive Practices in Consumer Acculturation

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## EXTENDED ABSTRACT

While acculturating consumers have been shown to traverse (Lindridge, Hogg, and Shah 2004; Mehta and Belk 1991; Peñaloza 1994), negotiate (Askegaard, Arnould, and Kjeldgaard 2005; Jafari and Goulding 2008; Regany, Visconti, and Fosse-Gomez 2012), and oscillate between (Askegaard et al. 2005; Jamal and Chapman 2000; Oswald 1999; Regany et al. 2012; Sutton-Brady, Davis, and Jung 2010) wider socio-cultural boundaries, what is less clearly understood in consumer acculturation theory is how acculturating consumers might *shift* these boundaries and what resources they might use to do so. To address this theoretical gap and extend the current understanding of consumer agency in acculturation, this paper introduces, conceptualizes, and empirically demonstrates the phenomenon of meta-reflexive practices, which refers to the ironic recoding of dominant socio-cultural codes such as stereotypes. By heightening and ‘jamming’ dominant socio-cultural codes, acculturating consumers move beyond reflexively traversing boundaries (Askegaard et al. 2005) towards *playfully shifting* these boundaries. As such, meta-reflexive practices represent a novel practice of consumer agency whereby culture is not only consumed, but also critiqued.

The concept of meta-reflexivity is rooted in the perspectives of poststructural semiotics and literary theory, wherein socio-cultural categories, boundaries, and codes are viewed as texts-in-process which are consumed by individual consumers as resources for identity construction (Thompson and Haytko 1997). In addition, these socio-cultural codes are unstable and undergo continual ‘retextualization’ (Thompson, Stern, and Arnould 1998). The ongoing ‘coding’ of culture is furthermore conceived as a social process, involving repeated re-mediation and re-performance within diverse social practices and textual forms such as advertising (Phillips 1997; Ritson and Elliott 1995; Scott 1994). These practices of retextualization, in turn, have recursive effects on the socio-cultural codes which shape their construction. Applied to consumer acculturation theory, this view suggests that boundaries are not fixed, but emerge out of the continual repetition of dominant codes. Moreover, this view emphasizes that boundaries have the potential to be re-coded.

Stereotypes, in particular, represent one type of socio-cultural code through which boundaries are reinforced and maintained. As consumer acculturation scholars have previously shown, stereotypes carry stigmatising effects on acculturating consumers (Jafari and Goulding 2008; Luedicke 2011; Tolstikova and Molander 2012). However, these stigmatising effects can potentially be interrupted through meta-reflexive practices, the ironic recoding of dominant socio-cultural codes. Within poststructural semiotics and literary theory, meta-reflexive practices have been characterized as “the attempt to avoid a text being believed by its readers” (Latour 1988, 166) and as “the attempt to render texts ‘unreadable’ by adding self-referential loops” (Pels 2000, 4). Essentially, meta-reflexive practices rely on irony to “bend [a text] back upon itself” (Pels 2000, 7), undermine its primary message, and subvert its originating codes. Meta-reflexive practices are also distinct from reflexive practices because these are not only self-conscious, but also self-destructive; they are not only strategic, but also playful.

This paper is empirically grounded in a hermeneutic analysis (Thompson 1997) of depth interviews with 26 Southeast Asian immigrant consumers in New Zealand. To enrich and deepen the con-

sumer narratives, visual and reflexive methods were deployed. First, each participant was asked to select objects and photographs which represent their experiences of migration (Zaltman and Coulter 1995) and use drawings to represent their social networks and social identities (Bagnoli 2009). Second, each participant was interviewed twice in line with open narrative reflexivity (Marcus and Fischer 1986; Thompson et al. 1998). In their second interview, participants were presented with the researchers’ emerging interpretation of their first interview and provided an opportunity to correct, qualify, or further deepen their initial responses.

As summarized in Figure 1 and illustrated in Table 1, participants identified a wide range of stereotypes through which socio-cultural boundaries were encoded. Both negative and positive stereotypes about Asian migrants reinforced boundaries between Southeast Asian and New Zealand cultures, as well as boundaries between migrants and locals. These dominant socio-cultural codes were, in turn, transmitted through media texts, with participants actively decoding stereotypes about Asian migrants in advertising, television, and social media texts. Moreover, participants actively used these stereotypes as resources in their meta-reflexive practices. These ironic, playful, and self-contradictory retextualizations of dominant codes paradoxically resulted in ‘code-jamming’ and code-heightening effects. While meta-reflexive practices enabled participants to playfully subvert, invert, and diminish dominant boundaries, at the same time, these practices relied on repeating the very same socio-cultural codes that they are aimed at eroding. Thus, meta-reflexive practices represent a novel practice of consumer agency through which socio-cultural boundaries are simultaneously shifted and maintained.

Consumer meta-reflexive practices help to advance consumer acculturation theory by extending the current understanding of consumer agency in acculturation. In particular, by presenting a novel practice through which consumers recursively affect wider socio-cultural codes, this paper extends Luedicke’s (2011) dialectical model of agency and structure in acculturation. Further, consumer meta-reflexive practices illustrate how acculturating consumers do not only traverse, negotiate, or oscillate between socio-cultural boundaries (Askegaard et al. 2005), but can also *playfully shift* these boundaries. In addition, it was surprising to find that stereotypes are not only experienced as negative constraints on the identity projects of acculturating consumers (Jafari and Goulding 2008; Luedicke 2011; Tolstikova and Molander 2012), but are actively used by acculturating consumers as resources for boundary negotiation. Despite the reductive and often negative effects of cultural stereotyping, meta-reflexive practices empower consumers to creatively re-claim and re-code dominant socio-cultural boundaries in positive and productive ways.

Meta-reflexive practices represent a greater level of agency, reflexivity, and playfulness in the way acculturating consumers consume socio-cultural codes than is currently theorized in marketing. Ultimately, meta-reflexive practices show that culture is not merely consumed (Askegaard et al. 2005), it can also be critiqued.

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# When Calorie Information Does and Does Not Impact Consumers' Food Choices

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## EXTENDED ABSTRACT

In an effort to promote healthier food choices and fight obesity, the Patient Protection and Affordable Care Act includes a provision requiring chain restaurants with 20 or more locations nationwide to provide calorie information for food items on their menus. Although calorie labeling in chain restaurants has not yet been implemented nationwide, similar laws have already been adopted in many United States jurisdictions (Krieger et al. 2013). However, doubts have been raised as to whether calorie labels are effective at decreasing calorie intake (Loewenstein 2011). In addition, existing research on the effectiveness of calorie labels has produced mixed results (Kiszko et al. 2014). This previous research has typically focused on examining *whether* adding calorie information to menus has an impact at a simple yes-or-no level. In contrast, the present research consists of five studies examining *when* and *which* consumers use calorie information as policy makers intend—to make lower calorie food decisions.

We structure the present research around the central notion that calorie information is a cue to the extent to which a product addresses a health goal. Using this structure, we examine four situational factors that can alter the extent to which consumers use calorie information to make lower calorie food decisions. Specifically, we propose that whether calorie information is used to make lower calorie food decisions depends upon the following situational factors: whether a health goal (vs. a taste goal) is activated (Studies 1-2), how much health goal progress a consumer has made (Study 3), the presence of an alternative cue (besides calorie information alone) about the extent to which a food item addresses a health goal (Study 4), and the presence of a cue that can alter how consumers map calorie information onto product healthiness (Study 5). Moreover, we suggest that sensitivity to some of these different factors will depend upon individual differences in restrained eating: restrained eaters will tend to use calorie information to make lower calorie food decisions across a wider range of situations, whereas unrestrained eaters will tend to use calorie information to make lower calorie food decisions only under a much narrower range of situations.

In Studies 1 and 2, participants were exposed to a health or taste goal cue. Because people assume that the number of calories in an item is an indication of the product's healthiness (Booth 1987), we predicted and found that consumers—regardless of dietary restraint—for whom a health goal is activated will use calorie information as intended—to make a lower calorie food choice—regardless of their level of dietary restraint. Similarly, because consumers high in dietary restraint (“restrained eaters”) compared to consumers low in dietary restraint (“unrestrained eaters”) are highly sensitive to their eating behavior and consciously and continually monitor it (Herman and Mack 1975), we predicted and found that even when a taste goal was activated they used the calorie information as intended. On the other hand, however, because the goal to consume fewer calories is weaker and less persistent for unrestrained eaters (Mohr, Lichtenstein, and Janiszewski 2012; Stice 1998), we predicted and found that when a taste goal was activated, unrestrained eaters do not use the calorie information as intended.

In Study 3, participants were asked to list three or seven times that they had eaten healthily in the past week. We predicted and found that when people are reminded of the progress they have made toward their health goal, they feel licensed to indulge, and do not

use the calorie information as intended, regardless of their level of dietary restraint (Fishbach and Dhar 2005).

In Study 4, we manipulated whether consumers were asked their purchase intentions for a chicken wrap at a restaurant with a health halo (Subway) or a restaurant without a health halo (McDonald's) (Chandon and Wansink 2007). We found that when a restaurant has a health halo (Subway), which we argue can be used as an alternative cue to a product's healthiness, restrained and unrestrained eaters respond to the calorie information in different ways. Because of restrained eaters' heightened sensitivity to calorie information (Mohr et al. 2012), we found that regardless of whether a restaurant has a health halo, restrained eaters use the calorie information as intended. However, because a health halo can be used as alternative information that the products at a restaurant are healthy (Chandon and Wansink 2007), and unrestrained eaters are less sensitive to calorie information (Mohr et al. 2012), we predicted and found that unrestrained eaters use the calorie information as intended when the restaurant does not have a health halo (i.e., it cannot be assumed that the food at the restaurant is healthy), but use the calorie information in an unintended way when the restaurant has a health halo.

Finally, in Study 5, we tested the effectiveness of an oft-proposed menu-board intervention that informs consumers about the recommended calorie limit per meal for adults. We propose that this intervention may alter how some consumers map calorie information onto product healthiness. Indeed, we found that the intervention had no effect on the food choices of unrestrained eaters but, because restrained eaters are highly sensitive to cues about what is and is not appropriate to consume (Knight and Boland 1989), the intervention led restrained eaters to prefer any foods that fell underneath the calorie guideline. We find that this heightened preference may occur because restrained eaters believe that foods that fall beneath the calorie guideline are healthier.

To our knowledge, this paper is the first to systematically draw upon the central notion of calorie information as a cue to product healthiness to examine when and which consumers use calorie information to make lower calorie food decisions. In terms of practical contribution, our findings offer explanations for why calorie information often has mixed effects in the real world. In terms of theoretical contribution, our findings indicate that restrained eaters and unrestrained eaters respond differently to a variety of health-goal related cues, including health-goal activation cues and health halos.

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# Navigating by the Stars: What Do Online User Ratings Reveal About Product Quality?

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## EXTENDED ABSTRACT

Consumers typically have to make an inference about a product's quality before buying. Traditionally consumers have drawn on marketer-controlled variables like price and brand name to make such inferences (Rao and Monroe 1989), but the consumer decision context has changed radically over the last several years. One of the most important changes has been the proliferation of user-generated content (Keen 2008). Almost all retailers now provide user reviews and ratings on their websites, and these reviews often play an important role in the purchase process (Mayzlin, Dover, and Chevalier 2012). The steep rise of user ratings suggests that consumers think they are valuable for making good decisions. But just how much faith should consumers put in these ratings?

We identify a number of potential challenges to the predictive validity of user ratings for quality. Previous research indicates that ratings do not faithfully represent the population of users (Mayzlin, Dover, and Chevalier 2012, Hu, Pavlou, and Zhang 2006), and raters are influenced by previously posted ratings, creating herding effects (Moe and Trusov 2011; Muchnik, Aral, and Taylor 2013; Schlosser 2005). Moreover user experience is highly variable and there is often not a sufficient sample size to yield a precise estimate of the average. Another concern is that product quality is often hard to discern from use experience and evaluations are therefore biased by marketing variables like price and brand name. This raises the possibility that user reviews are similarly biased.

We developed a database of (1) quality scores from *Consumer Reports*, (2) user ratings from Amazon.com, (3) selling prices, and (4) brand perceptions from a proprietary industry survey. Analyses reveal that the average user rating is about equally predictive of quality as the number of ratings and much less predictive than price. Not controlling for other predictors, having a higher Amazon user rating predicts having a higher quality score only 57% of the time. Differences in user ratings lower than 0.40 have essentially no predictive value and larger differences predict quality superiority only about 65% of the time. We also found that the predictive validity of the average user ratings depends substantially on its precision as measured by standard error. As sample size increases and/or the variability of the distribution decreases, user ratings become better predictors of quality. Unfortunately a large proportion of products in the marketplace do not have sufficient precision to yield a reliable indicator of product quality. We also examined the predictive validity of price and found it to be similar to what has been suggested in past research (Tellis and Wernerfelt 1987). Notably, although the correlation between price and quality is modest, it is a much better predictor than either the average or number of ratings

In a second study we asked consumers to search for pairs of products on Amazon.com and then to rate the relative quality of these products. Consumers perceived a significant positive relation between all three cues—price, average user rating and number of user ratings—to quality. Average user rating was by far the strongest predictor of quality perceptions. We also found that consumers fail to moderate their reliance on the average user rating as a function of its precision. Although the effect of average ratings on quality inferences may not be surprising in light of many studies documenting their pervasive influence on consumer and managerial decision-making, it is notable that consumers think the average user rating

is so much more predictive of quality than price. The price-quality heuristic is one of the most studied phenomena in the marketing literature and typically considered to be one of the cues that consumers treat as most diagnostic of quality. Our study is the first to revisit the strength of the perceived price quality relationship in a multi-cue environment where user ratings are simultaneously present, which is a common mode in which consumers evaluate products today.

Study 1 revealed that average user ratings are not very diagnostic of technical quality. We hypothesized that one reason for this is the biasing influence of marketing actions on user evaluations. To test this idea in Study 3 we supplemented the market data with brand perception data and conduct a new regression that predicts average user rating as a function of price, brand perceptions and technical quality. By controlling for quality we isolate the contaminating influence of extrinsic cues on user ratings. As predicted, the dissociation between user ratings and quality can be traced in part to the influence of marketing actions on users' evaluations. Controlling for quality, average user ratings are higher for more expensive products, higher for brands with a reputation for offering more functional and emotional benefits, and lower for brands with a reputation for affordability.

We conclude that consumer trust in online user ratings is largely misplaced. It may be a kind of "illusion of validity" where the predictive accuracy of a cue is overestimated due to its resemblance to the outcome variable, regardless of factors that undermine its value (Tversky & Kahneman 1974).

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# Going to Extremes: Dialectical Thinking in the Context of Contradictory Information

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## EXTENDED ABSTRACT

Current social media facilitate communications among consumers, and such conversations often involve product evaluations, leading to recommendations to adopt or to avoid certain options. However, it is unlikely that product reviews or recommendations provided by numerous others will be unanimously positive or unanimously negative. When considering contradictory reviews, can consumers accept that it is both of the best yet also the worst quality at the same time? How will such conflicting information be integrated and reflected in subsequent attitudes towards the movie? This research aims to answer these questions.

Research on dialectical thinking has found differences in the degree to which consumers are comfortable with ambiguity or holding contradictory beliefs. Peng and Nisbett (1999) showed that high dialectical thinkers (Chinese people) tend to endorse both sides of an argument that low dialectical thinkers (North Americans) perceive to be contradictory and hence incompatible. Similarly, we expect that responses to contradictory information may depend on consumers' propensity to accept and resolve contradiction; namely, their level of dialectical thinking. More importantly, research suggests that relative to their low dialectical counterparts, high dialectical thinkers generally avoid the adoption of extreme positions (Choi and Choi 2002). However, we predict a more counterintuitive impact of dialectical thinking on consumer attitudes when these are based on contradictory information. We propose that high (vs. low) dialectical thinkers process contradictory information more fluently, and that this greater processing fluency in turn will boost their judgmental confidence, resulting in relatively greater attitude extremity.

High (vs. low) dialectical thinkers process contradiction with greater ease (Peng and Nisbett 1999). Research on processing fluency (Janiszewski and Meyvis 2001; Lee and Labroo 2004; Novemsky et al. 2007) suggests that attitudes toward a stimulus are more favorable when it is more easily processed. Importantly for our theorizing, greater processing ease or fluency is associated with greater judgmental confidence (Tsai and McGill 2011), which refers to consumers' impression of the quality of their judgments. Confidence is subject to change during the processing of sequential information. In particular, when forming impressions of an object based on an initial piece of information that is subsequently disconfirmed by a second, contradictory piece of information, judgmental confidence will be undermined (Maheswaran and Chaiken 1991). A question that arises is how this greater confidence will be reflected in subsequent attitudes. Since greater ease of processing contradictions may make high dialectical thinkers feel assured with respect to the quality of their judgments, we predict that greater levels of judgmental confidence will decrease the tendency of evaluating options modestly, and hence increase attitude extremity.

Thus, we argue that high dialectical thinkers infer that, given that an object is easy to evaluate, they must either like it or dislike it intensively. That is, high dialectical thinkers exhibit greater judgmental confidence and become more extreme in their attitudes. Based on this, we propose that high (vs. low) dialectical thinkers are more likely to evaluate options extremely in contexts of contradictory information, and the effect of dialectical thinking on evaluations should be driven by confidence.

We conducted a series of experiments that collectively provide support for our theory concerning the relationships among consumers' propensity to engage in dialectical thinking, confidence, and subsequent attitudes. The first study tests our first proposition and demonstrates that high (vs. low) dialectical thinking result in more extreme attitudes in the presence of contradictory information, but – consistent with prior literature – in more modest attitudes based on non-contradictory information. A follow-up study manipulates (rather than measures) dialectical thinking and again finds high dialectical thinking associated with more extreme judgments based on contradictory information. Study 2 extends these findings by showing that confidence drives the effect of dialectical thinking on attitude extremity. Consistent with our proposition that individuals draw on confidence inferred from processing fluency in their attitude construction, study 3 evinces that dialectical thinking no longer impacts attitude extremity for those less likely to rely on these inferences; namely, those high in product knowledge.

This work makes three theoretical contributions. First, we show that presence (vs. absence) of contradiction moderates the effect of dialectical thinking on attitudes. Second, we evince that high (vs. low) dialectical thinkers respond more extremely to contradiction because they are able to process contradictory information more fluently, giving them relatively greater judgmental confidence. Third, we demonstrate that attitude extremity differs based on the degree of processing fluency. Although past research has shown that processing fluency leads to greater liking (Janiszewski and Meyvis 2001; Lee and Labroo 2004; Novemsky et al. 2007), our result suggests that when an object becomes easier to evaluate, attitudes change not only in valence but also in intensity, such that consumers become more extreme in their liking or in their disliking.

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# Will A Broad Identity Increase Preference for More Advanced Products? The Impact of Identity Breadth on Consumer Choice

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## EXTENDED ABSTRACT

Consider one shopping scenario: Peter is choosing among a series of digital cameras including both digital point-and-shoot camera (designed for beginners) and advanced digital SLR camera (designed for semi-professionals or professionals). Which camera will Peter finally choose? And what factors will influence Peter's choice? It's widely accepted that consumer decision making is largely determined by how much knowledge or expertise they think they have about the given product. For instance, prior studies found that consumers' subjective knowledge was an important determinant of product information search (Brucks 1985; Moorman et al. 2004; Rao and Sieben 1992), product information process (Alba and Hutchinson 1987; Johnson and Russo 1984) and product choice (Burson 2007).

However, the metacognitive feeling of knowing is not fixed and can be influenced by situational factors (Alba and Hutchinson 1987). We propose that framing an individual's social identity at different breadth level would influence his or her subjective knowledge, which in turn changes his/her preferences for more advanced products. According to the Self-Categorization Theory (Turner et al. 1987), people have multiple social identities which could be organized into a hierarchy representing at three levels of abstraction: 1) The superordinate level corresponds to human beings, 2) the intermediate level of categorization focuses on similarities and differences in social groups, and 3) the subordinate level represented by the personal self, the unique "I."

By extending this categorization, the current research proposes that social identities can be further differentiated at a spectrum of breadth. As an illustration, a broad identity defines a member in a superordinate group that is an overarching inclusive social category (e.g., professor). In contrast, a narrow identity defines a member in a subgroup that is highly specific and exclusive (e.g., a microbiology professor of science at a university). Given that the salient identity can make its corresponding category of knowledge more accessible for retrieval and usage (Cheng, Sanchez-Burks, and Lee 2008; Devine and Monteith 1999), we propose that a broad identity, compared with a narrow identity, can increase the accessibility of a broader category of knowledge. On the contrary, a narrow identity corresponding to a limited and specific knowledge category may create the perception that a person knows little in domains beyond this narrow category.

As a result, we expect that individuals with a broad identity will feel more knowledgeable in general and that this heightened feeling of knowing will be readily applied to the product domain. Because subjective knowledge or expertise in a product domain is predictive of product choice (Brucks 1985; Burson 2007; Raju et al. 1995; Rao and Sieben 1992), we further propose that consumers will exhibit greater preference for more advanced products when they adopt a broad identity than a narrow identity. Because identity shift will not change the level of objective knowledge, we expect that this effect of identity level on preference for advanced products will be attenuated when consumers' actual knowledge level of the product is called into question.

In order to test the proposed identity breadth effect, three empirical experiments were conducted. In experiment 1, we aimed to provide the initial evidence for the impact of identity breadth on

consumers' subjective knowledge. We employed a one factor (broad identity, narrow identity, no identity priming) between-subjects design. As predicted, participants primed as an employee of Hewlett-Packard Company (broad identity condition) scored higher than participants primed as an employee of the Engineering Management Department which is a subdivision under Hewlett-Packard Company (narrow identity condition) on the perception of knowledge in general ( $p < .01$ ).

Experiment 2 was conducted to further investigate the influence of identity breadth on consumer choice, and employed a 2 (identity breadth: broad vs. narrow identity) x 2 (remind of objective knowledge: yes vs. no) between-subjects design. We manipulated identity breadth by making salient of a broad identity ("which university do you study in?") or a narrow identity ("which specific department/major do you study in?"). Consistent with our hypothesis, participants in the broad identity condition (vs. narrow identity condition) were more likely to choose the more advanced software if their objective knowledge was not called into question ( $M_{\text{broad}} = 3.57$ ,  $SD = 1.33$  vs.  $M_{\text{narrow}} = 2.56$ ,  $SD = 1.25$ ;  $F(1,55) = 8.68$ ,  $p < .01$ ). But if the participants' objective knowledge was called into question, the difference in choosing more advanced software between broad and narrow identity became insignificant ( $p > .80$ , NS).

Finally, in experiment 3, we examined the process that underlying the influence of identity breadth on consumer choice, and ruled out some alternative explanations. Experiment 3 employed a 2 (identity breadth: broad vs. narrow identity) x 2 (remind of objective knowledge: yes vs. no) between-subjects design and manipulated the identity breadth by the similar procedure as that used in experiment 2. The findings suggested that compared with participants in the narrow identity condition ( $M = 2.89$ ,  $SD = .94$ ), those in the broad identity condition expressed higher preference for the more advanced camera ( $M = 3.54$ ,  $SD = 1.04$ ) if there was no reminder of objective knowledge ( $F(1,45) = 4.68$ ,  $p < .05$ ). This effect disappeared when the objective knowledge was reminded ( $p > .20$ , NS). In addition, a 95% bootstrapping analysis confirmed the mediation role of subjective knowledge (95% CI = -1.25 to -.09).

To summarize, the present research identifies broad versus narrow identity breadth as one important antecedent of consumers' subjective knowledge level and investigates its consequences on their decision making. Our findings could make substantial contributions to the related literatures about social identity by providing an initial investigation of the broad versus narrow identity breadth paradigm. Furthermore, the current paper adds evidence to consumer knowledge calibration (Goldsmith and Pillai 2006) by documenting that identity breadth may lead to miscalibration. Importantly, results from the three experiments could provide meaningful implications for marketing practice. To illustrate, marketers can consider activating a broad identity for consumers in order to promote the professional model of products. Conversely, activating a narrow identity may be more effective in increasing preference for the amateur model of products.

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# How Does Taste Change?

## A Field-level Analysis of the Dynamics of Field-specific Cultural Capital

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### EXTENDED ABSTRACT

The constant renewal of our consumption world is a staple of capitalism (Schumpeter 1942). This is perhaps nowhere evident as in fashion, a field governed by the reinvention of yesterday's trends (Rinallo and Golfetto 2006). From fashion to consumer electronics to coffee culture to music, most of consumption fields are partly taste-driven. Yet, how does taste change remains an unanswered question. On the one hand, taste is performed through taste regimes, or "discursively constructed normative systems that orchestrate the aesthetics of practice in cultures of consumption" (Arsel and Bean 2013: 900). Consumers' knowledge about the objects, meanings and doings articulated through taste regimes constitute their FSCC (Arsel and Bean 2013). On the other hand, consumption serves as a ground for status claim (Holt 1998; Ustuner and Holt 2010). I propose that consumers unintentionally enact field-level changes by altering taste regimes through their strategies to, consciously or not, better their field position.

I study this dynamic by unpacking the changes in field members' taste in the context of avant-garde menswear. I use a multi-method longitudinal approach taking a fashion web forum as my central site of study. This web forum is the breeding ground, recognized authority and place of gathering for avant-garde menswear enthusiasts. It has some 15 000 members (in comparison, a well-known avant-garde menswear retailer in Chicago estimated his local market to be of about 300 consumers) and has facilitated the launch of three designers, a magazine and a web store. The choice of avant-garde fashion is relevant as it is where change in taste would be the most expected (Bourdieu 1996). More, fashion forums are an important part of the fashion industry as they are "routinely read by industry insiders and can be powerful influencers of purchasing behaviour" of both fashion buyers and consumers (Rabkin 2013). My data set is comprised of field notes following a 2 year-long netnography, 7 interviews with field members, more than 175 000 forum posts over a 7 years long period, and some 50 articles from traditional and online media related to the field.

I employ Bourdieu's field theory and generate insights through a field-level analysis. More specifically, I use the concepts of field; cultural capital; symbolic capital; and conversion value to make sense of the symbolic struggles pertaining to the FSCC-related strategies of consumers (see Bourdieu 1986; 1996; Bourdieu and Wacquant 1992). As my context is based on aesthetic and taste, I also draw from Arsel and Bean (2013) notion of taste regime as an operationalization of FSCC.

The field is seen as a space of possible positions that consumers can attain through the conversion of their FSCC into symbolic capital (Bourdieu and Wacquant 1992). It evolves through consumers' actions towards the accumulation of field-specific cultural capital, the preservation of their stock of FSCC, or their efforts to disrupt the distribution of FSCC. Consumers accumulate FSCC when they join the field by using the web forum as a codified database of field-related knowledge. Also, the consumption-related problems emerging from the taste regime (Arsel and Bean 2013) create challenges that push consumers to acquire FSCC. As consumers gain expertise, they start to seek information outside of the field and develop a thorough understanding either of one of the core objects of the taste regime, such as a core designer, or of several peripheral ones. Consumers preserve their FSCC by actively engaging in judging other members'

taste, answering questions from newer members and extending the existing objects, doings and meanings arrangements of the taste regime. Finally, consumers try to disrupt the distribution of FSCC by legitimizing new objects, meanings or doings unrelated to the current taste regime, or working to delegitimize existing objects, meanings and doings arrangements.

These strategies, played concomitantly by all field members, unfold through symbolic struggles in which the arrangement of and value associated with the objects-doings-meanings of a field change. As the field evolves, the conversion value of the FSCC changes, that is, the value of certain forms of knowledge associated with the taste regime fluctuates. As these symbolic struggles develop, taste changes.

I contribute to a growing literature on field-level analyses (Coskuner-Balli and Thompson 2013; Giesler 2012; Martin and Schouten 2013; Scaraboto and Fischer 2013) by explaining how consumers' symbolic struggles lead to changes in taste regimes and in the conversion value associated with a specific stock of FSCC. Over time, the field changes as these modifications bring about new possibilities for position-taking by field members.

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# My Louis Vuitton Bag from eBay is Definitely Genuine: Closing the Self-Discrepancy Gap through Self-Deception with Brands

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## EXTENDED ABSTRACT

We all have moments in our lives when we feel far from the ideal person that we would like to be. A student fails an exam. A dieter sneaks a cookie after dinner. An academic researcher receives a rejection letter from a journal. The distance between one's actual and ideal selves is known as self-discrepancy (Higgins 1987; Higgins et al. 1986). Given that being far from one's ideal self is an uncomfortable and aversive state, individuals are motivated to reduce such discomfort (see Higgins 1987 for a review).

Brands bolster self-views (Gao et al. 2009) and can correspond to our ideal selves (Reed and Bolton 2005). Yet while there is abundant evidence that *actual* self-congruency drives brand preference (Birdwell 1968; Dolich 1969; Landon 1974; Malär et al. 2011; Ross 1971), support for *ideal* self-congruency as a driver of brand preference has been limited. The lack of research into ideal-self congruency as a driver of brand preference is especially surprising given the research on luxury brands (Mandel, Petrova, and Cialdini 2006; Reed and Bolton 2005; Rucker and Galinsky 2009; Wilcox, Kim, and Sen 2009). Thinking about future successes, feeling powerless, and wanting to gain approval from others all increase consumers' preferences for luxury brands (Mandel et al. 2006; Rucker and Galinsky 2008; Wilcox et al. 2009). To the extent that consumers see power, success, and social acceptance as characteristics of their ideal self, this research suggests that a consumer's ideal self may drive their preference for luxury brands.

Self-discrepancy may also help explain consumers' preferences for counterfeit luxury brands. Counterfeits, however, may only reduce self-discrepancy when a consumer can mislead himself into believing that the counterfeit product is genuine via self-deception. Self-deception should reduce self-discrepancy because individuals do not engage in self-deception needlessly or out of ignorance, but rather out of a lack of awareness (Gur and Sackeim 1979). Therefore, consumers who engage in self-deception to feel closer to their ideal selves should actually convince themselves that their behavior is moving them towards their ideal selves and consequently reduce self-discrepancy.

Study 1 focused on a particular "self," an individual's American self, and manipulated self-discrepancy through the difficulty of a quiz on American history and government. Participants then evaluated one of three advertisements for a laptop. The advertisement was either for an American brand (ideal), foreign brand (unideal), or was unbranded. In addition to testing whether interacting with the advertisement for the American brand would lower participants' self-discrepancies, we also measured brand attitude. An ANOVA revealed that those with high self-discrepancy (hard quiz condition) had greater brand attitudes toward an American brand compared to consumers with low self-discrepancy (easy quiz condition). Furthermore, we found that by interacting with an advertisement for the American brand consumers with high self-discrepancy lowered their self-discrepancy. These results only occurred with an American (ideal) brand and did not occur with a foreign (unideal) brand.

Study 2 was similar to study 1 except we also measured participants' belief in entity versus incremental theories of personality. Individuals who endorse incremental theory believe their personality to be malleable and amenable through their own efforts while entity theorists believe their personal traits are fixed and therefore

unsusceptible to improvements through their efforts (Dweck 2000). As such, incremental theorists should be more like to behave in self-deception than entity theorists. If self-deception is at play, then we would expect our results from study 1 to hold for incremental theorists, but not entity theorists. We found an interaction of implicit self-theory with quiz condition predicting brand attitude such that the effect of implicit self-theory was significant and positive in the hard quiz (HSD) condition ( $b = .26$ ,  $t(98) = 2.28$ ,  $p < .03$ ) but not significant in the easy quiz (LSD) condition ( $b = -.04$ ,  $t(98) = -.34$ ,  $p > .73$ ). A spotlight analysis revealed that incremental theorists (+1 SD) reported greater brand attitudes in the hard quiz condition than the easy quiz condition ( $b = .62$ ,  $t(98) = 2.00$ ,  $p < .05$ ). There was no effect of quiz condition among entity theorists (-1 SD;  $b = -.26$ ,  $t(98) = -.81$ ,  $p > .41$ ).

Study 3 examined whether consumers deceive themselves into believing in the authenticity of a likely counterfeit product. We focused on students' business identities in study 2 and again manipulated self-discrepancy through the difficulty of a quiz. Participants then imagined they had purchased one of four leather business portfolios: a luxury brand portfolio purchased at a premium price (\$500) at a store, a luxury brand portfolio purchased at a discount (\$50) on eBay, a counterfeit luxury brand portfolio purchased at a discount (\$50) on eBay, or an unbranded portfolio (\$50). We find that individuals with HSD evaluate a (probable) luxury brand portfolio sold at a discount on eBay just as highly as one purchased in the store, and significantly more than an unbranded, comparably priced, portfolio. When they were told the product is counterfeit, however, they decreased their evaluation of the portfolio. This pattern of results suggests that those who imagined purchasing the Louis Vuitton portfolio on eBay for a discounted price, but were not *explicitly* told that the good was counterfeit, are self-deceptively convincing themselves that the good is genuine. Furthermore, both the eBay-bought and store-bought portfolios reduced self-discrepancy for participants in the hard quiz condition, while the counterfeit portfolio did not.

This paper examines the effect of self-discrepancy on brand attitudes and counterfeit product evaluations, the self-deceptive process underlying these behaviors, and whether these behaviors help individuals feel closer to their ideal selves. The contributions from this research are threefold. First, the results add to literature on the self-expressive function of brands by highlighting an important individual difference variable (self-discrepancy) that drives preference for brands and charities that express one's ideal self. Second, we shed light on the self-deceptive process that allows consumers to "lie" to themselves and believe that they are closer to their ideal self. Finally, this research contributes to work on compensatory consumption (Gao, Wheeler, and Shiv 2009; Rucker and Galinsky 2008; Rucker and Galinsky 2009) showing not only that consumers use brands and counterfeits to reduce their self-discrepancy, but also that these behaviors are effective.

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# Ray of Hope: Hopelessness Increases Preferences for Brighter Lighting

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## EXTENDED ABSTRACT

Electricity consumption brings heavy economic and environmental burden. Previous research highlights the importance of household characteristics such as family size and price consciousness (Heslop, Moran, and Cousineau 1981), demography and meteorological factors (e.g., temperature and wind velocity; Valor, Meneu, and Caselles 2001), and economic activities (Squalli 2007), in predicting electricity consumption.

Based on the recent conceptual metaphor literatures, we propose a novel hypothesis that examines the impact of incidental emotion on energy consumption for lighting. Specifically, we contend that the emotion hopelessness (e.g., as a reaction to a depressing economy) is connected to our sensory perception of ambient lighting, which in turn may determine our preference of lighting and electricity consumption.

Hopelessness is a negative emotion characterized by the feeling that the future holds little promise or having no means to achieve one's goals (Melges and Bowlby 1969). People experience some extent of hopelessness in almost every stage of their lives. Students may feel hopeless for a final examination that they have not prepared for after a weekend of partying; adults may experience hopelessness when facing a grim economy and suffering from major setbacks in life (e.g., joblessness, homelessness, and divorce).

In our daily use of language, hopefulness or hopelessness is often communicated through concepts linked to light and darkness. In metaphors such as *ray of hope*, for example, hope is represented as the sensory perception of light and hopelessness as darkness. But can the emotion hopelessness actually trigger the sensory perception of darkness? Early models of emotion seem to suggest that this is unlikely. The semantic network models of emotion (e.g., Bower 1981; Ingram 1984; see Niedenthal 2008 for a discussion of relevant models), for example, represent emotional concepts as nodes in networks of abstract information. The activation of emotional nodes may activate abstract, amodal concepts related to light or darkness but should not induce actual sensory change.

However, drawing on the recent advancements in conceptual metaphor research (Lakoff and Johnson 1980), people grasp concrete, lower level concepts such as up vs. down and close vs. far before they understand higher level, abstract concepts. In addition, rather than creating completely new conceptual systems for abstract concepts, people "recycle" their experience with and knowledge of lower level concepts. Thus, the abstract concepts of happiness and sadness are mentally represented as physical concepts of up and down (Meier and Robinson 2004), importance as physical weight (Jostmann, Lakens, and Schubert 2009), and morality as physical cleanliness (Zhong and Liljenquist 2006).

Hopelessness concerns the prospect of achieving one's goals (Melges and Bowlby 1969), which incorporate both a desirable end states (a destination) and the means through which goals can be completed (paths lead to the destination) (Kruglanski 1996). In darkness, people are neither able to see the destination ahead nor the road leading to the destination, known as the "night myopia" phenomenon (Koomen, Scolnik, and Tousey 1951). The physical inability to see into the distance is analogous to the experience of feeling hopeless when people are unclear about the means (the path) to reach their

goals (the destination). Therefore, we expect that the emotional experience of hopelessness may be psychologically represented as the absence of light. In other words, we expect that people experiencing hopelessness might actually perceive their environment to be darker than it actually is. Furthermore, this perceptual bias should also lead them to prefer brighter lighting than otherwise.

Three experiments tested these possibilities. In Experiment 1, disguised as a life experiences study, participants were first asked to recall a past experience that gave rise to feelings of hopeless, hopeful, or sad (to test whether sadness can also darken people's light perception). Moreover, we included a baseline control condition in which participants described their typical day experience. After that, participants proceeded to an ostensibly unrelated task, in which they were asked to evaluate the lab room for the building management office along the following three dimensions: brightness, comfortableness, and temperature. Participants' response on the lighting evaluation was our main dependent variable. Results suggested that participants who recalled a hopeless situation perceived the room to be dimmer than those in hopeful, sad, or neutral conditions (the comfortableness and temperature ratings were not differed), thus providing initial evidence for the proposed metaphorical mapping between hopelessness (but not general sadness) and reduced lighting.

Experiment 2 was conducted to test if the visual bias as a result of feeling hopeless would lead people to prefer brighter ambient lighting. We first measured participants' hopelessness toward the economy and job market prospects using a 9-item scale ( $\alpha = .92$ ). Then in an unrelated study, participants indicated their preference for bright lighting. To get a better sense whether this can transfer into potential electricity use, we took pictures of an actual light fixture installed with incandescent bulbs with varying wattages and asked participants to indicate their ideal lighting ambience. Correlation results suggested that preference for lighting was positively correlated with the averaged hopelessness about the economy and career prospect. These results suggest that the more hopeless participants feel about the current economy, the more they prefer bright lighting.

Experiment 3 demonstrated the reverse of Experiment 2. Specifically, participants were randomly assigned to either a bright or a dim lab, and then they indicated their perceived prospects of job search. Results suggest that participants staying in a dimmer (vs. brighter) room indeed felt more hopeless about their job search prospect.

This research makes important theoretical contribution to embodiment literature by showing that a common emotion of hopelessness can reduce people's visual perception of ambient light and increase people's electricity (lighting) consumption. It enriches the emerging body of recent research showing that people's psychological states can affect sensory perceptions. For instance, nostalgia increases perceived ambient temperature (Zhou et al. 2012), and violations of interpersonal justice elicits moral disgust which triggers stronger taste and smell reactions to gustatory and olfactory stimuli (Skarlicki et al. 2013). Moreover, our work contributes to the literature on energy conservation by offering a new perspective that emotional factors such as hopelessness can affect electricity (lighting) use.



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# Using Social Comparisons to Motivate Health Behavior Over the Lifespan: The Impact of Experience with Health Problems

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## EXTENDED ABSTRACT

The potential benefits for older adults of increased motivation to care for their health are substantial, for example helping them to maintain an independent lifestyle for longer (Shephard 1993) Older adults are a demographic group of increasing size and economic importance globally, with rapid growth in industrialized nations relative to younger demographics. However, it remains an understudied group in marketing (Yoon et al. 2005).

Public health campaigns often use fear appeals to motivate health behaviors in teenagers and adults, and they are increasingly used for older adults. A common approach is to provide comparisons with worse-off others (e.g., a long-time smoker suffering from emphysema) to motivate behavior change. The current research looks at some of the motivational effects of such “downward comparisons”, including effects on older adults’ interest in and motivation by advertising messages (study 1) and health role models (study 2), and the impact on the likelihood that participants will choose a healthy snack following a downward comparison manipulation (study 2). In our studies, we find that motivational effects of downward comparisons on older adults are directionally different from those for midlife adults and, for older adults, the impact of downward comparisons varies substantially with individuals’ experience with ill health (both their own health experience and their experience with the ill health of those close to them). These results caution against assuming that health campaigns will impact older adults in the same ways as for other adults, and they remind us of the substantial heterogeneity of the older adult population.

We have completed two studies. In study 1, we compare 59 older (38 female, mean age = 79.0 years) and 63 midlife (55 female, mean age = 44.6 years) adults on the impact of downward comparisons. All participants wrote about a negative health experience of someone they knew, simply describing the experience (control group) or imagining that it happened to them (downward comparison group). Participants then rated their interest in negatively-framed (prevention-oriented) and positively-framed (promotion-oriented) messages advertising four food items. They also provided information on the recency and amount of experience they had with ill health in others (including illness and death of spouse, close friends and relatives) and rated their own current health. The results differed for midlife versus older adults,  $F(106) = 4.34, p = .04$ . For midlife participants, downward comparisons increased their interest in prevention-oriented messages, replicating and extending past research on the motivational impact of downward comparisons, conducted in a different domain with young adults (Lockwood 2002). In contrast, many older participants showed little impact, and the interest in prevention-oriented messages of people with greater experience with others’ ill health even decreased (interaction,  $t(49) = 3.371, p = .003$ ).

In study 2, we used a similar method, with the following changes. 1) We included only older participants (261, aged 60 to 99 years). 2) We added a second control group, where participants described a vacation experience of someone they knew. 3) We used different dependent variables: participant rated their motivation by six (positive and negative) health role models, and selected three snacks from a choice of six healthy or unhealthy options. 4) We included additional variables (such as affective response and perceived vulnerability) to explore potential explanations for our results.

Similar to study 1, for many participants there was little impact of the downward comparison manipulation relative to controls on prevention-orientation (motivation by negative role models), and any impact was moderated by individuals’ health experience. Older adults who were both relatively healthy and more experienced with ill health in close others were less motivated by negative role models (lower prevention-orientation) after a downward comparison, even when controlling for age ( $p = .02$ ).

These results were not accounted for by differences between individuals on variables such as perceived vulnerability, similarity to the other, perceived control, and severity (several of which have been found to mediate the impact of downward comparisons in younger adults). The decrease in prevention focus shown by individuals with more experience of others’ ill health (that we saw in study 1, and in study 2 for older adults who are relatively healthy) did not seem to be due to a reduced affective response to downward comparisons for these more experienced individuals. Rather, this result may reflect less informational impact of considering another’s negative health experience in older adults with more experience of others’ ill health.

Finally, individuals’ snack choice was also affected by the downward comparison manipulation. Older adults who were both relatively healthy and more experienced with ill health in close others were more likely to choose healthy snacks following the downward comparison.

The current work contributes to the literature in several important ways. First, the use of experimental methods (such as random assignment to conditions) is relatively unusual in the literature on older adults and preventative health. Research in this literature more commonly relies on longitudinal studies or correlational approaches where it is more difficult to prove cause-and-effect. Second, in much of aging research, age serves as a proxy for other, often unidentified, variables. We identify and measure variables that vary with age and that capture heterogeneity in experience in older adults, and we demonstrate their effects, independent of any other effects of age. Third, we examine the influence of individuals’ experiences with serious health issues in those close to them, a variable that is rarely examined beyond its impact on stress in individuals (as in research on life events). In contrast, in our research, this variable seems to have a buffering or desensitizing effect on individuals’ responses.

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# How Experience Similarity Shapes Product Evaluation

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## EXTENDED ABSTRACT

Consumers often have multiple experiences with the same product. An iPod provides musical accompaniment while walking the dog, flying on airplanes, and running on treadmills. A pair of sunglasses offers eye protection while running errands, commuting to work, and lounging at the beach. A handbag can be carried to the movies, the office, and the mall. Might the similarity of experiences consumers have with a product affect how much they like it? If someone recently bought an iPod, for example, would having relatively different experiences (e.g., walking the dog, flying on airplanes, and running on treadmills) or more similar experiences (e.g., walking the dog, walking to work, and walking to the grocery) with it make them evaluate it more positively?

Contrary to decades of research on consumers' need for variety and stimulation, we propose that perceiving product experiences as more similar – not more different – improves product evaluation. We argue that more similar experiences are categorized more broadly (Ülkümen, Chakravarti, and Morwitz 2010) and as a result, appear to occur more frequently (Redden 2008; Redden and Hoch 2009; Sussman and Alter 2012). Because usage frequency is key driver of product evaluation, we thus predict that perceiving product experiences as more (vs. less) similar will enhance product evaluation.

Four studies support this perspective. Study 1 (N=128) examines how having more or less similar product experiences impact product evaluation. We manipulated perceived experience similarity, holding the experiences constant, and measured the effect on product liking. Participants were randomly assigned to one of two conditions: similar versus different experiences. First, participants described a recent purchase and three experiences they had had with it. Second, after listing these experiences, we manipulated how similar those experiences seemed. In the similar [different] condition, participants described how their experiences were similar to [different from] one another. To measure product evaluation, participants rated on seven-point scales how much they liked their purchase and how happy it made them ( $r=.76$ ). We collected additional measures to rule out a potential alternative explanation due to differences in experience valence across conditions. Participants viewed each of the three experiences they had previously listed and rated how positive it was.

Results suggest that, compared to describing differences among their experiences with a recent purchase (5.76), describing similarities among those experiences enhanced participants' evaluation of the product (6.18). There were no differences in experience valence, either within or between conditions. Further, a follow-up study ruled out the possibility that this effect was driven by differences in feelings of cognitive ease across conditions (Schwarz 2004).

Study 2 tested our proposed process by (1) directly measuring perceived usage frequency and testing its mediating role in the effect, and (2) manipulating how broadly participants categorize their product experiences. If focusing on experience similarity impacts perceived usage frequency by promoting broader categorization of experiences, then encouraging Participants (N = 110) described a recent purchase and three experiences they had previously had with it. In the similar experiences condition, they were asked to describe experiences that were relatively similar. In the different experiences condition, they were asked to describe experiences that were relatively different. At this point participants were told the study was completed and thanked. Next, participants completed an ostensibly unrelated

categorization task which primed narrow vs. neutral categorization (adapted from Liberman, Sagristano, and Trope 2002). Finally, we asked participants to think back to the recent purchase they had previously described, and to indicate how much they liked it, how happy it made them, and how much they anticipated enjoying it in the future ( $\alpha=.86$ ). We also measured perceived usage frequency.

Results replicated study 1 in the neutral categorization condition: Compared to participants who listed different product experiences (5.55), those who listed similar experiences liked the product more (6.24). In the narrow categorization condition, however, there was no significant difference in product evaluation (5.85 vs. 6.26). A moderated mediation analysis indicated that the positive effect of more (vs. less) similar experiences on product liking was driven by increased usage frequency perceptions. This indirect effect was not significant, however, in the narrow categorization condition.

Study 3 examines the generalizability of our effects by examining whether active elaboration on (dis)similarities is necessary to obtain the observed effects, or if – consistent with our categorization account – simple similarity cues might suffice. Participants (N=106) read a vignette about a fellow student, Susan, who had recently bought a handbag. They were told that Susan had the following three experiences with her handbag: “running errands,” “picking up her kids from school,” “driving to a meeting.” We manipulated how similar these three experiences by labeling them as “similar vs. “different” (Etkin and Ratner 2013). Finally, we measured product evaluation and perceived usage frequency. As predicted, framing product experiences as more similar increased how much participants thought another person would like her recent purchase (6.23 vs. 5.70). This effect was mediated by assessments of how frequently the product would be used.

Our studies so far used controlled experiments to demonstrate the causal effect of experience similarity on perceived usage frequency and product evaluation. Study 4 investigates whether these relationships emerge naturally, when consumers reflect on past purchases in the absence of experimental interventions. Participants (N=68) described a recent purchase. We measured how much they liked the purchase, how similar their past experiences with it had been, and how many times a week they used it. As expected, the more participants thought their product experiences were similar, the more they liked what they bought. Further, this relationship was mediated by perceived usage frequency.

Our findings make two important theoretical contributions. First, whereas prior work on variety-seeking suggests that product variety often improves consumers' experiences (Ratner, Kahn, and Kahneman 1999), we demonstrate an important exception to this principle. Second, we illustrate a novel factor that shapes consumers' frequency judgments: the similarity of past experiences.

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# Behavioral versus Goal Modeling: When Exposure to Helping Models Decreases Helping

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## EXTENDED ABSTRACT

Imagine that the Red Cross is designing a new campaign to promote helping. For the purposes of this campaign, the organization considers recruiting a person that recently helped people in need. There are two potential candidates: 1) Justin Bieber, a Canadian pop musician who donated food supplies to a school, and 2) Ed Denst, a homeless man who donated money to a charity providing rental assistance. Which candidate would be more effective in promoting helping? We suspected that although both Bieber's and Denst's acts can be classified as prosocial, people might be more likely to help after being exposed to Ed Denst's example.

Literature on prosocial behavior has claimed that an individual might act prosocially either because of a genuine concern for another being's hardship or because that individual expects to attain a positive outcome for him or herself (Penner et al., 2005; Batson, Fultz, and Schoenrade 1987). In the example described above, while Ed Denst's behavior may be perceived unequivocally driven by altruistic goals, Justin Bieber's prosocial act may be interpreted as a self-serving behavior used to enhance his popularity. In the present work, we investigated whether the inferences about the benefactor's goals, in turn, influence the observer's willingness to behave prosocially.

According to behavioral modeling, simply observing a person engaging in helping behavior should enhance one's own tendency to engage in prosocial behavior (e.g., Bryan and Test 1967; Solomon and Grotta 1976). Research on mimicry also show that merely perceiving another's behavior increases the probability of engaging in that behavior oneself (e.g., Bargh, Chen, and Burrows 1996; Chartrand and Bargh 1999). Therefore, behavioral modeling and mimicking theory would predict that people will behave prosocially upon witnessing a prosocial act.

More recent research, however, reports that people do not merely observe behaviors but also tend to make spontaneous inferences about the goal underlying those behaviors (Hassin, Aarts, and Ferguson 2005). It has further been shown that people tend to adopt the goal that others are perceived to pursue, an effect which has been coined "goal contagion," (Aarts, Gollwitzer, and Hassin 2004; Aarts and Hassin 2005). Thus, although it has never been empirically tested, goal contagion theory would predict that observing a prosocial act is not sufficient in eliciting prosocial behavior; rather inferences about the goal underlying that act should influence the observer's behavior. According to goal contagion, if observers infer that altruism is the goal underlying another person's helping behavior, they should be likely to adopt that goal and act in a prosocial manner. On the contrary, if observers infer that satisfying self-interest is the goal underlying a helping behavior they should be likely to become less prosocial than if they did not observe any behavior. Therefore, behavioral modeling and goal contagion research make competing predictions with respect to observers' response to an actor's prosocial behavior when it is assumed to be driven by selfish goals. In the present research we empirically test for the first time these competing predictions.

In Study 1 we examined whether inferences about an actor's goal, rather than an actor's behavior, may influence the observer's behavior. Participants observed an actor's donation behavior but were previously exposed to information about the actor's dispositions described as altruistic (altruistic condition), individualistic (individualistic condition) or neither of the two (control condition). Subsequently, we

assessed participants' prosocial behavior towards an unknown other. Participants in the individualistic condition inferred that Richard was more individualistic compared to the other two conditions. In sharp contrast, participants in the altruistic condition inferred that Richard was more altruistic compared to the other two conditions. Further, participants in the individualistic condition were less prosocial relative to the other two conditions. A mediation analysis showed that altruistic and individualistic inferences mediated the observed effect of exposure to an individualistic goal on point allocation. This analysis provides support for a goal contagion account.

In Study 2 we examined whether individuals become more or less prosocial relative to a control condition in which no donation behavior is observed. This way we sought to show that observing a prosocial behavior enhances prosocial tendencies, among those who are exposed to a prosocial actor, and reduces prosocial tendencies, among those who are exposed to an individualistic actor, compared to not observing such behavior.

Furthermore, we sought to identify an important moderator of our effects. In specific, we hypothesized that goal contagion effects may be moderated by independent self-construal. Independent people are less likely to take the perspective of another person (Wu and Keysar 2007) and they also tend to prioritize their own goals and strive to preserve their personal identity while being unique from others (Markus and Kitayama 1991). Therefore, we predicted that highly independent individuals would not exhibit the goal contagion phenomenon, whereas individuals characterized by low level of independent self-construal would be susceptible to goal contagion.

Replicating previous findings, participants in the individualistic condition were less prosocial than participants in the other two conditions. Importantly, these effects were qualified by a significant two-way interaction between the experimental condition and the independent self-construal. In accordance with our predictions, we found significant goal contagion for those scoring low on independence. There was both a significant negative effect of individualistic model and a significant positive effect of altruistic model on prosocial behavior. These effects indicate that, for those scoring low on independence, exposure to an altruistic helping model increases prosocial behavior, while exposure to an individualistic helping model decreases prosocial behavior, compared to the control condition where no prosocial behavior is observed. The effects of the individualistic and altruistic models on prosocial behavior were not significant for those scoring high on independence.

Our findings may have important implications for charitable organizations. Charitable organizations often recruit models who display prosocial behavior to foster contributions to their causes. Our data suggest that using models to promote prosocial behavior may backfire when the model appears to be self-interested. Any ambiguity or skepticism about the underlying motivation of the model can have detrimental effects on potential donors' willingness to contribute.

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# Context Effects under Prominence

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## EXTENDED ABSTRACT

Changes in the decision context have consistently been shown to have an effect on consumer choice (e.g., Huber, Payne, and Puto 1982; Levav, Kivetz and Cho 2010; Simonson 1989; Simonson and Tversky 1992; Dhar and Simonson 2003). For instance, consumers are more likely to choose a brand when it becomes a dominating (Huber et al. 1982) or middle option (Simonson 1989) in a choice set. Traditionally, context effects have been assumed to be the consequence of high preference uncertainty, such as when the two attributes in a trade-off problem are equally important (Fischer, Luce, and Jia 2000; Simonson 1989). Therefore, introducing relational properties (e.g., a dominance or compromise relationship) between any of the options has been found to facilitate choice by providing a solution that minimizes the negative affect associated with the trade-off (Hedgcock and Rao 2009; Shafir, Simonson, and Tversky 1993). These well-documented context effects are thus predicated on uncertainty about how to trade-off the different attributes, and, by extension, which option to prefer.

Recent research, however, suggests that context effects may also arise when consumers face low uncertainty about how to trade-off the different attributes (Evangelidis and Levav 2013). Evangelidis and Levav (2013) report that, even when consumers afford greater weight to one attribute over the other in a trade-off (i.e., there is prominence), they are still influenced by changes in the consideration set. In this research, we expand our understanding about how changes in context affect choice when one attribute is more important than another (prominence).

We propose a sequential decision-making model where the structure of the choice set determines the probability that consumers will employ a particular decision criterion when solving a choice problem (Tversky, Sattath, and Slovic 1988; Fischer and Hawkins 1993; Evangelidis and Levav 2013). Based on this model, we propose that the probability that a consumer will use prominence (i.e., differences in attribute weights) when constructing his or her preference decreases as a function of introducing relational properties in the choice set. Relational properties can either be dominance or compromise relationships. This hypothesis implies that the choice share of the option favored by prominence (i.e., the option scoring higher on the prominent attribute) will be lower in the presence of relational properties relative to a control two-option set. One important assumption underlying this prediction is that prominence judgments are not affected by the presence or absence of relational properties. We assume that the relative importance of the two attributes does not change as a function of the choice set.

Our empirical section comprises five Studies. In the first two Studies we find support for our hypotheses when symmetric dominance relationships are introduced in the set. Participants were randomly assigned to one of two choice set conditions. In Study 1 we randomly assigned individuals to either a two-option set where they face a decision between two options that present a trade-off in two attributes one of which is more prominent than the other, or to a four-option set where a symmetrically dominating and a symmetrically dominated decoy were inserted. In Study 2 we randomly assigned individuals to either a two-option set where they face a decision between two options that present a trade-off or to a three-option set where only a symmetrically dominated decoy was added. We

measured participants' attribute importance weights along with choice. We show that while relative preference for the target options changes when dominance relationships are introduced in the set, relative attribute importance weights (i.e., prominence) remain largely unaffected. We further find that consumers are more likely to make a choice that is inconsistent with their attribute weights (i.e., prominence) when a symmetrically dominating (Study 1) or dominated alternative (Study 2) is introduced in the choice set. In our third Study we find support for our hypotheses when asymmetric dominance relationships are introduced in the set. We randomly assigned participants to one of three choice set conditions: one two-option set and two three-option sets where one of the two options asymmetrically dominated a decoy. We replicate findings of Studies 1 and 2. Participants in Study 3 were less likely to make a choice that was consistent with their attribute weights when an asymmetrically dominated decoy was added in the set. In Studies 4 and 5 we find support for our hypotheses when compromise relationships are introduced in the set. In Study 4 we analyzed hard drive sales rank data from Amazon.com. We find that differences in performance on the prominent attribute capacity are more likely to influence sales when there is no middle alternative relative to when such an option is present. In Study 5 we further replicated this effect in an experimental setting using two product choices (car and hard drive) and also confirmed that prominence judgments remain unaffected when additional options were introduced. Our work contributes to work on context-effects, decision-making strategies, and choice architecture.

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# Brand Logo Frames: How and When Framing Brand Logos Increases Purchase Likelihood

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## EXTENDED ABSTRACT

Research has demonstrated that design features such as the shape (Grohmann 2008; Hagtvedt 2011; Zhang, Feick, and Price 2006) and color (Labrecque and Milne 2011) of a logo influence brand perceptions. One design feature that has received little attention is the use of frames. Yet, a significant number of brands feature a frame surrounding their logo (e.g. Smucker's, Leap Frog). In fact, as of December 2013, 8.84% of American corporations listed on the New York Stock Exchange (NYSE) and classified as members of the consumer goods or service industries used a framed brand logo. Given their pervasiveness within the marketplace it is important to examine the effects of logo frames on consumer behavior. In this research we argue that logo frames can trigger either associations of protection or confinement.

A logo frame is a graphic representation of a psychological boundary. Much of the work on boundaries has examined how they can serve as organizational tools. Indeed, boundaries have been shown to provide a meaningful sense of where things belong (Burris and Branscombe 2005; Cutright 2012). When environments are perceived as disorganized and chaotic boundaries can be used to mitigate the experience of emotional discomfort (Belk, Seo, and Li 2007; Ger and Yenicioğlu 2004). Physical boundaries, however, have also been shown to generate feelings of confinement. In general, small and contained spaces may make people feel confined and restricted (Hall 1996) and this, in turn, influences the way in which stimuli are processed (Meyers-Levy and Zhu 2007) and the consumption choices people make (Levav and Zhu 2009).

Little research has examined how logo frames themselves influence consumer perceptions. In this paper, we hypothesize that a logo frame symbolizes a physical boundary such as a wall or fence. Physical boundaries simultaneously protect people inside of them, while isolating them from the outside world. We propose that a logo frame, like a physical boundary, may symbolize either protection or confinement and whether a logo frame is associated with protection or confinement will depend on perceptions of purchase risk. Safety is a fundamental need (Maslow 1943). When faced with high risk it is likely that a consumer's desire for risk mitigation (e.g., Cox and Rich 1964) makes the concept of protection relatively accessible. If purchase risk is low consumers do not need to concern themselves with risk reduction. Consequently, we hypothesize that when purchase risks are high (low) a frame's symbolic association with protection (confinement) will become relatively salient and increase (decrease) purchase intent.

In study 1 participants were presented an advertisement for a scented candle. The advertisement featured the brand's logo. We manipulated the presence or absence of a logo frame. In the frame-present condition a square frame was placed around the logo. In the frame-absent condition there was no frame. We also manipulated perceptions of risk. In the high-risk condition participants were told that the product was a final sale. In the low-risk condition participants were informed that the product carried a satisfaction guarantee and that consumers would receive a full refund if they were unsatisfied with their purchase. As predicted, in the high-risk conditions, participants were more willing to purchase the scented candle if the brand logo was framed ( $F(1, 127) = 4.78, p < .05$ ); in the low-risk condi-

tions, however, participants were less willing to purchase the scented candle if the brand logo was framed ( $F(1, 127) = 8.05, p < .01$ ).

Study 2 examined the effect of frame type. According to our theorization only certain logo frames will influence purchase intent, those that can signal protection and/or confinement. Incomplete logos do not signal either protection or confinement and therefore a logo featuring an incomplete frame should not influence purchase likelihood. Participants were shown an advertisement for a sports car. The advertisement featured the brand's logo. We manipulated the type of frame surrounding this logo. In the frame-absent condition the logo was not framed. In the regular-frame condition a square frame surrounded the logo (similar to the frame-present condition of study 1). In the incomplete-frame condition a square frame with dashed lines surrounded the logo. We also manipulated perceptions of risk. Participants were informed that these automobiles had been sold overseas for 25-years. In the high-risk condition, participants were told that two safety recalls had been issued. In the low-risk condition, participants were told that no safety recalls had ever been issued. As predicted, under high-risk conditions, participants were more willing to purchase the car if the brand logo featured a regular frame than if it was not framed ( $F(1, 203) = 4.83, p < .05$ ). There was no difference in terms of purchase intent between the frame-absent and incomplete-frame conditions ( $F(1, 203) = 1.00, NS$ ). Under low-risk conditions, participants were less willing to purchase the car if the brand logo featured a regular frame than if it was not framed ( $F(1, 203) = 3.48, p = .05$ ). There was no difference in terms of purchase intent between the frame-absent and incomplete-frame conditions ( $F < 1$ ). According to these results, a necessary condition for the interactive effect of purchase risk and logo framing on purchase intent is that the logo frame signal protection/confinement. In Study 3 we extended these findings by showing that the positive effect of brand logo frame on purchase intent under high risk is mediated by a reduction in perceived risk, whereas the negative effect of brand logo frame on purchase intent under low risk is mediated by an increase in perceptions of confinement.

We show that logo frames may either trigger an association of protection or an association of confinement. Furthermore, we demonstrate that which of these associations is relatively more accessible depends on purchase risk. High (low) purchase risk increases the accessibility of a logo frame's association with protection (confinement). This is the first research to systematically examine the influence of purchase risk on logo frame perceptions. Furthermore, it is the first research to demonstrate that logo frames can impact consumption intentions and the first to highlight how logo frames can negatively impact brand perceptions.

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# Labeling Exercise Fat-burning Increases Post-exercise Food Consumption in Self-imposed Exercisers

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## EXTENDED ABSTRACT

Individuals may compensate, or even overcompensate, for the energy spent during physical activity via higher post-exercise energy intake, but the reasons for this remain largely unknown (Schubert et al. 2013). Whilst physiological factors and the type and mode of exercise influence post-exercise energy intake (Blundell and King 1999), there is recent evidence that contextual and psychological factors are relevant too (Hall et al. 2012).

The study considers the label given to the exercise bout as one contextual factor that potentially influences post-exercise energy compensation. In particular, we consider the influence of labeling an exercise bout ‘fat-burning’ (compared with the same exercise bout without such name) on immediate post-exercise food intake.

## Conceptual Framework

The names of products and services trigger automatic associations in consumers and influence goal-directed behavior (Fitzsimons, Chartrand, and Fitzsimons 2008). This also applies to food; the names and labels of foods have been shown to influence food intake (Irmak, Vallen, and Robinson 2011; Koenigstorfer et al. 2013; Wansink and Chandon 2006). References to fat cannot only be found on food packages, but also on products and services in the exercise domain. For example, treadmills and bicycle ergometers offer ‘fat-burning programs’ and health and fitness clubs offer ‘fat-burning classes.’ The fat-burning label is typically used to describe low-to-moderate intensity exercise bouts.

We predict that labeling an exercise bout fat-burning will increase immediate post-exercise food consumption, because it makes the concept of fat burning salient and individuals believe that activated fat metabolism produces health benefits. However, there are reasons to assume that this labeling effect is influenced by the degree to which individuals self-impose physical activity in order to reach health and body appearance goals. Labeling exercise bouts fat-burning may increase food intake in individuals who exercise as a consequence of externally imposed self-regulation, because physical activity legitimizes rewarding activities from their perspective (Markland and Tobin 2004). In the context of this study, these individuals may perceive exercise in the fat-burning zone as a license to consume (Khan and Dhar 2006) and are thus more likely to compensate for the energy expended during exercise.

## Methods

A laboratory experiment was conducted to test our hypotheses. The study employed a one-factorial design with the label given to an exercise bout (fat-burning exercise vs. endurance exercise) as a between-subjects factor. Ninety-six participants were randomly assigned to either the fat-burning label condition or the endurance label condition. Participants were told that they would participate in a market research study to evaluate newly developed training software for bicycle ergometers. After participants had given informed consent for participation they were equipped with heart rate monitors, seated on the bicycle ergometer, and then they completed a twenty-minute low-to-moderate intensity bicycle ergometer ride. During the exercise bout, the label given to the bout was made salient via a poster displayed on the wall in front of participants and on the screen

of the bicycle ergometers. In the fat-burning label condition, the poster showed the following sentence: ‘fat-burning exercise – developing training software for exercise in the fat-burning zone.’ In the endurance label condition, the control condition, the poster showed the following statement: ‘endurance exercise – developing training software for exercise in the endurance zone.’ When the participants had finished the bicycle ergometer ride, they were told that they could help themselves to drinks and food whilst completing a survey. Water bottles and a bowl filled with *Snyder’s of Hanover Pretzel Pieces* were arranged so that participants were out of sight of the experimenter. Participants used a spoon to serve themselves pretzels in a smaller bowl (250 gram capacity) before seating themselves at a table. When they had finished the questionnaire, they were thanked for their participation and fully debriefed before they were released.

The amount of food eaten was measured using a balance (pre vs. post), subtracting any leftovers. The amount of food eaten (measured in grams) was used as the dependent variable in the following analyses. We captured the degree to which individuals self-impose physical activity via the following variables: behavioral regulation (Markland and Tobin 2004; Behavioral Regulation in Exercise Questionnaire; the lower the score, the more participants self-imposed physical activity) and subjective exercise experience, including psychological distress, fatigue, and positive well-being (McAuley and Courneya 1994; Subjective Exercise Experience Scale).

## Results and Contributions

The manipulation check showed that participants who exercised in the fat-burning label condition stated that they had burned a higher percentage of fat than participants who exercised in the endurance label condition even though neither exercise intensity nor duration differed between the groups. Moderated regression analyses were performed to assess the influence of the experimental manipulation on food intake. Food consumed (in grams) was the dependent variable, the experimental manipulation, behavioral regulation in exercise (mean-centered), and their interaction were modeled as independent variables. The analysis was repeated for the three measures of subjective exercise experience as dependent variables. The results showed that self-imposed exercisers – individuals with low behavioral regulation and high psychological distress, high fatigue levels, and low positive well-being when exercising – ate more food immediately after an exercise bout when the bout was labeled fat-burning exercise rather than endurance exercise. Labeling an exercise bout fat-burning (unexpectedly) reduced consumption in individuals with high behavioral regulation and in individuals who perceived physical activity as enjoyable rather than stressful. We did not find the reverse relationship in individuals with low fatigue levels.

The study is the first to show that the tendency to compensate for energy expended during physical activity depends on prime-inducing contextual factors (Werle, Wansink, and Payne 2011, 2014), in this instance the label given to the physical activity. Although high food consumption is not necessarily associated with negative health consequences, there is increasing evidence that individuals in developed countries struggle to maintain their energy balance, tending to consume more energy than they expend. In the long run, a positive

energy balance causes weight gain, and weight gain is associated with several health risks (Pedersen 2013).

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# Motivational Effects of Reminders on Accelerating or Delaying Task Competition

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## EXTENDED ABSTRACT

Research on prospective memory and implementation intentions advocates the use of reminders. Many papers show that without reminders as simple memory aids or more elaborate aids linking the future context with a behavior, such as implementation intentions, people fail to finish their plans. However, most work has been conducted with single tasks. Participants are asked to perform a task and the presence of reminders is manipulated. In real life, we juggle multiple tasks. Students report on average 15 ongoing projects (Little 1989). In our studies, participants also easily report 10 planned tasks such as academic (buy study materials), health (lose weight), interpersonal (call my parents) and recreational tasks (go out with friends). Surprisingly, the few papers that asked participants to deal with multiple tasks found no effects of reminders (3 papers).

We predict and show an interaction between reminders and propensity to plan on when people schedule tasks and on whether they complete them. Reminders help people high in propensity to plan to resume an interrupted task in the future and to maintain vigilance for opportunities to finish it. But they harm the execution of other tasks that demand immediate attention. On the contrary, reminders hurt those low on propensity to plan to resume an interrupted task and they decrease the urgency to start working on the task. But they also free up cognitive resources to be used for other tasks that require immediate attention.

People are motivated to finish what they have started. As a result, as they get close to finishing a task, the value of a unit of progress is quite motivating (Kivetz, Urminsky, and Zheng 2006). Yet, one of the most fundamental problems with planning is that people often do not complete their plans. This is because people often commit to more tasks than they can attend (Zauberman and Lynch 2005). People often think they will have spare of time in the future and say yes to future commitments, only to regret making those commitments at a later point in time (the “Yes...Damn!” effect, Zauberman and Lynch 2005). This illusion of time slack in the future causes consumers to procrastinate on tasks.

Our attentional system monitors information that is relevant to our current goals and leaves out of consideration information that is not relevant. This process of monitoring of relevant information for current goal pursuit is determined by our motivations and occurs automatically without the necessity of an explicit intention to attend to this information (Moskowitz 2002; Vogt, De Houwer, Moors, van Damme, and Crombez 2010). Unfulfilled tasks that one has to perform compete for attention. And highly accessible alternatives are more likely to be considered (Frederick, Novemsky, Wang, Dhar, and Nowlis 2009).

In our experimental paradigm, we asked participants to list ten tasks they intended to perform over the following week(s), manipulated whether participants were prompted to specify reminders or measured their use of reminders and measured their propensity to plan. Later we asked participants to schedule the tasks. The number of days from the experimental session that participants schedule tasks was used as our main dependent variable. We show that reminders interact with propensity to plan to affect when people schedule tasks. The presence of reminders included as a within or between-participants factor interacts with propensity to plan included as a continuous factor to predict when people schedule tasks and whether they complete them. Consumers high in propensity to plan are motivated

to schedule tasks sooner when they generate reminders than when they do not. This is because people high in propensity to plan elaborate more on how to execute tasks. Elaboration on tasks is associated with breaking larger tasks into subtasks, highlighting the need to get started. Tasks scheduled sooner are more likely to be completed, so reminders help these consumers complete the tasks. However, for consumers low on propensity to plan, generating reminders has exactly the opposite effect. Those low in propensity to plan are less prone to elaborate on tasks they plan to undertake; the tasks are at a more molar level that inspires less urgency. Generating a reminder can be a tool for self-delusion for consumers thinking at this molar level, who act as if writing a task down on a post-it note is sufficient to ensure that the task will be completed. Reminders cause these consumers to schedule tasks later than they would if they generated no reminders for the same tasks. Procrastinating the scheduled of these tasks leads to lower completion of the tasks, despite the greater time allowed for completion (cf. Ariely and Wertenbroch 2002).

Ideally, reminders would help people allocate cognitive resources optimally – to remember to complete consumer tasks in the future without disrupting focus on some new task undertaken after setting the reminder. The present research shows that reminders involve a trade-off. They help people high on propensity to plan to resume an interrupted task in the future and to maintain vigilance for opportunities to complete it. But they harm the execution of other tasks that demand immediate attention. Reminders hurt those low on propensity to plan to resume an interrupted task and they decrease the urgency to start working on the task. But they also free up cognitive resources to be used for other tasks that require immediate attention. Understanding the positive and negative effects of reminders is a necessary step towards developing optimal interventions that promote multiple task completion. Those interventions may try to reduce the negative effects of reminders in the pursuit of multiple goals for people high on propensity to plan as well as for people low on the scale. Those interventions may try to alleviate the cognitive load of setting reminders among those high on propensity to plan and inhibit the procrastination of tasks with reminders among those low on propensity to plan. Much remains to be examined about the effects of reminders in more naturalistic designs such as when people pursue of multiple goals.

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# The Dissociation between Consumers' Memory Predictions and Memory Performance

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## EXTENDED ABSTRACT

Forgetting to buy items at the supermarket is a problem for most consumers. Yet, only about half of consumers use shopping lists. We interviewed shoppers in two supermarkets in Colorado, and found that only 40% had written a shopping list. We also found that shoppers don't use lists because they think they will remember without one. However, shoppers' beliefs about their memory could be wrong. In specific situations, they may incorrectly predict that they will remember to buy what they need in the supermarket, not take appropriate actions to help them remember (use a shopping list) and end up forgetting.

We examine memory predictions and memory performance of consumers for items they needed to buy at the grocery store. We show that memory predictions fail to consider two key factors that influence memory (item familiarity and in-store exposure). Consumers are likely to forget unfamiliar items when focused on fast and efficient buying. Moreover, they don't anticipate they would forget in those situations and thus fail to use a much needed shopping list.

Memory depends on two sources of activation of items' representations: (a) Activation that is stable base-level (Anderson et al. 2004; Higgins 1996). For example, familiar items are chronically activated in memory, making them easier to access (Hall 1954). (b) Activation from exposure to items (Anderson et al. 2004). For example, shopping items can be retrieved when shoppers are exposed to items they need while performing an extensive search and visiting most aisles in the store (van Osselaer and Janiszewski 2012).

Memory predictions are highly influenced by the ease-of-retrieval. For example, when consumers figure out that they need to buy a certain product in the supermarket, they are likely to think they will remember to buy later in the supermarket. However, in-store memory is only sufficiently high when products are either chronically accessible or presented in the stimulus environment. As a result, consumers are more likely to forget unfamiliar items especially when scanning just a few categories in the store rather than when scanning many categories in the store. In addition, consumers do not use a shopping list when it is needed as they fail to anticipate when they are more likely to forget.

In study 1 and 2, participants had to remember 10 items. Right after participants were exposed to the items, they were asked to predict how many they would remember few minutes later. After a time interval, participants entered an online shopping task in study 1, and were asked to remember the products either in a recall task or a recognition task in study 2. In both studies we manipulated whether we asked participants to buy familiar or unfamiliar items. Moreover, to study the interactive effect of item characteristics and search strategy, in study 1 we measured how many categories people browsed in the online store (as a measure of narrow vs. broad search). In study 2, we mimicked memory vs. stimulus-based search strategies using the type of memory task (recall vs. recognition). As hypothesized, memory suffers when consumers shop for unfamiliar items and scan a few categories (in study 1) or in recall tasks (in study 2). Memory predictions do not anticipate this pattern. As a result, participants were overconfident in their memory for unfamiliar items when visiting few categories (in study 1) or in recall tasks (in study 2). In study 3, respondents were asked to answer questions about their grocery shopping behavior and hypothetical questions of how many of 10 items they would remember

to buy on a shopping trip as well as the likelihood of using a shopping list in that situation. We find that forgetting to buy is a problem for most of our respondents. In addition, memory predictions highly influence the decision to use a shopping list. The more items shoppers think they will forget, the more likely they are to use a shopping list.

The main goal of this paper is to explain the common experience of forgetting to buy and why consumers often fail to avoid it by the use of a shopping list. We disclose the situations in which consumers forget and fail to anticipate it. In-store memory depends on base-level and incoming activation of items. Memory needs chronic activation or recurrent exposure to the items. Without this, people are likely to forget. However, consumers fail to take into account those factors when predicting their memory. Consumers make flawed memory predictions because they ignore base-level activation from familiarity with items and incoming activation from exposure to the items that boost in-store memory performance. Identifying our misconceptions about memory is a first step towards remedying the problem of forgetting. Consumers forget when their memory predictions are wrong such that they mistakenly think they would not need a shopping list.

Although our empirical strategy centered on shopping for groceries, implications of our findings should extend to other tasks in which memory is crucial. For example, consumers need to remember to pay the bills, book a flight, save money, take medication, among other tasks. Our results should also have implications for non-consumer tasks. Memory mistakes can cause inconvenience, when people forget to call someone else, and tragedies, when babies are forgotten inside the car. People are more likely to forget when they are busy such that cues in the environment do not activate the task and when the task is unfamiliar such that it is not chronically activated in memory, even though people cannot predict their memory would be lower in those situations. This research shows not only the situations in which consumers are more likely to forget, but also to fail to anticipate they would so. Successful memory requires the use of memory aids (Intons-Peterson and Fournier 1986). When people are not accurate about how well they will remember, they cannot adequately prepare memory aids. Consumers might be better off erring on the side of caution and using a simple rule: Don't ask yourself if you'll remember. Just write a shopping list.

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# Pride and Prejudice – Promotion or Prevention?

## Investigating the Role of Domestic Country Biases in Consumers' Product Choices

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### EXTENDED ABSTRACT

Domestic country bias, or the bias in consumers product perceptions and buying intentions such that domestic products are preferred over foreign ones irrespective of their objective quality is well documented in the literature (Balabanis and Diamantopoulos 2004; Verlegh 2007). Two alternative socio-psychological traits of consumers are frequently employed to explain this effect, namely consumer ethnocentrism and national identification (Verlegh 2007). However, while the impact of both constructs on consumer behavior is widely researched (e.g., Josiassen 2011), the mechanism behind this effect is still not well understood. Furthermore, almost nothing is known so far with respect to how this bias can be reversed.

Shimp and Sharma's (1987, p. 280) consumer ethnocentrism construct is defined as "beliefs held by ... consumers about the appropriateness, indeed morality, of purchasing foreign-made products." Based on the broader concept of ethnocentrism, it is a unique form of ethnocentrism that captures only economic motives for in-group bias, such as fear that opting for foreign products threatens the domestic industry and causes unemployment (Verlegh 2007). National identification (Verlegh 2007) is an alternative motive for in-group bias. It indicates the extent to which people identify with and have a positive feeling of affiliation with their own nation (Feather 1981; Tajfel 1978). In contrast to consumer ethnocentrism, domestic country bias due to national identity thus should occur exclusively based on in-group love, and not out-group hate (Brewer 1999). Hence, although both concepts trigger a strong preference for domestic products, we expect the psychological process causing this bias to be substantially different.

We build on regulatory focus theory (Higgins 1997) to elaborate on these differences. According to this theory, people can either focus on the achievement of ideal situations and gains, or they can prioritize behaviors such as meeting their obligations (Higgins 1997). Whereas the first strategy is related to self-fulfillment and growth (i.e., promotion focus), the latter one rather comprises aspects like security and protection (i.e., prevention focus). Since consumers having a strong degree of national identification tend to purchase domestic due to an inner bond with their nation and reward themselves by showing their affiliation to a certain identity (Mackie and Smith 1998), we propose that for consumers identifying strongly with their nation, promotion focus might activate needs to utter their in-group love and thus amplifies domestic country bias. The opposite is expected to hold true for ethnocentric consumers. Since motivations such as meeting one's obligations or security are dominant (Sharma, Shimp, and Shin 1995), we propose that for consumers being in a prevention focus, their common belief wherein foreign products threaten the domestic economy becomes activated. This in turn should strengthen domestic country bias. We propose the following hypotheses:

*Hypothesis 1a: There is a positive relationship between consumers' national identification and their chronic promotion versus prevention focus*

*Hypothesis 1b: There is a negative relationship between consumers' ethnocentrism and their chronic promotion versus prevention focus.*

*Hypothesis 2: Consumers' activated regulatory focus will moderate the effect of national identification on domestic country bias. Whereas domestic country bias due to national identification is enhanced by promotion focus, it is mitigated by prevention focus.*

*Hypothesis 3: Consumers' activated regulatory focus will moderate the effect of consumer ethnocentrism on domestic country bias. Whereas domestic country bias due to consumer ethnocentrism is enhanced by prevention focus, it is mitigated by promotion focus.*

Study 1 (N=87) aims at testing H1 and was conducted online using a French convenience sample. As a filler task, we first asked participants to complete a brief survey seemingly dealing with their knowledge about certain product categories. We then measured their national identification, consumer ethnocentrism (Verlegh 2007), and chronic promotion focus (Haws, Dholakia, & Bearden 2010). Having built a difference score to evaluate their relative promotion focus, we found a positively (negatively) significant correlation between consumers' national identification (consumer ethnocentrism) and their relative promotion focus (H1, see Table).

In study 2, an experiment was set up to test H2 and H3. 100 respondents were recruited through a large representative online panel in Germany. Building on Crowe and Higgins (1997), we developed a manipulation for promotion versus prevention focus, respectively. Specifically, as part of a seemingly unrelated research project, we told them that they were taking part in a general knowledge test. They were either instructed to answer incorrectly as few questions as possible (i.e., manipulation of prevention focus), or they had to answer correctly as many questions as possible (i.e., manipulation of promotion focus). Participants then had to make choices between a less (more) typical domestic (foreign) alternative (German versus Italian tie). We then measured their national identification and consumer ethnocentrism. We found a negatively (positively) significant interaction between national identification (consumer ethnocentrism) and promotion prime. More importantly, spotlight analysis indicates that the simple slope for national identification on consumers' preference for the domestic product is significant in the promotion focus only, while the opposite holds true for ethnocentrism (H2 and H3, see Table).

Study 3 aims at testing whether the effects identified in study 2 also hold true in a more practical setting, with another product, and in another cultural context. We assigned 105 South Koreans recruited from a representative household panel to a real ad of the Swiss chocolate firm Lindt & Sprüngli but manipulated the advertising claim to trigger either a promotion or a prevention focus. We then asked them to indicate their willingness-to-pay (WTP) for the product. We identified a positively (negatively) significant interaction between national identification (consumer ethnocentrism) and promotion



versus prevention prime. More importantly, spotlight analysis indicates that the simple slope for national identification on consumers' WTP for the foreign chocolate is significant in the prevention focus only, while the opposite holds true for ethnocentrism (H2 and H3, see Table).

Overall, in three studies, we find strong evidence for the assumption that domestic country biases due to national identification and consumer ethnocentrism follow a distinct psychological pattern. Our findings also suggest that future research should take a more nuanced perspective of in-group bias depending on the socio-psychological trait under consideration and that approaches that do not clearly distinguish between the various forms of biases could be misleading. Finally, we provide clear recommendations for practitioners on how to nurture or mitigate domestic country bias due to national identification or consumer ethnocentrism.

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# Why Did You Betray Me, My Friend? When Selling Extended Warranty Backfires

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## EXTENDED ABSTRACT

Many brands sell extended warranties as add-on services to their customers to provide extra coverage on top of the base warranty. Since its sales often contribute more to firms' profits than the sales of the original products (Chen et al. 2009), such developments are not surprising. Despite the importance of extended warranties, knowledge about its consequences on the brand, however, is scarce at best. Prior research either took a descriptive perspective by examining which customer segments were particularly inclined to make extended warranty purchases (Chen et al. 2009) or exclusively focused on the positive signaling effects of bundling the base warranty with a product (Bearden and Shimp 1982; Shimp and Bearden 1982). In the latter, it is argued that such a strategy sends positive signals (Lutz 1989) because only high quality brands are able to provide it without extra charges (Boulding and Kirmani 1993). How do consumers react to the brand having been offered an extended warranty? The positive signaling literature suggests that brand trust would increase if a base warranty is bundled with the sales of the product. However, we expect brand trust to be shaken if firms intend to sell extended warranty separately.

Two potential mechanisms might be responsible for this detrimental effect. First, the mere mentioning of a warranty may remind consumers that there is a certain risk involved with the product (Grewal, Gotlieb and Marmorstein 1994). Alternatively, consumers may also interpret the sales of an extended warranty as an attempt to exploit them, thereby activating their innate betrayal aversion (e.g., Gershoff and Koehler 2011). Our research aims to examine the latter, while ruling out the former. Building on work from Grayson, Johnson, and Chen (2008), we make a distinction between generic concepts of trust and more specific concepts of trust such as brand trust and investigate their interactions. Broad-scope trust was found to be positively correlated with narrow-scope trust (Grayson, Johnson, and Chen 2008). This finding supported the institutionalists' view that broad-scope trust is a catalyst of narrow-scope trust (Bachmann 2004). If betrayal aversion is the mechanism, brand trust lowered by extended warranty offers should make consumers more suspicious in general and thus also decrease broad-scope trust. Similarly, lowered broad-scope trust should nurture the negative effect of selling extended warranties on narrow-scope trust. However, contrary to the predictions by the institutionalists, enhanced brand trust by bundling a lengthy warranty should not have an effect on general trust because it does not activate consumers' betrayal aversion. In a similar vein, enhanced broad-scope trust should not restore hampered brand trust after betrayal aversion has been activated.

We finally identify the relationship based on different norms (Aggarwal 2004; Clark and Mills 1993) between firms and consumers as a boundary condition. While relationships having a more intimate and interpersonal character (i.e., relationships built on communal norm) are expected to be highly susceptible to the negative effect of selling extended warranty on brand trust, relationships having a rather matter-of-fact character (i.e., relationships built on exchange norm) are expected to be relatively immune to the betrayal effect.

Participants in study 1 (N=50) were recruited from MTurk. They were asked to imagine that they were looking for a purchase of a new television. We provided them with product information and told them that they would be interested to purchase the latest model from a (hypothetical) brand. We manipulated the company's war-

ranty policy and assigned participants to one of three conditions: (1) warranty with five-year coverage, (2) control with regular one-year warranty, or (3) extended warranty offer by the company. The base warranty in (3) was the same as the one in (2). After the purchase of extended warranty, the scope and coverage of (1) and (3) were identical. Having raised some filler tasks, we asked participants to indicate their brand trust (Herbst et al. 2012). Confirming the assumptions behind the signaling literature, brand trust is enhanced if participants were shown the bundled warranty vs. the control condition. Most importantly, compared with control, brand trust, however, was shaken after an offer to purchase an extended warranty.

Participants in study 2 (N=54) were recruited from MTurk. Different from study 1, participants were told that they were to take part in two seemingly unrelated studies. Having answered the first part of the study, we directed them to a trust game (Berg et al. 1996). We asked them to imagine that they had been given \$10 and that they were able to send none, some, or all of it to an anonymous person whom they will never meet. On the way to this person, the amount would be tripled and the other person could decide on how much money she would send back to the participant. Contrast analysis reveals a spillover effect of lowered narrow-scope trust on lowered broad-scope trust but no positive spillover of enhanced narrow-scope trust. Participants were both willing to send the highest amount of money to the other person and expected the other person to send the highest amount of money back to them if they were offered to purchase an extended warranty in the seemingly unrelated study.

Study 3 (N=50) was conducted online with students from a European business school. Prior to the main study, we implemented a seemingly unrelated study to manipulate their broad-scope trust. They either had to elaborate on a situation they could trust somebody or on a situation they felt betrayed. A control condition in which they had to write a story based on a few pictures with neutral contents was added. In the main study, all participants saw condition (3) in study 1 in which they were exposed to an extended warranty offer. As hypothesized, we found brand trust to be lowest if participants had been previously exposed to the betrayal prime but not significantly higher in the trust prime versus the control condition.

Results from studies 2 and 3 together support the betrayal aversion explanation. Whereas both lowered narrow- and lowered broad-scope trust spilled over, enhanced trust did not. Alternatively, as pointed out above, having reminded participants that there is a nonzero chance of the product to break down provides another possibility to trigger the effect. However, without invoking the concept of betrayal, it cannot explain results in studies 2 and 3.

Study 4 (N=94) was conducted in the experimental lab of an Asian business school and employed a 2 (extended warranty offer: present vs. absent)  $\times$  2 (relationship norm: communal vs. exchange) between-subjects design. Participants were either offered to purchase an extended warranty or they were assigned to a control condition only mentioning the regular warranty. As a second factor, we manipulated the relationship norm between the firm and the consumer (Aggarwal 2004). Our results reveal a significant interaction between both factors on brand trust. Whereas the extended warranty offer hurts brand trust in communal relationships, the contrast is non-significant in the exchange relationship condition.

Overall, our research captures another tension between short-term value appropriation and long-term value creation (Mizik and

Jacobson 2003). It further identifies that consumers are vulnerable to the activation of betrayal aversion which is responsible for the negative effect of selling extended warranties on brand trust. Building on relationship norm theory, the findings highlight that trying to establish long-term relationships with consumers by means of communal norms (Aggarwal and Larrick 2012; Fournier 1998) eventually backfires if firms simultaneously intend to profit from the sales of extended warranties.

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# Save Dessert for Last?

## The Effect of Food Presentation Order on Food Choice and Caloric Intake

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### EXTENDED ABSTRACT

Consumers are often faced with the situation of sequentially combining a meal from an array of healthy and indulgent food options (e.g., all-you-can-eat buffet restaurants and school). In this research, we ask whether a simple change in the order of food presentation—dessert first or dessert last—can substantially alter downstream food choice and caloric intake. Building on the literatures of order effects and self-regulation, we propose that in long food sequences, a healthy (indulgent) food item at the beginning rather than the end of the sequence will lead consumers to balance their first choice and subsequently choose higher (lower) calorie dishes and consume more (less). Our reasoning is that, due to a primacy effect, the first item presented in a sequence will influence subsequent choices. Specifically, consumers attempt to resolve the goal conflict that arises from the first item by pursuing a competing goal in their remaining subsequent choices.

In Study 1, we developed an intervention in a real cafeteria to test whether positioning a healthy or an indulgent dessert at either the beginning or the end of the food lineup affected the choice of main and side dish (light or heavy), and overall caloric intake. Consistent with our prediction, we found that 67% of participants selected the lighter main dish when an indulgent dessert was positioned first compared to 36% when a healthy dessert was positioned first ( $p < .05$ ), and 70% of participants chose the lighter side dish in the indulgent dessert first condition, compared to 39% of participants in the healthy dessert first condition. In addition, participants consumed significantly fewer calories when an indulgent dessert was positioned first ( $M = 581$ ) than when a healthy dessert was positioned first ( $M = 829$ ;  $p < .001$ ).

Study 2 was conducted to replicate the findings of Study 1 in an on-line decision making context and to explore the moderating role of cognitive resources. Because primacy effects are reduced when an individual's memories are occupied (Biswas, Biswas, and Chatterjee 2009), we expected that participants under cognitive load would be less likely to balance their food choices and caloric intake on the basis of the first item. Study 2 had a 2 cognitive load (low, high) x 2 dessert presentation order (first, last) x 2 dessert type (healthy, indulgent) between-subjects design. We set up a virtual cafeteria in a web environment that presented foods in sequence. We asked participants to select food items to build their meal and to indicate how much of each they would eat. Before participants began selecting their foods, we asked participants to memorize a seven-digit number (high cognitive load) or a two-digit number (low cognitive load) following a previously established cognitive load manipulation (Shiv and Fedorikhin 1999). Under low cognitive load more participants selected the lighter main dish (77% versus 51%), the lighter side dish (65% versus 34%), and consumed fewer calories ( $M_{\text{Indulgent}} = 737$  versus  $M_{\text{Healthy}} = 916$ ) compared to the healthy dessert first condition ( $ps < .05$ ). However, under high cognitive load conditions, there were no significant differences in main dish choice, side dish choice, or consumption between the indulgent dessert first condition and the healthy dessert first condition ( $ps < .10$ ).

In order to garner process evidence we used the “two randomized experiments strategy” (Stone-Romero and Rosopa 2011). Because indulgences can evoke feelings of guilt (Kivetz and Simonson

2002), and healthy items can signal consistency towards a healthiness goal (Fishbach and Dhar 2005) evoking feelings of deservingness, we hypothesized that guilt and deservingness explain the effect of dessert presentation order and dessert type on reward/restraint. In turn restraint/reward responses lead consumers to eat fewer/more calories.

In Study 3a, we tested the first link between order of presentation [first, last] and dessert type [healthy, indulgent] and the proposed mediator (restraint/reward). We used a 2 dessert presentation order (first, last) x 2 dessert type (healthy, indulgent) between-subjects design and a similar procedure to the one used in Study 2, except that right after participants selected the first item in the sequence, they were prompted to choose between a zero-calorie (restraint) and a high-calorie (reward) drink and to rate how much they had restraint or rewarded themselves in their choice of drink. They also rated how guilty (PANAS-X; Watson and Clark 1999) and deserving they felt (Mick and Faure 1998). Significantly more participants chose the rewarding drink when the healthy dessert was presented first (51%), than when the indulgent dessert was presented first (16%). Participants who saw the indulgent dessert first restrained more ( $M = -31.05$ ) than did participants who saw the healthy dessert first ( $M = 18.43$ ;  $p < .001$ ). A bootstrapping analysis showed that guilt and deservingness significantly mediated the effect of dessert presentation order and dessert type on restraint/reward.

In Study 3b, we tested the second link between mediator (restraint/reward) and dependent variable (total calories consumed). Participants were assigned to read a scenario that described the positive or negative consequences of food restraint or reward. After reading the scenario, participants chose a snack (chocolate bar or granola bar) and indicated what percentage of their chosen snack they would eat. Participants in the “reward” conditions had a significantly higher caloric intake ( $M = 151$ ) than participants in the “restraint” conditions ( $M = 116$ ;  $p < .01$ ).

Experiments 3a and 3b show that a healthy dessert presented first in a sequence causes consumers to feel a sense of deservingness, which in turn leads consumers to seek reward and consequently eat more calories. On the other hand, an indulgent dessert at the beginning of a food sequence leads consumers to feel guilty, which in turn leads consumers to restrain themselves by eating fewer calories.

The results suggest a simple environmental intervention that can be used to help consumers choose healthier food items and consume less.

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# The Adaptiveness of Unconscious Brand-Attribute Associations

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## EXTENDED ABSTRACT

Our product preferences and choices are often unconsciously influenced (e.g., Chartrand, 2005). One way seems to be through brand-attribute associations that have been formed unconsciously (Galli & Gorn, 2011), for example as a result of advertising showing brief, rapidly changing information to an audience uninterested in processing the information in depth. This research investigates properties of brand-attribute associations formed unconsciously. Specifically, it investigates if changes in the valence of an attribute have repercussions on the evaluation of a brand if the latter has been associated with the former unconsciously.

Prior research has shown that reevaluating an object influences evaluations of other objects that are *consciously* associated with it (e.g., Sweldens, van Osselaer, & Janiszewski, 2010). However, whether this effect would occur for unconscious associations has not been previously investigated. This is the main question we address. We also explore if the effects of reevaluating an attribute that is associated with a brand unconsciously are contingent on the context in which the attribute is reevaluated. Prior research has studied this for consciously associated attributes, and its findings suggest that the effect of reevaluating an attribute on evaluations of a consciously associated object depends indeed on the context in which the attribute reevaluation took place (Gawronski, Rydell, Vervliet, and De Houwer, 2010).

Increasing evidence now seems to support the view that the unconscious is flexible, adaptive, and sophisticated (e.g., see Bargh & Morsella, 2008, for a review), with one author recently arguing that any fundamental cognitive function that can be performed consciously can also be performed unconsciously (see Hassin, 2013). If so, the effects of unconscious associations should be similar to the effects of conscious associations observed in previous research. Based on this we expect that when an attribute gets reevaluated, its changed valence carries over to evaluations of an unconsciously associated brand, *except* when the attribute's reevaluation is specific to a given context and the brand evaluation context mismatches it (Gawronski et al., 2010).

Our first two experiments (1a, 1b) tested whether the reevaluation of an attribute influences unconsciously associated brand evaluations, and our second two experiments (2a, 2b) explored the context-dependency of unconscious evaluations. Because of space constraints, we describe only experiment 1b in detail, and discuss very briefly the results of the other three.

Undergraduates ( $N = 107$ ) were randomly assigned to conditions of a 2 (article: Hunan virus vs. fuel prices)  $\times$  2 (attribute association: X-ray/scan vs. neutral) experimental design, with the second variable manipulated within-subjects. Participants completed two ostensibly unrelated tasks. The first, supposedly about visual memory, constituted a subliminal conditioning procedure. In each trial, a string of "++++" for 600 ms was followed by a Chinese word for 1500 milliseconds. Unbeknownst to participants, on target trials a neutral Chinese ideograph flashed very rapidly (26 ms) before the words "X-ray" and "scan," and another neutral Chinese ideograph flashed very rapidly (26 ms) before unrelated neutral words such as "stone," "drawer," etc.

The second task was supposedly a marketing research project for a potential new express-mail company. Participants read a short

news article about an issue faced by express-mail companies, followed by questions. In the *Hunan virus* condition, the article mentioned that the Hunan virus was being spread through postal mail, including express mail. Although invisible to the naked eye, the virus could easily be detected with adequate screening devices; therefore, postal and courier services should scan or X-ray each and every package. The article thus attached positive meaning to the words "X-ray" and "scan," explicitly linking them to mail companies. The *fuel prices* article featured as a control discussed how oil prices had been rising rapidly over the previous six months; it did not change the valence of the words "X-ray" and "scan" (it did not mention them at all).

Participants then evaluated two brand names, "I Express-mail Company" and "G Express-mail Company" (in Chinese), using three semantic differential items (-3 to +3; negative/positive, unfavorable/favorable, and I dislike it/I like it). Finally, awareness of the ideographs during the conditioning procedure was assessed by having participants go through 20 trials of the conditioning task again and reporting, on each trial, whether they saw something on the screen in addition to the words and the "++++."

The three attitudinal items were summed for each brand ( $\alpha = .90$ ), and the overall attitude toward "I" (paired with neutral words) was subtracted from the overall attitude toward "G" (paired with X-ray/scan). A one-way ANOVA on these difference scores indicated a significant effect of article ( $F(1, 102) = 6.30, p = .01$ ). The (ideograph) brand paired with X-ray/scan was evaluated less favorably than the (ideograph) brand paired with neutral words in the fuel prices article condition ( $M_{diff} = -1.16$ ), but this pattern was reversed in the Hunan virus article condition ( $M_{diff} = .38$ ).

Experiments 1a and 1b both showed that changes in the valence of attributes associated with a brand influence brand evaluations even when the association is unconscious. Experiments 2a and 2b suggested that this effect is context-dependent: Both the context in which the attribute's valence changes and the context in which the brand is evaluated seem to matter. When they matched, brand evaluations incorporated the attribute's revised valence, but when they mismatched, brand evaluations reflected the attribute's original valence (Experiment 2a). Interestingly, when it was not possible to tell whether the change in attribute valence applied to the brand, people unconsciously seemed to assume that it did (Experiment 2b).

By using a subliminal procedure combined with strict awareness checks, this research provides evidence for an associative learning system that can operate outside awareness, an important result theoretically speaking because the existence of such a system is still often disputed, following repeated failures to establish evaluative conditioning effects without conscious contingency awareness (Mitchell, De Houwer, and Lovibond, 2009). It suggests that what happens at the level of conscious processing might just be the proverbial "tip of the iceberg." Considering the potentially worrisome implications of unconscious influences of advertising (Biegler & Vargas, 2013), future research in this area is certainly called for. [1000 words.]

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# How Does Power Distance Belief Affect Status Consumption?

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## EXTENDED ABSTRACT

Status consumption, the tendency of consumers to purchase products for the social prestige that they confer to their owners, is an important consumer phenomenon (Berger and Ward 2010; Eastman, Goldsmith, and Flynn 1999). Despite previous research has identified status concern (Loch, Huberman, and Stout 2000; Veblen 1899), benefits of displaying status (Hopkins and Kornienko 2004), evolutionary advantages (Wang and Griskevicius 2013), and compensating self-view threaten (Rucker and Galinsky 2008) as some of the most important reasons for status consumption, limited research has considered the potentially influential role of cultural orientation.

The current research explicitly focuses on how consumer's cultural orientation regarding power distance belief (PDB, consumers' acceptance of power disparity in social interactions, Hofstede 1984) affects status consumption. More specifically, we propose that the effect of PDB on status consumption is dependent on the presence versus absence of superior's consumption information, and this interaction effect is mediated by need for propriety (NFP, individual's concerns regarding the appropriateness or properness of her/his behavior, Clark et al. 2007).

The limited research on the effect of PDB on consumer behavior suggests two opposite conclusions regarding the possible effect of PDB on status consumption. On one hand, some research found high PDB consumers are more likely to pursue status consumption, given they are more status conscious (Kim and Zhang 2011; Torelli et al. 2012). On the other hand, another stream of research suggests it is low PDB consumers who are more likely to pursue status consumption (Hofstede 2001; Kirkman et al. 2009; Yang, Mossholder, and Peng 2007). We propose the presence/absence of superior's consumption information is the key factor to reconcile these conflicting findings.

When superior's consumption information is present, it creates an interaction between the consumers and their superior. Given high PDB consumers' respect for social hierarchy, they tend to avoid bypassing their superior in status and lower the status implications of their behaviors (Hofstede 2001). In other words, they are concerned about the properness of their behavior to make sure it doesn't challenge the existing hierarchy (Lian et al. 2012). In contrast, given low PDB consumers' strong belief in equality, they tend to make sure that their status is not lower than their superior's status (Hofstede 2001). In other words, low PDB consumers tend to care less about properness of their behavior in this situation. Instead, they tend to engage in behaviors to make sure they are of higher status than they actually are (Yang et al. 2007). Thus, we propose when superior's consumption is present, low (vs. high) PDB consumers are more likely to pursue status consumption.

However, when superior's consumption is absent, high PDB consumers are not bypassing any superiors in pursuing status, so it is not improper for them to consume status products anymore. Combining it with their strong status conscious (Kim and Zhang 2011), we expect high PDB consumers to prefer status consumption. In contrast, for low PDB consumers, the absence of superior's consumption means no threat to their equality belief. As a matter of fact, in this situation, they might be concerned with whether their behavior is proper, given they are motivated by seeking equality and avoiding symbolizing higher status, which might cause status disparity (Ja-

vidan et al. 2006). Thus, we propose when superior's consumption is absent, high (vs. low) PDB consumers are more likely to pursue status consumption.

In addition, we propose that concern regarding properness of behavior is the mediator underlying the effect. Following Clark et al. (2007), we define this concern as NFP, referring to individual's concerns regarding the appropriateness or properness of her/his behavior.

Seven studies were conducted to test the theorizing. More specifically, study 1A was a 2 (PDB: high vs. low) x 4 (other's consumption information: superior's vs. colleague's vs. subordinate's vs. none) between-subjects experiment, in which we considered all possibilities for superior's consumption absent condition. The results indicated that when superior's consumption was present, high PDB consumers are more likely to pursue status consumption. In contrast, in the three superior's consumption absent conditions, low PDB consumers are more likely to pursue status consumption. In studies 1B and 1C, we replicated the findings by using different samples, manipulation for superior's consumption, and dependent measures. Study 1D further replicated the findings in a field setting in China.

Study 2 was a 2 (PDB: high vs. low) x 2 (superior's consumption: present vs. absent) between-subjects experiment. We measured NFP (Clark et al. 2007) to test its mediating role. The results from the bootstrapping mediation analysis supported NFP as the mediator. At the same time, we ruled out alternative explanations such as self-monitoring and subjective-norm. Study 3 adopted the moderation-of-process method to further test the mediation. It was a 2 (PDB: high vs. low) x 2 (superior's consumption: present vs. absent) x 2 (NFP: manipulated vs. control) between-subjects experiment. As expected, we replicated the two-way interaction between PDB and superior's consumption under the control condition, whereas this interaction effect was attenuated under the NFP manipulated condition.

Study 4 was a 2 (PDB: high vs. low) x 2 (superior's consumption: present vs. absent) x 2 (following behind: probed vs. control) between-subjects experiment, in which we manipulated consumer's following behind motivation as a proxy to NFP (Anderson et al. 2012). As expected, we replicated the parallel three-way interaction effect in study 3.

Through this research, we make significant contributions to the literature. First, we reconciled the seemingly conflicting findings regarding the effect of PDB on status consumption. Second, we identified NFP as a new motivation for status consumption. Third, we suggest that consumers sometimes might actively avoid status-enhancing behavior, which is counterintuitive to the belief that humans always prefer higher status.

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# Vertical and Horizontal Individualism as Determinants of Materialism within and across Cultures

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## EXTENDED ABSTRACT

Materialism is an enduring belief that a person's identity is tied to their material possessions. Richins and Dawson (1992) conceptualize materialism along three dimensions: centrality (things are important to me), happiness (things make me happy), and success (things confer success). A common expectation is that highly individualistic people are more materialistic due to a substitution of goods for social relationships as self-identifiers (Clarke and Micken, 2002; Wong, 1997;); although the support is mixed (Ger and Belk, 1996, 1999; Eastman et al., 1997; Wong, Rindfleisch and Burroughs 2003). We incorporate the vertical-horizontal distinction, which focuses on how much people perceive there to be a strong status hierarchy (e.g., Singelis et al., 1995; Triandis and Gelfand, 1998; Shavitt et al. 2006) to provide further insight into the drivers of materialism.

We expect vertical individualism (VI) to be positively and horizontal individualism (HI) to be negatively related to materialism-success (M-s). People with a VI orientation believe society is strongly hierarchical and that status is achieved through individual success, goods can be used as a signal of success and hence VI should be positively correlated with M-s values (H1). Conversely, people with a HI orientation have an "aversion to conspicuously successful persons and to braggarts, emphasizing instead the virtues of modesty" (Shavitt et al., 2006, p. 326), given the potential for excess consumption to appear immodest, HI should be negatively correlated with M-s values (H2). The values literature which finds that VI is positively, and HI negatively, related to achievement and power values (Oishi et al., 1998). However, since both the VI and HI orientations value hedonism, we expect both VI and HI to be positively related to materialism-happiness (M-h; H3).

We expect the influence of the individual's personal level of VI on materialism will be moderated by the level of VI in their cultural context; a strong VI culture level will lead all members toward higher materialism, due to the influence of social norms on materialism (Ahuvia and Wong, 2002). Whereas people who reside in a low VI culture, but still personally ascribe to a strong VI orientation, should have a closer relationship between their personal VI level and their materialism (H4).

Data was collected from online panels of young adult (age 18-29) in seven countries with diverse cultural orientations. The countries were selected to have at least one country higher on each of the four cultural dimensions (the USA (VI), the UK (VI), Australia (HI), Germany (VI), Brazil (HC), China (VC) and South Korea (VC)). The questionnaire was developed in English and translated into Mandarin, German, Portuguese, and Korean by bilingual translators living in the target countries; then back translated into English by a second translator (Brislin, 1970). Materialism was measured by Richins and Dawson's (1992) 18-item scale. The cultural orientations were measured by Triandis and Gelfand's (1998) 16-item scale.

The materialism-centrality dimension was dropped for sharing too much variance with M-s. Removal of one item each gave the M-s and M-h subscales good model fit (Success:  $\chi^2_{25} = 10.11$ ,  $p = 0.07$ ; CFI = 0.99; RMSEA = 0.06; Happiness:  $\chi^2_{22} = 3.76$ ,  $p = .15$ ; CFI = 1; RMSEA = 0.06) with reliabilities >0.80 and AVEs >0.70. The subscales' metric invariance was assessed by examining the  $\chi^2_{diff}$  between an unconstrained model and a model in which the measure-

ment weights were constrained equal across all of the countries. Measurement invariance was achieved for the subscales (Success:  $\chi^2_{diff3} = 11.33$ ,  $p = 0.01$ ; Happiness:  $\chi^2_{diff3} = 5.07$ ,  $p = 0.17$ ).

Minor modifications of the VH/IC scale led to a good fit (VI:  $\chi^2_{21} = 1.84$ ,  $p = 0.17$ ; CFI = 0.99; RMSEA = 0.06; HI:  $\chi^2_{21} = 0.30$ ,  $p = 0.59$ ; CFI = 1; RMSEA < 0.01; and VC:  $\chi^2_{21} = 0.02$ ,  $p = 0.90$ ; CFI = 1; RMSEA < 0.01). The reliabilities were acceptable (ranging from 0.73 for VI to 0.87 for VC) and the AVEs suggested convergent validity (ranging from 0.49 for VI to 0.68 for VC). The shared variance was less than the lowest AVE score, supporting discriminant validity. Partial metric invariance was achieved for each subscale (HI:  $\chi^2_{diff3} = 5.33$ ,  $p = 0.15$ ; VI:  $\chi^2_{diff3} = 1.93$ ,  $p = 0.59$ ; VC:  $\chi^2_{diff3} = 4.21$ ,  $p = 0.24$ ; HC:  $\chi^2_{diff3} = 6.50$ ,  $p = 0.37$ ).

The following hierarchical model examines the hypothesized relationships:

$$\text{Multilevel: } \text{MAT}_{ij} = g00 + g01\text{MEANVI}_{ij} + g10(\text{VI}_{ij} - \text{MEANVI}_{ij}) + g20(\text{HI}_{ij} - \text{MEANHI}_{ij}) + g11\text{MEANVI}_{ij}(\text{VI}_{ij} - \text{MEANVI}_{ij}) + m0j + m1j(\text{VI}_{ij} - \text{MEANVI}_{ij}) + r_{ij}.$$

$i$  indicates individuals;  $j$  indicates groups; MAT represents a person's Materialism and VI and HI represent a person's vertical and horizontal individualism, respectively. MEANVI represents a country cohort's mean vertical individualism.

H1 is supported; the higher a person's VI, the higher the degree of M-s ( $g10 = 0.65$  ( $p < 0.001$ )). H2 is also supported; the higher a person's HI the lower the degree of M-s ( $g20 = -0.05$  ( $p < 0.01$ )). In addition, both VI and HI are positively related to M-h (H3, VI  $g20 = 0.48$ ,  $p < 0.001$ ; HI  $g20 = 0.16$ ,  $p < 0.001$ ). Consistent with H1, the degree of country-level VI had a positive effect on M-s ( $g01 = 0.79$ , and to a lesser extent on M-h ( $g01 = 0.61$ ). The interaction, H4, is also supported; the positive effect VI had on M-s was weaker in cultures with higher VI norms ( $g11 = -0.12$ ,  $p < 0.05$ ). VI explains 89% (72%) of the explainable variation in country-level mean M-s (M-h). At the individual level, VI and HI explain 35% (23%) of the within-country cohorts explainable variation in M-s (M-h). Additional analyses showed that Collectivist orientations showed no significant relationship with materialism.

Across seven diverse countries, VI and HI have contrasting effects on M-s and consistent positive effects on M-h. Demonstrating the importance of distinguishing between types of individualism that differ between countries such as Australia (HI) and America (VI). For example, an ad campaign directed at M-h would need limited modification, whereas a M-s ad would need to be modified to suit the cultural differences.

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# How 'Benefit Distribution' Influences Consumer Goal Perseverance in Loyalty Programs

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## EXTENDED ABSTRACT

This research demonstrates that altering the distribution of benefits accrued as a function of progress toward a consumer loyalty program goal influences goal perseverance and attitudes toward the offering firm. *Benefit distribution* is proposed as the degree to which receipt of benefits is coupled with the goal end state. That is, benefit distribution determines the extent to which benefits are disbursed as a function of progress toward the end state of a loyalty goal, versus solely attached to that end state. Although such practices of separating end state-related and progress-related rewards are widespread (e.g., My Starbucks Rewards offers redeemable vouchers prior to gold status), the resulting impact upon loyalty program effectiveness is not well understood. In addition to explicating the effects of benefit distribution, we identify two underlying psychological mechanisms, with broad implications for goal theory in the loyalty domain and beyond. In particular, this work contributes to research examining the relationship between consumer goal pursuit and improved loyalty program outcomes (e.g., Bagchi and Li 2011; Drèze and Nunes 2011; Kivetz, Urminsky, and Zheng 2006; Nunes and Drèze 2006), goal progress effects (e.g., Louro, Pieters and Zeelenberg 2007), and waste aversion (e.g., Bolton and Alba 2012).

Benefit distribution is *all-or-nothing* when benefits are disbursed only upon achieving the end state, whereas benefit distribution becomes *cumulative* as benefits are disbursed as a function of progress independent from that end state. What are the implications of an all-or-nothing versus cumulative benefit distribution for consumer engagement in loyalty programs? As shown in a series of field and laboratory studies, benefit distribution alters the influence of goal progress upon goal perseverance and attitudes toward the offering firm. Specifically, when benefit distribution is all-or-nothing, goal perseverance and attitudes improve as goal progress increases, but this effect is mitigated by the presence of cumulative benefits. Two underlying psychological processes account for this pattern; i) aversion to wasting resource investments (e.g. time and effort) that become salient with progress and ii) perceptions of marginal value associated with further progress.

Five studies tested and found support for the preceding propositions. Study 1 was a field study conducted to evaluate whether pursuit of a loyalty program goal providing an all-or-nothing versus cumulative benefit distribution increased program completion rates. New members received a loyalty card with the goal of attending 12 times in one month. Benefit distribution was manipulated to be either all-or-nothing (12 stamps to receive \$30 membership credit) or cumulative (\$2.50 membership credit per stamp up to \$30). Results indicated that consumers in the all-or-nothing (vs. cumulative) condition attended more often, and were more likely to persevere to achieve the goal of 12 visits. Study 2 was a loyalty program simulation conducted in a controlled laboratory environment to examine the relationship between benefit distribution and goal progress in determining goal perseverance. In a 2 (benefit distribution: all-or-nothing/ cumulative) x 2 (goal progress: low/high) between subjects design, participants were given the option to adopt a goal to win a real raffle prize through earning 10 tickets. In the all-or-nothing condition, ten raffle tickets were received upon completing the 10<sup>th</sup> task, whereas in the cumulative condition a ticket was rewarded after each task. In the low (high) progress conditions, a difficult target task was presented after 2 (8 tasks). For an all-or-nothing distribution, prog-

ress increased perseverance (e.g., time spent on the difficult task), but the effect of progress was mitigated for a cumulative distribution.

Studies 3—4 examined the underlying roles of aversion to wasting resource investments and marginal value perceptions. Study 3 employed a 2 (benefit distribution: all-or-nothing/ cumulative) x 2 (goal progress: low/high) between subjects design. Participants read a scenario in which they had accumulated (2/8) stamps out of 10 on a coffee loyalty card. In the all-or-nothing condition, 10 stamps provided a free coffee, in the cumulative condition, each stamp provided a 10% discount. Participants indicated goal perseverance intentions, in addition to perceptions of invested resources (e.g., effort and time) and marginal value of further progress. Results were consistent with study 2, such that for an all-or-nothing distribution, progress increased perseverance. In contrast and as expected, this effect was mitigated for a cumulative benefit distribution. A bootstrap analysis (Zhao, Lynch, and Chen 2010) indicated that the effect of progress upon perseverance was mediated by both the salience of invested resources and perceptions of marginal value for an all-or-nothing distribution, and that these pathways were mitigated for a cumulative distribution. Study 4 examined the implications of hybrid benefit distributions (which provide both all-or-nothing and cumulative benefits) upon perseverance and underlying processes. The results indicated that the addition of cumulative benefits to all-or-nothing benefits serves to attenuate the salience of invested resources, thereby also mitigating overall goal perseverance. This effect emerged even when such cumulative benefits were purely incremental. Finally, study 5 examined the impact of benefit distribution upon attitudes toward the firm, while demonstrating that individual differences in waste aversion moderate the impact of benefit distribution. A 3 (benefit distribution: all-or-nothing/cumulative/hybrid) x 2 (goal progress: low/high) between subjects design was employed. The pattern of results for goal perseverance replicated previous studies. However, an all-or-nothing distribution had the adverse effect of undermining consumer attitudes toward the firm during initial stages of goal pursuit, which only improved to reach parity with cumulative and hybrid distributions. As such, whereas all-or-nothing goals may improve perseverance and program completion, their application does risk harming attitudes toward the firm. Furthermore, individuals high (low) in waste aversion demonstrated an amplified (mitigated) effect of progress upon perseverance and attitudes. Taken together, these findings provide theoretical contributions to loyalty research, goal theory, and related areas.

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# The Boundary Role of the Type of Revenge Behaviors: a Longitudinal and an Experimental Approach

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## EXTENDED ABSTRACT

The intra-personal function of revenge — diminishing the avenger's internal negative emotions (Gollwitzer 2009) — has received mixed support. On the one hand, there is a popular adage that says “revenge is sweet.” Despite its costs, customers could see value in revenge because it provides them with an emotional satisfaction that compensates in part for their objective loss (Bechwati and Morrin 2003). On the other hand, confirming Walter Weckler's statement that “revenge has no more quenching effect on emotions than salted water has on thirst,” several studies in social psychology have found that although people initially believe that revenge would make them feel better, they actually feel worse after enacting revenge (Carlsmith, Wilson, and Gilbert 2008; Yoshimura 2007) but in at least some instances, revenge has hedonic consequences that are precisely opposite to those that people expect. Three studies showed that: (a.

Pointing out these inconclusive findings, this study investigates which logic prevails after initial revenge behaviors (RBs): the quenching (sweet revenge) or the amplifying (salted water) effect? We assert the evolution of desire for revenge depends on the form of RB, direct or indirect, that is enacted against the firm. *Direct* RBs (i.e., *marketplace aggression* and *vindictive complaining*) (Grégoire, Laufer, and Tripp 2010) against a firm diminish customers' future desire for revenge (i.e., H1), because they create the impression that the firm has received what it deserves (Gollwitzer and Bushman 2012) and customers have reached their revenge-related goals (Gollwitzer and Denzler 2009). Here, a *desire for revenge* is defined as a felt urge to punish a firm because of what it has done (Grégoire and Fisher 2006). In this instance, revenge becomes “sweet.”

However, *indirect* RBs (i.e., spreading *negative word-of-mouth* (Grégoire et al. 2010) and *complaining to third party for legal resources* - as a customer's effort to use online resources to get access to legal expertise and advice) have the opposite effect; they amplify future desire for revenge (i.e., H2), resembling the metaphor of salted water. Indirect RBs neither offer the opportunity to achieve the typical outcomes associated with direct RBs, nor provide a chance to settle the score with a firm. Therefore, customers experience an increasing desire for revenge. Reconciling these two rival explanations constitutes the key contribution of this research.

Two studies, one longitudinal and one scenario-based experiment, were employed to test the hypotheses.

## Study 1

Participants in the study were real online complainers on two third-party websites. The study consisted of four series of questionnaires sent to participants every two weeks. RBs were measured at time one, and customers' desire for revenge was repeatedly measured in times one to four. Overall, 166 respondents (56.0% female,  $M_{age} = 46.46$ ,  $SD = 12.58$ ) completed all waves of questionnaires. We tested H1 and H2 by examining the effects of customers' initial RBs at time one on their subsequent desire for revenge at times one, two, three and four. Therefore, an individual growth modeling approach was selected to explore the data. More precisely, we used mixed linear models fitted with the MIXED procedure in SAS (table 1). To il-

lustrate the results, the levels of desire for revenge were plotted by substituting the low and high values ( $M \pm 1 SD$ ) of each RB in the equation, for each time period (Figure 1).

Confirming H1, the interaction effects of direct RBs with time are significant (Marketplace aggression:  $\beta_{Marketplace Aggression \times Time} = -.16$ ,  $p < .05$ ; Vindictive complaining:  $\beta_{Vindictive Complaining \times Time} = -.11$ ,  $p < .01$ ), meaning that desire for revenge of customers in high-marketplace aggression and high-vindictive complaining groups decreases more rapidly compared to that of low-marketplace aggression and low-vindictive complaining customers (Figures 1a and 1b).

We tested H2 by examining the interaction effects of indirect RBs with time in models three and four. Both terms failed to achieve significance (Negative WOM:  $p = .83$ ; Complaining to third party for legal resources:  $p = .98$ ), implying that the decay in desire for revenge is the same for both — high and low — indirect RBs groups (figures 1c and 1d). Although the results do not fully support H2 as initially stated, they imply that indirect RBs lead to a sustained higher desire for revenge over time ( $\beta_{Negative WOM} = .27$ ,  $p < .001$ ;  $\beta_{complaining to third party for legal resources} = .17$ ,  $p < .01$ ) (Figures 1c and 1d).

## Study 2

Study 2 was designed to replicate the findings of study 1 using a scenario-based experiment where the participant were randomly assigned to different RB conditions, hence controlling for individual differences. Since, cross-sectional approach captures data in one shot; we speculate that customers who engage in *direct* RBs feel less desire for revenge compared to those who engage in *indirect* RBs (i.e., H3). The experimental approach made it also possible to hypothesize customers who do not engage in RBs feel less desire for revenge compared to those who engage in RBs (i.e., H4). The scenario described a service failure that happened in a truck rental firm. The truck was reserved in advance for moving but the firm changed the pick-up location to a distant new location in the very last minute. Stuck in this situation, 171 participants (i.e., MTurk workers) read one of five scenarios (i.e., four RBs and control group).

Due to non-normality, a series of Mann-Whitney tests were performed to tests H3 and H4 (table 2). Supporting H3, consumers who engaged in direct RBs ( $M_{Marketplace Aggression} = 4.27$  and  $M_{Vindictive Complaining} = 4.27$ ) experienced significantly less desire for revenge compared to those who engaged in indirect RBs ( $M_{Negative WOM} = 5.02$  and  $M_{3rd party complaining} = 5.00$ ). To test H4, control group was tested against all RBs groups ( $M_{Control} = 3.86$ ). Supporting H4, participants in control group had significantly less desire for revenge compared to those in indirect RBs groups. However, in contrast to H4, the participants in control group did not experience significantly less desire for revenge from those in direct RBs groups.

Overall, this study suggests an approach to reconcile two seemingly opposite schools of thought. In a word, it proposes that future desire for revenge is dependent on the way one enacts revenge. According to our study those customers who do not engage in RBs at all, or engage in direct RBs experience a weaker desire for revenge compared to those who engage in indirect RBs.

Our research is limited by predicting future desire for revenge from past behaviors. Future work should also take into account personality traits (e.g., revengefulness), among factors affecting one's future desire for revenge.

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# Revisiting Symbolic Visual Communication

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## EXTENDED ABSTRACT

Theories of visual rhetoric have been welcomed as a promising framework for understanding how visual communication works in advertising (McQuarrie and Mick 1999; Scott 1994). However, visual rhetoric has not yet provided a systematic understanding of how visual persuasion operates. One of the assumptions which might inhibit the further development of theories of visual rhetoric is the argument that images do not imitate reality (Scott 1994). The main limitation in the argument against resemblance is that it locates the source of the problem in the nature of the relationship between a sign and its object. The main drawback, however, in past research might not have been the misidentification of the form of this relationship, but the belief that interpretation should be limited to the recognition of the visual objects. That is, imitation was seen as the main purpose of visual representation. Within symbolic theory, advertising images are not seen as mimetic artefacts, but as purposefully crafted messages of a symbolic language that represent by convention in a similar vein to letters and words. Convention is seen as dictating both the relationship between sign and object, as well as to the relationship between sign and interpretation. Images have to be learned and do not necessarily bear any resemblance to the object or concept they convey (Scott 1994). This symbolic approach was trying to challenge the view that images are mere copies of reality. In challenging this view, however, the symbolic approach might have “hyper-corrected” the problem -the icon/symbol distinction might have been wrongly rejected because images form a continuum of cases ranging from icons to symbols (Larsen 2008). Symbolic theory essentially might have replicated the mistake of resemblance theory by extending a type of relationship (i.e. resemblance) between a sign and an object to the relationship between sign and interpreter (i.e. imitation). Our study focuses on the relationship between object and interpreter -what we consider to be the most neglected part of visual representation.

Our argument is that resemblance between visual signs and reality is essential for leveraging consumers’ experiences when they interpret pictorial metaphors in ads. We see no real difficulty in assuming a representation system where visual content can influence signification by pointing to real objects and experiences. Based on this theoretical perspective, we examine the ability of visuals to argue at varying levels of strength by pointing to objects in the physical world. Visual Claim Strength (VCS) is structured based on a framework derived from the categorisation of natural objects (Rosch et al., 1976). We further argue that the relationship between the *reader* and the *object* is informing metaphoricity in visual communication. Peirce’s (1931-58.247) basic idea was that signification is not simply about dyadic relationships between signs and objects, but about triadic relationships that involve an interpreting mind (interpreter). We revisit symbolic visual communication by introducing the concepts of experiential comparability and conceptual distance. In particular, we define metaphoricity (claim figurativeness) in terms of a. the conceptual distance between the two domains compared in a visual metaphor (e.g., armchair vs. a life insurance) and b. the extent to which the attribute is comparable (e.g., physical comfort of an armchair vs. psychological comfort of a life insurance).

The findings of three experiments suggest that individuals incorporate their knowledge of the physical world into their interpretation of ad images. Study 1 and 2 reveal that visuals can argue at varying levels of strength by iconically representing objects that have well defined properties in the real world. VCS had a significant and controllable impact on product attribute beliefs. Specifically, as the strength of visual claim increased so the persuasive impact of the ad increased up to a point of diminishing returns. Study 2 and 3 further suggested that figurative claims elicit more positive attitudes towards the ad and provoke greater elaboration than literal claims. Study 3 further reveals that it is conceptual distance (Gkiouzepas and Hogg 2011; McCabe 1983) that drives attitude and elaboration effects and isomorphism (experiential equivalence of comparison) that drives persuasion effects.

In sum, our study suggests that in a visual metaphor, readers deal with specific instances rather than with general categories, which makes the envisioning of visual communication as a system that consists exclusively of conventionally learned signs difficult to argue for. Issues of similarity, in particular, have long concerned metaphor research, but they have not attracted much attention in consumer research. Similarly, attribute equivalence points to a rich area of investigation. We strongly argue that visual communication research, as well as theories of visual rhetoric, can only benefit from a reconciliation of the symbolic/iconic distinction. We hope our paper moves researchers a little further in that direction.

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# The Changes of Meanings over Life Stages: Caftans as Expression of Moroccan Women's Identities

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## EXTENDED ABSTRACT

Authors in consumer research have shown that meanings are malleable and may change over time (McCracken 1986). However, little is known on how product meanings are likely to evolve in the course of consumer's lifetimes. We try to fill such gap while exploring the different meanings that Moroccan women ascribe to their traditional dress at different life stages.

Product meanings are visible at three levels: public, private and relational meanings (Nugyen and Belk 2013). Public meanings are those assigned to objects by non-owners of the objects. They have various significances (Richins 1994). Some are stable over time, while others are dynamic (Eckhardt and Houston 2008; Richins 1994). Private meanings are those assigned to objects by the owner of the objects. Relational meanings are those cocreated by consumers who aim to strengthen their interpersonal or intergroup relationships.

We conducted a qualitative investigation in order to understand how meanings are likely to change over distinct life stages. We located our research in the Moroccan context because Moroccan women's verbal expression and behaviors are strictly constrained. Moroccan women are not expected to talk in public (Sadiqi 2003). Therefore, we thought that product meanings would help women in communicating with others.

We chose to study the consumption of Moroccan traditional dresses, the caftans, because of the fame, the time and the cost associated with caftans. Nowhere is the limitation of female verbal exchanges more obvious than in Moroccan weddings. In such contexts, most of female guests privilege observation to speech and one of their common activities consists in a critical observation of caftans.

The consumption of caftan is embedded in a male biased society (Mernissi 1975, 2010), which is based on the family (Sadiqi 2003). In the Moroccan context, most women have a weak, indirect, invisible power but their socially attributed responsibility is remarkable. In the collective imagination, the image and reputation of a family resides in its female members' behaviors.

We interviewed 20 female informants in Casablanca, Morocco. Interviews were complemented with recordings of human experience in natural settings. One of the authors participated to three Moroccan weddings over a period of six months. The two authors analyzed the data first separately and then together. Iteration was made to form, revise, and develop understandings of the entire data set (Miles and Huberman 1994).

Our analysis of caftan consumption reveals that product meanings are used to express distinct identities over a lifetime and to communicate within and between subgroups. Our findings suggest three types of meanings attached to three distinct life stages. We found that (1) meanings related to individual identity are prevalent in the discourse of single young women, (2) meanings related to family identity are prevalent among married women who don't have single daughters and (3) meanings related to the collective identity of Moroccan women are prevalent in the discourse of old women.

First, our findings suggest that single young women to be married use caftan to express their individual identity. They use caftans as one of the scarce means for female individual expression that are not prohibited by Moroccan social conventions. Moreover, caftans contribute to the delicate task of finding a husband. However, young women don't aim to communicate with men. They intend to attract

the attention of mothers of young men. They use their caftans to communicate with potential mothers in-law rather than with potential mates.

Second, our findings suggest that married women use caftans to express their family in-law identity. In the Moroccan collective imagination, married women are expected to reflect favorably the identity of their family in-law and old women have the duty to supervise the behaviors of younger female family members. Therefore, Moroccan women invest in time and efforts to choose a caftan, and try to conform to the expectations of their mothers-in-law. Married women, thus, ascribe relational meanings to their caftan in order to strengthen their relationships with their mothers-in-law. Besides, they ascribe other types of meanings to express positively the identity of their family in-law. We define such meanings as distinctive meanings.

Third, our findings suggest that old women use caftans to express the Moroccan women collective identity. While wearing caftan in wedding ceremonies, they play their socially attributed role of guardians of the traditions (Sadiqi 2003).

Our work suggests three contributions. First, our findings extend the body of knowledge on product meanings while showing that meanings are likely to vary along different stages of consumers' lives. Second, our findings suggest an additional level of product meaning. Distinctive meanings are likely to be created at the group level in order to foster one's group image and/or compete with other groups. Third, our findings extend prior research on the meanings of consumption and intra gender relationships. We demonstrate that women may use product meanings to attract the attention of potential mates' mothers.

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# Co-Creating Value through Balancing a Collaboration-Competition Duality

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## EXTENDED ABSTRACT

The phenomenon of co-creation challenges traditional marketing thought on value creation. Unlike traditional views that adopt a firm-centric approach delineating the acts of producing and consuming, co-creation focuses on the co-occurrence of production and consumption among firms and consumers (Prahalad and Ramaswamy 2004; Ritzer and Jurgenson 2010; Tapscott and Williams 2006; Vargo and Lusch 2004). Co-creation appears in the marketing literature under a variety of often contrasting narratives. In one narrative, co-creation stems from a harmonious relationship in which consumers are willful partners with firms (Prahalad and Ramaswamy 2004; Vargo and Lusch 2004). Other narratives present co-creation as an exploitive relationship (Cova and Dallı 2009), or one in which the consumer holds the majority of control (Fisher and Smith 2011).

Although co-creation often involves consumer communities (e.g., Threadless, Lego Mindstorm, Linux), only a few articles discuss the role of community and its embedded variety of relationships integral in value creation (e.g., Cova and Pace 2006; Schau, Muñiz, and Arnould 2009). While empowering customers is one way through which co-creation can be a successful strategy (Fuchs, Prandelli & Schreier 2010), current literature tends to focus on co-creation as occurring between a firm and an individual consumer and value co-creation is typically examined from the firm's perspective, giving little attention to consumers' activities that are conducive to value co-creation (Fisher and Smith 2011; Saarijärvi 2012; Storbaccka et al. 2010). Ultimately, co-creation appears to be a complex phenomenon that would benefit from richer insights into its intricacies.

To study the intricacies of co-creation in a community, we bring to bear a lens of collaboration-competition duality. Our lens finds its basis in literature on intergroup collaboration and competition as a strategy for innovation enhancement (Baer et al. 2010; Hutter et al. 2011; Peters and Waterman 1988). The literature on collaboration and competition in organizational workplaces also serves to inform the integration of competition into our lens. For example, companies widely use internal competition as a management strategy to spark creativity for product and service innovation (Peters and Waterman 1988). Using competition as a strategy to stimulate creativity stems from the idea that the challenges associated with competition can serve as a positive force within a group (Amabile 1988). The notion of a collaboration-competition duality also emerges in literature regarding community-based innovation contests suggesting that in these contests, elements of competition and collaboration merge to improve innovativeness (Baer et al. 2010; Bullinger et al. 2010; Ebner, Leimeister, and Krcmar 2009; Hutter et al. 2011).

We undertake a phenomenological study of a successful co-creation community, Threadless, with more than 1.8 million global members. Threadless operates by members submitting artwork designs to a competition for print on a variety of goods. The Threadless community consists of members who submit designs, members who vote on submissions, consumers who purchase Threadless products, and Threadless employees. In this research, we focus primarily on those who create designs without whom there would be no commercial offering.

Through our lens, we elucidate the intricacies of value co-creation in this co-creation community by means of a netnography (Kozinets 2002) and depth interviews with members of the community (McCracken 1988). These approaches allow us to focus on

the variety of experiences and relationships inherent in co-creation and offer a unique context and opportunity to build on Schau et al.'s (2009) insights on the co-creation of value in communities in that its business model relies entirely on its community.

Three themes characterizing value co-creation emerge from the netnography and interviews: members of this community collaborate to compete and compete to collaborate, value co-creation flourishes through balancing the collaboration-competition duality, and the meaning of value flows in sympathy with the balancing of the collaborative-competitive tensions.

Members of this co-creation community collaborate to compete and compete to collaborate. Within the community there appear to be either intentional or unintentional conditions that propel competition and collaboration, ultimately allowing co-creation to thrive. Collaborative activities enhance members' ability to compete and competitive activities encourage collaboration. We find that members derive and co-create value through the variety of these collaborative and competitive activities; however, we highlight that the inherent tension emerging from the opposing nature between the collaborative and competitive activities of the duality propels value co-creation. For example, through collaborating and competing, members improve their design skills, which further both the competitiveness and the caliber of the competition within the community. We focus on the tension emerging between collaborative and competitive activities as a mechanism for successful value co-creation, thus extending our understanding of this phenomenon.

Members work with the collaborative-competitive duality to achieve a balance that ultimately maintains favorable levels of tension for successful co-creation. While the collaborative and competitive activities propel value co-creation, the balancing of tensions from these activities establishes an environment in which co-creation can flourish. For example, collaborating in order to learn how to compete is the priority for members as represented by the plethora of collaborative posts discussing how to compete more effectively. In our observations, the shifting and maintaining of the balance appears to be ongoing and is very much reflective of the fluid meanings that members ascribe to value in this co-creation community. This finding extends the notion of harmony in co-creation to highlight that harmony also includes the balancing of the tension in the collaboration-competition duality.

The meanings that members ascribe to value, in our observations, appear to flow in concert with how the community balances these tensions. Our informants' narratives highlight that value co-creation continuously evolves throughout their entire engagement. For example, upon the first successful print, many members shift their meaning of value from a competitive focus to more collaborative activities, such as counseling others on how to create a successful design. This observation, that meanings of value flow sympathetically with the balancing of collaborative-competitive tensions, provides a rich foundation for future work on the co-creation phenomenon.

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# The Impact of Early Life Experiences on Young Adults' Compulsive Buying Tendencies

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## EXTENDED ABSTRACT

While there has been a long-standing interest in understanding the development and consequences of compulsive consumer behaviors, there is still limited knowledge regarding the onset and the processes that characterize their development (e.g., Ridgway, Kukar-Kinney, and Monroe 2008). Previous attempts have mainly relied on stress theory to explain the development of such maladaptive behaviors (e.g., Rindfleish, Burroughs, and Denton 1997), neglecting additional theoretical perspectives that may offer alternative explanations (e.g., Hill, Yeung, and Duncan 2001).

The study of compulsive buying in contexts that are heavily afflicted by easy credit, such as Greece, appears to be timely and essential. The life course paradigm, which has been rapidly diffused across countries and disciplines (Mortimer and Shanahan 2003), might fill gaps in previous research efforts that have focused on theoretical and substantive time- and context-related consumer issues pertaining to the development of compulsive behaviors (Moschis 2007). It has been used to study similar phenomena of maladaptive behavior, such as the impulse-control disorders of binge-eating and binge-drinking, and would be appropriate for studying yet another form of maladaptive behavior - i.e., compulsive buying. By adopting the life course paradigm, this study examines the impact of various conditions in an adolescent's environment that contribute to the onset and development of compulsive proclivities in later life.

The life course paradigm merges diverse theoretical perspectives from various fields of social and behavioral sciences (Moschis 2007). These different viewpoints are complimentary when explaining the impact of early life experiences on consumer behavior (Mortimer and Shanahan 2003). The life course conceptual framework includes: (a) life events encountered at a certain point in time, (b) processes prompted by these events, and (c) outcomes that take place at future times as a result of previously-encountered events and processes within contexts in which the person is embedded during a certain period of time (Moschis 2007). Critical life events affect an individual's consumer behavior directly and indirectly, as the individual responds and adapts to new life conditions. This adaptation entails the processes of stress and coping, socialization, and development or decline in mental resources, which are viewed as the underlying change mechanisms of the three most widely-accepted life course perspectives: the stress perspective, the normative perspective, and the human capital perspective. These perspectives serve as bases for deriving the hypotheses of this study.

The study used a sample of 285 undergraduate Greek students from four Greek universities. Nearly half (49.5%) of the participants were female and the ages of the group ranged from 18 to 28 (average age = 22.87, SD = 2.58 years). Students were approached during classes but filled out the anonymous questionnaire that was subjected to back translation prior to administering. They were directed to submit the completed questionnaires to a secure place assuring confidentiality. All measures used were based on similar studies reported in the relevant literature. For each construct the recommended .70 threshold level was adopted to determine internal consistency (CR)

and the benchmark of .50 for AVE to gauge convergent validity. Overall, the results indicate that the measures possess good internal reliability and validity.

To test the hypothesized model, we first conducted a confirmatory factor analysis (CFA) to establish the validity of the measurement model. For all multi-item reflective measures we specified first-order factors with uncorrelated errors. We then examined the full structural equation model (SEM) with covariates (i.e., age, gender, and social desirability) to assess the impact of the structural paths on fit. All models were analyzed using the maximum likelihood estimation method in Mplus 6. Overall model fit was assessed by CFI, TLI, RMSEA, and SRMR.

Contrary to previous studies, which assumed a direct effect of family disruptions on compulsive buying and stress as a developmental mechanism (e.g., Rindfleisch et al. 1997), our study findings suggests that such effects may be indirect, operating through social processes. The study findings contribute to compulsive behavior research in several ways. First, by employing the life course paradigm we surpass the limitations inherent in many previous time-specific studies that exclude the role and value of prior life experiences and earlier family interactions. Second, unlike previous studies that tend to rely on a single theoretical perspective, our study draws together diverse theoretical perspectives from several disciplines, including psychology, sociology, and consumer behavior theories (Moschis 2007). Third, by tying-in previous findings with ours, we further contribute to an explanation for the reasons and conditions that may cause some young adults to be more vulnerable to compulsive buying than others. Our findings provide additional insights into the impact of family disruptions, peer groups and family communications on the development of young adults' compulsive buying tendencies. While the inclusion of such additional factors has been suggested by prior studies (e.g., Rindfleisch et al. 1997), the absence of a relevant theoretical framework may have hampered their investigation.

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# In the Mood for Doing Good? How Affective States and Benefit Types Influence Consumers' Decision Making with Regards to Sustainable Products

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## EXTENDED ABSTRACT:

Resource-intensive lifestyles in industrialized countries are closely linked to adverse ecological and societal outcomes; and a shift to more sustainable consumption patterns has been suggested as potential remedy. Sustainable products can either be presented as entailing a self-benefit appeal (the main beneficiary is oneself) or an other-benefit appeal (the main beneficiary is someone else) (Fisher, et. al. 2008). If consumers are to be motivated to buy sustainable products, which appeal type is more likely to stimulate a positive decision? Furthermore, how does the decision between appeal types depend on the affective state of consumers? After all, extant research has shown that altruistic decisions, i.e. helping others, can improve individual's moods.

This paper reports the results of two laboratory experiments in which mood is manipulated by means of autobiographical recall and appeal type by means of different product descriptions (focusing either on "doing something good for oneself" vs. "helping others"). The 2 (mood: happy vs. sad) x 2 (appeal type: self vs. other) between-subject design is first used to test individuals' decisions between a Fair Trade (FT – other-benefit appeal) and an organic (self-benefit appeal) smoothie; and in consequence between two description of a coffee (which combines both attributes but particularly stresses either self- or other-benefit). In both experiments, respondents' WtB is measured as well as their WtP (for a 250ml smoothie bottle and a 500g coffee bag respectively) and results are ambiguous: in the case of the smoothie, a happy affective state significantly increases both WtB and WtP if an other-centered benefit is promoted. In the case of the coffee, a sad affective state and a self-benefit appeal sig-

nificantly increase consumers' decision to buy the product, but when it comes to their WtP, the other-benefit yields significantly higher euro amounts. In conclusion it seems as if business or non-profits interested in consumers' willingness to pay a premium should opt for messages entailing a negative affective appeal.

Subsequently, a two-week long field experiment is conducted in a campus café (selling a self-roasted coffee blend which is both organic and FT certified) and affective state is manipulated by means of music. Consumers are randomly assigned to either the control condition (no specific question), the other-condition (question whether they prefer house blend or FT coffee) or the self-benefit condition (question whether they want house blend or organic coffee). While mood has a slight but non-significant influence on decision-making, presenting the coffee as Fair Trade led to significantly more choices than if presented as organic. This is particularly true for days with sad music, providing support of the Negative State Relief Model (Cialdini et al. 1987).

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# Can Persuasion Knowledge Change Preferred Persuasion Based on Self-Construal?

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## EXTENDED ABSTRACT

### Introduction

People generally prefer a persuasive message that matches with one's self view. For example, people tend to have favorable attitudes when advertising appeals match their self-construal (a compatible effect; e.g., Han & Shavitt, 1994). In particular, people with an interdependent self-construal favor interpersonally focused ads (e.g., focus on family), whereas people with an independent self-construal favor individually focused ads (e.g., focus on uniqueness). However, when people consider the message in more detail or use their persuasion knowledge, the effect of favoring a matched message may change. In other words, when people have sufficient cognitive resources, they may question the meaning behind the persuasive message (i.e. persuasion knowledge; Friestad & Wright, 1994) instead of using their intuition to make judgments. The current research aims to explore the influence of cognitive capacity and persuasion knowledge on how consumers with different self-construals respond to various persuasion attempts and form their attitudes in an interpersonal context where a direct interaction between consumers and sales agents occurs.

The activation of persuasion knowledge (i.e. a consumers' knowledge of sales agents or sales tactics developed in the marketplace; Friestad & Wright, 1994) is closely related to cognitive resources (Campbell & Kirmani 2000; Williams, Fitzsimons, & Block, 2004). When cognitive capacity is constrained, consumers' persuasion knowledge is less likely to be activated (Campbell & Kirmani, 2000) so a compatible effect is expected to show for both interdependent and independent self-construal due to the preference of messages which match with self view (Briley & Aaker, 2006).

However when cognitive capacity is sufficient, persuasion knowledge can be activated. In this case, the effect of matching persuasive messages with self-construal may disappear. Instead the mismatched persuasive message may create a positive effect depending on the salience of one's self-construal where an interdependent self-construal is sensitive to contextual details and an independent self-construal pays attention to dispositional information (Nisbett et al., 2001). An interdependent self-construal leads to a focus on contextual details which may make the processing less (or more) fluent based on whether the incoming message is incongruent (or congruent) with one's self view (Macrae, Milne, & Bodenhausen, 1994). As ease of processing demands less cognitive resources (Reber, Wurtz, & Zimmermann, 2004), the processing of individually (versus interpersonally) focused persuasion attempts will demand more (versus less) cognitive resources for an interdependent self-construal. Therefore, persuasion knowledge is less (versus more) likely to be activated and, in turn, the trust in sales agents who use persuasion attempts is higher (versus lower). In contrast, the focus on dispositional information for those with an independent self-construal makes impression formation easier and less demanding on cognitive resources (Gilbert, Pelham, & Krull, 1988), so persuasion knowledge is likely activated when encountering persuasion attempts (regardless of whether they are individually or interpersonally focused) from sales agents. Thus the trust in the sales agents is low leading to a null effect with an independent self-construal.

First and foremost, the present research contributes to the culture literature by examining the role of persuasion knowledge in changing people's preference of persuasion attempts, especially for those with salient interdependent self-construal. The current research also contributes to the Persuasion Knowledge Model (Friestad & Wright, 1994) by recognizing the important influence of self-construal on the activation of persuasion knowledge, which in turn affects consumer responses to sales agents. This boundary condition of the Persuasion Knowledge Model advances our understanding of when persuasion attempts will be more or less effective leading to a more comprehensive understanding of the role of persuasion knowledge under varying conditions of self-construal salience. Finally, the current research contributes to the literature in both psychology and consumer behavior by introducing one way of delineating persuasion attempts through their focus on uniqueness versus commonality instead of mainly focusing on social attempts such as flattery (Main, Dahl, & Darke, 2007). We test our propositions through three studies. This finding offers potential applications for international companies that are planning to open retail stores in different cultural settings. For stores opened in a relatively collective culture, the company may need to train their sales agents to provide customers with individually-focused persuasion attempts (e.g., focusing on uniqueness)—a possibly surprising approach.

### Method

#### Study 1

The objective of S1 is to test consumers' response to persuasion attempts from sales agents with the salience of interdependent (vs. independent) self-construal when considering the influence of persuasion knowledge. This was a 2 (persuasion attempt: individually vs. interpersonally focused)  $\times$  2 (primed self-construal: interdependent vs. independent)  $\times$  2 (cognitive capacity: normal vs. constrained) between-subjects design with 158 undergraduate business students from a central university in Canada.

*Procedure.* The self-construal priming consisted of asking half the participants to recall a nice purchase made for a friend or family member and how they felt about it. The other half were asked to recall a nice purchase for themselves and how they felt about it, adapted from Mandel (2003). After the priming, participants were asked to read a shopping scenario to buy a camera. They were told to search for and compare different cameras when a sales agent approached and tried to help them. During the interaction with a sales agent, half of the participants were informed: "That's a great camera. Whenever you are together with your family, you can capture those impressive moments and record your family's experience" (interpersonally focused persuasion attempt). The other half were told: "That's a great camera. Whenever you go on a trip by yourself, you can capture those impressive moments and record your unique experience" (individually focused persuasion attempt). The manipulation of interpersonally (vs. individually focused persuasion attempt) was adapted from Lau-Gesk (2003). Cognitive capacity also was manipulated in the shopping scenario. In the constrained cognitive capacity conditions, participants were asked to remember any numbers presented in the scenario (eight numbers were shown in the scenario). In the unconstrained cognitive capacity conditions, the same numbers were

presented but participants were not required to recall any of them. Participants were randomly assigned to one of the eight conditions.

**Measures.** To assess trust in the sales agent, seven 7-point scale items, ranging from 1 (insincere/not fake/dishonest/not phony/untrustworthy/not manipulative/not pushy) to 7 (sincere/fake/honest/phony/trustworthy/manipulative/pushy) were drawn from previous research (Main et al., 2007). Four of them were reverse-coded. Factor analysis indicated that these seven items loaded together, and thus they were averaged to form a trust index ( $\alpha = .71$ ).

Open-ended questions were coded to identify thoughts related to persuasion knowledge. Two judges (agreement was 90%) coded the target of the listed thoughts as related or unrelated to persuasion knowledge (e.g., skepticism about the truthfulness of the salesperson's comments would be related, while a comment such as "It reminds me of my last purchase" is not related to persuasion knowledge). As additional examples, if participants mentioned that "the salesclerk tried to convince consumers to buy products by saying good things", persuasion knowledge ("1") was coded. Instead, if participants stated that "the scenario sounded like something they would normally do when purchasing, "other" ("0") was coded.

**Manipulation Check.** Cognitive capacity was checked by asking "To what extent did you try to remember the numbers in the scenario?" The effectiveness of the persuasion attempt manipulation was assessed by asking "When thinking about the camera you were about to purchase, to what extent did that purchase emphasize feeling connected with family?" Both manipulations were successful.

**Results.** A 2x2x2 ANOVA illustrated a significant three-way interaction ( $F(1,150) = 12.8, p < .001$ ) on trust in the sales agent. Planned contrasts indicated that under normal and unconstrained cognitive capacity, an incompatible effect occurred. In particular, participants primed with interdependence had significantly higher trust in the sales agent when processing an individually as compared to an interpersonally focused persuasion attempt (4.60 vs. 4.05;  $F(1,73) = 4.52, p < .05$ ). In contrast, persuasion-attempt type had no influence on participants primed with independence (4.09 vs. 4.38;  $F(1,73) = 1.43, p = .25$ ).

In the constrained cognitive capacity condition, a compatible effect appeared. Specifically, participants primed with interdependence had higher trust in the sales agent for interpersonally as opposed to individually focused persuasion attempts (4.76 vs. 4.16;  $F(1,77) = 4.73, p < .05$ ). In contrast, participants primed with independence had higher trust in the sales agent for individually as opposed to interpersonally focused persuasion attempts (4.78 vs. 4.15;  $F(1,77) = 4.87, p < .05$ ).

**Moderated mediation of Persuasion Knowledge (PK).** We bootstrapped the indirect effect of the different persuasion attempts and priming on trust through PK, using the SPSS syntax of the MOD-MED version (Hayes & Matthes, 2009). The results demonstrated that the indirect interaction between self-construal and persuasion attempt type through persuasion knowledge on trust in the sales agent was significantly different from zero under the normal cognitive capacity condition (95% [CI]: -.36 to .00) but it was not significant under the constrained cognitive capacity condition (95% [CI]: -.12 to .30). In other words, persuasion knowledge mediated the interaction effect of persuasion attempt type and priming on trust in the sales agent when cognitive capacity was not constrained, but its mediating effect was attenuated when cognitive capacity was constrained.

Study 1 indicates that under normal cognitive capacity, a salient interdependent self-construal had higher trust in the sales agent who use individually focused persuasion attempt, and persuasion knowledge plays a mediating role in this effect. In contrast, persuasion attempt type had no influence on participants primed with an

independent self-construal as shown by a high level of persuasion knowledge under both types of persuasion attempts.

In addition, we find that when cognitive capacity is constrained, a compatible effect occurs. That is, interpersonally (vs. individually) focused persuasion attempts lead to higher (vs. lower) trust in the sales agent for those primed with an interdependent self-construal, whereas individually (vs. interpersonally) focused persuasion attempts result in higher (vs. lower) trust in the sales agent for those primed with an independent self-construal. As the compatible effect has been well established in cross cultural research, in next three studies, we will focus on conditions under which cognitive capacity is not constrained.

### Study 2

This study is a 2 (persuasion attempt: individually vs. interpersonally focused)  $\times$  2 (primed self-construal: interdependent vs. independent) between-subjects design conducted in Hong Kong. Participants were 124 undergraduate students with an average age of 21.4 (male 49, female 75) recruited from a Hong Kong university where English is a teaching language. The questions were presented with English version. Students who participated received HK\$50 for compensation.

**Procedure.** We used a pronoun-circling task in a paragraph involving a trip to a restaurant (Oyserman, Sorensen, Reber, & Chen, 2009) to prime interdependent versus independent self-construal. Eighteen personal pronouns were embedded in the paragraph. Half of the participants were given a paragraph containing embedded *we's*, and the other half were presented with a paragraph containing embedded *I's*. Next, participants were asked to read a shopping scenario with the same persuasion attempt manipulation as in Study 1.

**Measures.** Trust in the sales agent was measured by using the same items as prior studies ( $\alpha = .81$ ). We also measured purchase intentions and store satisfaction. Purchase intention was measured by asking participants how likely they are to buy the camera from this store. Following Westbrook (1980), store satisfaction was assessed by asking participants how they would evaluate their experience at the store (Unsatisfied/Satisfied, Disappointed/Delighted, and Indifferent/Excited;  $\alpha = .95$ ). We measured persuasion knowledge by coding the number of negative thoughts about the sales agent (e.g., Pat tries to promote camera; I become a little annoyed with Pat etc.). The manipulation check item was the same as prior studies and was successful.

**Results and discussion.** An ANOVA with primed self-construal and persuasion attempt type as the two independent factors showed a significant interaction on trust in the sales agent ( $F(1,120) = 6.50, p < .05$ ) and purchase intention ( $F(1,120) = 6.56, p < .05$ ), and marginally significant interaction on store satisfaction ( $F(1,120) = 3.46, p = .06$ ). Planned contrasts showed that when participants were primed with an interdependent self-construal, individually (vs. interpersonally) focused persuasion attempts resulted in higher trust in the sales agent (4.48 vs. 3.75,  $F(1, 120) = 11.93, p < .01$ ), purchase intentions (4.17 vs. 3.52,  $F(1, 120) = 3.80, p = .05$ ), and store satisfaction (4.41 vs. 3.61,  $F(1, 120) = 7.59, p < .01$ ). However, when participants were primed with an independent self-construal, the three outcomes did not differ for the two types of persuasion attempt ( $F < 1, ns$ ). Bootstrapping analysis demonstrated that the indirect interaction between self-construal and persuasion attempt type through persuasion knowledge was significantly different from zero on trust in the sales agent (95% [CI]: .10 to .39) and purchase intentions (95% [CI]: .03 to .24). Given the marginal significant of store satisfaction, the interval was close to zero but include zero (95% [CI]: -.006 to .107).

The results of Study 2 support the propositions of a null effect where persuasion attempt type does not influence consumer respons-

es when consumers have a salient independent self-construal. More importantly, when an interdependent self-construal is activated, individually rather than interpersonally focused persuasion attempts led to higher trust in the sales agent, purchase intentions, and store satisfaction. Persuasion knowledge plays a mediating role.

### Study 3

The goal of Study 3 is to further test this underlying process through manipulating persuasion knowledge among those with a salient interdependent self-construal. In particular, we propose that the incompatible effect will show under the condition of high persuasion knowledge. As the mismatch (match) between interdependent self-construal and persuasion attempts demands (does not demand) more cognitive resources due to ease of processing (Reber, et al., 2004), the processing of individually (versus interpersonally) focused persuasion attempts may (may not) suppress the high level of persuasion knowledge. Consequently, individually as compared to interpersonally focused persuasion attempts will result in higher trust in the sales agent under high persuasion knowledge.

This was a 2 (persuasion attempt: individually vs. interpersonally focused)  $\times$  2 (persuasion knowledge: low vs. high) between-subjects design conducted in a laboratory setting. Participants were 100 undergraduate business students with an average age of 20.4 (male 47, female 53) from a central university in Canada who participated in return for course credit.

*Procedure.* We used the same technique as in Study 2 to prime all participants with an interdependent self-construal as well as the manipulation of persuasion attempt type. In the shopping scenario, we also manipulated persuasion knowledge, which was adapted from Kirmani and Zhu (2007). In the condition with high persuasion knowledge, the sales agent told participants: "In a recent study conducted by our store, consumers rated this model of camera as producing better-quality pictures than the leading brand." In the condition with low persuasion knowledge, the sales agent told participants: "In a recent study conducted by *Consumer Reports*, consumers rated this model of camera as producing better-quality pictures than the leading brand."

*Measures.* The measure of trust, purchase intentions, and store satisfaction were the same as Study 2. The manipulation of persuasion attempts was successful and the manipulation check for persuasion knowledge was measured by asking participants: "The sales agent's claims about the camera based on the recent study were not truthful/truthful".

*Results and discussion.* A 2x2 ANOVA illustrated a significant two-way interaction between persuasion knowledge and persuasion attempt type on trust in the sales agent ( $F(1, 96) = 9.88, p < .01$ ), purchase intentions ( $F(1, 96) = 4.42, p < .05$ ), and store satisfaction ( $F(1, 96) = 4.45, p < .05$ ). Planned contrasts indicated that with high persuasion knowledge, an incompatible effect occurred, which is consistent with prior studies. Participants had significantly higher trust in the sales agent (4.67 vs. 3.57;  $F(1, 96) = 14.76, p < .01$ ), purchase intentions (4.79 vs. 3.88;  $F(1, 96) = 5.87, p < .05$ ), and store satisfaction (4.88 vs. 3.92;  $F(1, 96) = 5.41, p < .05$ ) when processing an individually as compared to an interpersonally focused persuasion attempt. In contrast, persuasion attempt type had no influence on participants with low persuasion knowledge (trust: 4.31 vs. 4.46,  $F(1, 96) = 0.29, p = .59$ ; purchase intentions: 4.48 vs. 4.67,  $F(1, 96) = 0.26, p = .61$ ; and store satisfaction: 4.55 vs. 4.80,  $F(1, 96) = 0.39, p < .53$ ).

The results of Study 3 demonstrate that when interdependence is primed, under low persuasion knowledge, trust in the sales agent, purchase intentions, and store satisfaction are not affected by the type of persuasion attempts, while under high persuasion knowledge,

there is a positive effect when the sales agent uses an individually focused as compared to an interpersonally focused persuasion attempt. This study further reveals the role of persuasion knowledge as the mechanism in the interaction between self-construal and the type of persuasion attempts. We argue that due to the additional demand for cognitive resources, individually focused persuasion attempts may make people suppress the high level of persuasion knowledge, which leads to higher trust in the sales agent, purchase intentions, and store satisfaction. On the contrary, processing interpersonally focused persuasion attempts is not cognitively demanding, so high persuasion knowledge remains and, in turn, people with a salient interdependent self-construal have lower trust in the sales agent, purchase intentions, and store satisfaction.

### General Discussion

the present research explores the three effects between self-construal and different persuasion attempts in an interpersonal persuasion context across cultures. Four studies conducted with consumers from two cultures (Canada and China) reveal that with normal cognitive capacity, an interdependent self-construal tends to result in an incompatible effect with interpersonally versus individually focused persuasion attempts. In particular, individually focused persuasion attempts lead to higher trust in the sales agent and greater purchase intentions than do interpersonally focused persuasion attempts. However, persuasion attempts have no influence on consumers with a salient independent self-construal (i.e. a null effect). These findings were robust across various manipulations of self-construal. When cognitive capacity is constrained, a compatible effect appears for both salient interdependent and independent self-construal, where those with an interdependent self-construal prefer interpersonally focused persuasion attempts while those with an independent self-construal prefer individually focused persuasion attempts. This result under constrained cognitive capacity is consistent with Briley and Aaker's (2006) findings, which show that a culturally compatible effect is likely to occur through an automatic process.

The current research contributes to the literature in several ways. First, previous research on culture shows that under normal cognitive capacity, persuasion appeals in an impersonal context (advertising) that are compatible with a salient self-construal lead to either favorable (e.g., Martenson, 1987; Hong, Muderrisoglu, & Zinkhan, 1987) or unfavorable attitudes (e.g., Aaker & Williams, 1998). The current research identifies the role persuasion knowledge in the switch of the change of persuasion preference by examining its influence on incompatible, null and compatible effects. Second, this research contributes to the consumer literature by integrating one culturally related concept, self-construal, into the Persuasion Knowledge Model (Friestad & Wright, 1994). Previous research on this model has investigated some factors such as cognitive capacity (Morales, 2005) and ulterior motives (Main et al., 2007; Campbell & Kirmani, 2000) but has not examined the cultural influence on the activation of persuasion knowledge which has a direct influence on impression formation of sales agents and on purchase intentions. Finally, the current research demonstrates one way of delineating persuasion attempts through their focus on uniqueness versus commonality. Ingratiation such as flattery and doing a favor are common tactics used by sales agents (Gordon, 1996), yet the psychology and consumer literature has not focused on different ways in which to deliver the same persuasion attempt. The focus on connectedness or distinctiveness may offer potential applications for international companies that have retail stores in different cultures.



### Future Direction and Limitations

In the future, as more people experience living in two cultures (biculturals) and react favorably toward both individual and interpersonal persuasion appeals (Lau-Gesk, 2003), it will also be interesting to compare the responses of biculturals and those who have experienced living in only one culture (monoculturals). In addition, it could be productive to examine the influence of product conspicuousness (i.e., public vs. private product, Bearden & Etzel, 1982) on impression of sales agents. Finally, future studies may need to explore other culturally related factors, such as uncertainty avoidance.

One of the limitations of this dissertation is the sample. Participants across three studies are all student samples. Future research may need to recruit non-student samples for generalizability purposes. In addition, this research only tests the effect of primed interdependent versus independent self-construal on persuasion attempts. Future studies may consider the situation in which a primed self-construal contradicts an individual's chronic self-construal and can result in different perceptions of trustworthiness in two different cultures.

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# What Motivates People to be Materialistic?

## Developing a Measure of Instrumental-Terminal Materialism

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### EXTENDED ABSTRACT

Materialism is an important construct that has gained considerable attention from marketing researchers, mainly due to its demonstrated impact on consumers' quality of life. Accordingly, it is essential to understand how materialism develops. However, even though understanding how materialism develops and how it affects quality of life is essential to take preventive actions against materialism, it is probably even more important to understand the real *motive(s)* to become materialistic. Richins and Dawson (1992) have suggested, based on values research, that materialistic people *value* their material possessions more highly than they do other goals in life. This conclusion begs asking the question, why is this so? What is the *motivation* behind valuing material possessions so highly? Richins and Dawson (1992) conceptualized materialism as a value and explained the motivation to acquire material things through three belief systems: acquisition centrality, happiness, and success. We argue that the core meaning of materialism as reflected in the Richins and Dawson's Material Value Scale (MVS) has been confounded between instrumental and terminal values. Acquisition centrality is, in essence, instrumental materialism whereas happiness and success are essentially terminal values (linking the perceived importance of materialism in life to specific end goals such as happiness and success).

This paper seeks to help researchers better understand the *motivation* behind the high value placed on material possessions and presents a new measure of instrumental-terminal materialism (MITM) that focuses on how materialism (instrumental value) motivates the attainment of three major life goals or terminal values: happiness, social recognition, and uniqueness. In other words, materialistic people have (1) the motive to seek *happiness* and the instrumental belief that having material possessions is key to happiness; (2) the motive to seek *social recognition* by significant others and the instrumental belief that having material possessions is key to social recognition; and (3) the motive to seek *uniqueness* (i.e., develop an identity that sets the person apart from the crowd) and the instrumental belief that having material possessions is key to asserting one's uniqueness. Because previous materialism scales do not measure these three motives of materialism comprehensively, we set to develop a new measure of instrumental-terminal materialism (MITM).

We developed our MITM by following the scale development procedures proposed by Churchill (1979) and DeVellis (1991). Six separate studies conducted in the United States provided evidence for dimensionality, internal consistency, discriminant validity, and non-susceptibility to social desirability bias for the second-order factor model (i.e., one higher order materialism factor that comprised of all three first-order factors). We also compared the MITM with the original and shorter versions of the MVS. The results showed that the MITM outperform the MVS in terms of internal consistency and dimensionality.

To assess nomological validity, relationships between materialism (and its dimensions) and three constructs (i.e., personal values, social influence, and physical appearance concern) were examined. As expected, excitement, being well-respected, and security values had positive and significant correlations with overall materialism and its three dimensions. Self-respect and a sense of accomplishment values were positively and significantly correlated with the social recognition and uniqueness dimensions, but not significantly correlated with the happiness dimension. Because the happiness dimension implies acquiring things for the sake of happiness, and because this dimension does not necessarily relate to signaling status and prestige to other people, non-significant relationships between happiness and these two values (self-respect and a sense of accomplishment) make theoretical sense. Social influence in buying behavior can be defined as the impact of family and peers on consumer behavior (in addition to the impact of media and advertising). As expected, social influence and materialism were positively correlated. The materialism dimensions that are more related to other people (i.e., social recognition and uniqueness) had higher correlations than the materialism dimension that is not directly related to other people (i.e., happiness). Materialism is defined as acquiring possessions and some of those possessions, such as jewelry and watches, are related to physical appearance. Accordingly, we found that physical appearance concern is positively correlated with materialism's three dimensions as well as the materialism scale as a whole.

Most measures presented in the consumer research literature seem to have been developed in the United States. However, many of these measures have been used in other countries, and the results are assumed to be comparable with the results in the US (Cheung and Rensvold 1999; Steenkamp and Baumgartner 1998). Because there are cultural differences and translation problems, it is important to assess the structure of the measure and its reliability and validity across different cultures when developing a new measure. To this end, data were collected from five countries with divergence in language, ethnicity and religion: Australia, Bosnia-Herzegovina, Egypt, Korea, and Turkey. Before testing for measurement invariance, a baseline model was estimated by running second-order confirmatory factor analyses for each country separately. Results showed that the model fit the data well for each country. A series of nested tests was conducted at increasingly more stringent levels to test for three specific purposes identified by Steenkamp and Baumgartner (1998, 82): "exploring the basic structure of the construct cross-nationally, making quantitative comparisons of means across countries, and examining structural relationships with other constructs cross-nationally." The results revealed that the MITM is invariant across different countries, suggesting that the new measure can be used in other countries with confidence.

Overall, based on 11 studies involving 983 university students and 1,039 adult respondents, we believe that the MITM will help

researchers conduct more reliable and valid materialism-related research both in the United States and cross-culturally.

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# Transportation Back: Reflecting On the Journey

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## EXTENDED ABSTRACT

Scholars across fields related to consumer psychology now recognize the powerful influence of narratives, which persuade through the depiction of events. Narratives evoke a distinct form of processing often called transportation, a composite of cognitive attention, mental imagery, and emotional involvement (Green and Brock 2000). A stream of work has shown that transportation into a story can alter beliefs about the narrative topic (Van Laer et al. 2014).

Current theory suggests narrative processing affects persuasion-related outcomes directly, and is silent on how the transportation experience leads to changes in expected outcomes. As Appel and Malečkar (2012, 26) observe, “what is still lacking... are answers to the question of how transportation affects persuasion.” Despite the lack of formal conceptualization, several studies suggest an additional process between transportation and persuasion-related outcomes, which can be viewed as a reflective process that integrates elements encountered in the story world into ones’ understanding of the real world (Risk perception; Dunlop, Wakefield, and Kashima 2010; Cognitive responses; Niederdeppe, Shapiro and Porticella 2011; Self referencing; Strange and Leung 1999). In the current work, I define and explore the process of reflection in the context of health-related narratives.

In three preliminary studies, undergraduate participants (study 1a, N=93; study 1b, N=169; study 1c, N=57) read one several different narratives (across studies 1a-1c) and responded to the open ended questions: “Please describe your thoughts while reading the passage,” and “Describe what emotions you felt while reading the passage,” and completed Green and Brock’s Transportation scale (2000).

As a necessary condition for reflection, participants must first be transported. Average scores on Green and Brock’s transportation scale were significantly higher than the scale midpoint of 3.5 in all studies. I applied procedures outlined by Kassirjian (1977) and reviewed the elicited text to gain an understanding of the underlying themes. I developed codes for responses to the question “what are the cognitive and emotional responses to a transportation experience?” and organized the elicited responses using a complete thought as the basic unit. I used descriptive coding to capture the themes and ideas expressed in the elicited responses, which yielded 15 unique categories.

Two undergraduate research assistants coded the elicited responses, assigning the responses to the pre-determined categories and using as many category labels as relevant. The author resolved any discrepancies when there were overlapping or conflicting codes. The Cohen’s Kappa score indicates that the coding scheme was clear and appropriate (study 1a: Kappa = 0.72, SE = .05,  $p < 0.05$ ; study 1b: Kappa = 0.80, SE = .03,  $p < 0.05$ ; study 1c: Kappa = 0.76, SE = .04,  $p < 0.05$ ). Each predetermined category label was used at least once, and the “other” code was not assigned frequently, suggesting the coding system comprehensively captured the process of reflection.

The results of studies 1a-c increase confidence that the 15 proposed categories are robust across variations in narrative features. I assessed the robustness of the categories used to represent reflection through using different stories. In each study, all 15 codes were applied at least once, and the “other” codes were not meaningfully related to the conceptualization of reflection.

Based on the content analysis of the open-ended elicitation responses in studies 1a-c, four general categories emerged: Statements that reflected thoughts about the narrative (e.g., “I thought about the

takeaway message of the story”), about the reader and the world external to the reader (“I thought about how the story relates to me while reading the story”), emotion evoked by the narrative (“I thought about how the story made me feel after reading”), and disbelief in the narrative (“I found myself questioning some of the statements in the story”). In study 2, undergraduate participants (N=172) read a published story describing an individual’s health-related reactions to home pesticide use and were presented with 30 Likert scale items generated from four general categories. Participants completed Green and Brock’s Transportation scale and 7 story-related belief items.

Scale validation techniques yielded a 3 factor model (corresponding to the first three categories; the fourth factor, skepticism, added stress to the model and likely moderates the relationships in the narrative persuasion process rather than as a component of reflection). See Figure 1 for the final set of items. As conceptualized, reflection on the narrative occurs after transportation into the story, which suggests a relationship between transportation and reflection. The composite measures of transportation and reflection were significantly correlated, and reflection mediated the influence of transportation on story-consistent beliefs. This suggests that both constructs are components of the narrative persuasion process.

Study 3 compares how individuals respond to rhetorical (argument-based) versus narrative messages. Previous work indicates that, though these types of messages may be equally persuasive, individuals are less likely to be transported into messages consisting of arguments. The process of reflection, then, may differ or be less relevant in this context. Undergraduate participants (N=154) were assigned to a “narrative” or “argument” condition. The narrative condition consisted of a published story about an individual’s development of allergies in response to GMO food. The information-based message was derived from this narrative with content displayed in a bulleted list (Adaval and Wyer 1998). Participants read the message and were asked to complete Green and Brock’s Transportation scale, followed by the reflection scale items identified in study 2, the skepticism measures (12 items total), and measures of message perceptions. Participants then completed measures related to story-consistent beliefs.

We assessed the discriminant validity of the reflection scale by examining whether responses to this scale differed for a narrative or argument-based message. The 3-factor structure for reflection characterized responses to narrative but not argument-based messages.

The analyses suggest the reflection composite mediates the relationship between transportation and an overall belief composite in response to a narrative message, but not in response to an argument-based message. Although both forms of messages lead to changes in some beliefs and attitudes, transportation and reflection are relevant mechanisms for narrative messages, but do not operate for argument-based messages. This difference provides additional evidence the mechanisms that underlie narrative and argument-based processing are distinct.

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# Control over What? Assessing General and Domain-Specific Self-Control

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## EXTENDED ABSTRACT

Recent research underscores the importance of better understanding how differences in self-control impact a wide range of behaviors. However, the plethora of related constructs and measures, the variety of self-control domains and manipulations, and the numerous and radically different ways in which self-control is captured as a dependent measure suggest there are challenges involved with self-control research. Furthermore, there is still a lack of clarity in the conceptualization and operationalization of self-control by psychologists and consumer researchers. On the one hand, extant theory, in particular the “self-control as resource” framework or the “strength model” (Muraven, Tice, and Baumeister 1998), views self-control as a general resource that is applicable and transferable across multiple domains (Pocheptsova et al. 2009). When self-control is exercised in one domain, it is consumed or used up and is therefore shown to be available to a lesser degree in another domain or even an additional task in the same domain. On the other hand, many consumer behavior studies implicitly or explicitly utilize a domain-specific conceptualization for measuring self-control, for example, the consumer’s self-control regarding spending (Haws et al. 2011; Rick et al. 2008) or compulsive buying (e.g., Ridgway, Kukar-Kinney, and Monroe 2008), followed by an assessment of the person’s behavior within the same domain. Such studies usually remain silent on the potential impact of prior or subsequent acts of self-control outside the specific behavioral domain being examined. One can even argue that by their very existence, domain-specific analyses and measures of self-control reject its general nature.

Therefore, the objective of the present research is to explicitly consider a variety of contexts in which self-control has been examined in consumer research and to scrutinize the relations between general and domain-specific measures of self-control. We examine how well various self-control measures correlate with one another and the extent to which they predict a series of associated consumer attitudes and behaviors specifically in the area of financial decision making, eating control, and control over the use of one’s time. We then examine these issues in two studies, the first of which involves a 5-phase, 3-month long behavioral laboratory study, and the second of which utilizes credit card transaction data in conjunction with matched survey responses from a large financial institution. Our results reveal that although there is considerable supporting evidence for self-control as a general resource, a domain-specific approach to conceptualization and measurement is necessary to account for and predict a variety of consumer behaviors.

Study 1 consisted of a fairly complex, longitudinal study in which the 178 participants completed various tasks in the lab over the duration of a semester. This study allowed us to compare the various types of self-control as captured by a series of validated measures, and to examine whether or not the individual difference measures were able to predict a series of behaviors in a very conservative way in which these behaviors were assessed over a period of time. Specifically, would the more general measures tend to predict a wider range of behaviors than the more domain-specific measures? Favoring the general self-control account, results revealed moderate correlations in the expected directions both between general measures among themselves and between many of the general and

domain-specific measures. However, on the negative side, only 6 of 28 possible predictions of behavioral outcomes in the longitudinal study are significantly achieved by the general measures. In contrast, the domain-specific measures are able to predict more than twice as many (13 of 28) outcomes in the expected directions. Furthermore, the correlations between the domain-specific measures are strong within domains, but weak across domains, supporting the domain specific account.

Study 2 was conducted to generalize the results of study 1 with an entirely different consumer sample, and using a combination of subjective and objective outcome variables. Consequently, we conducted this study with 600 adult customers belonging to a large financial institution with a consumer credit card business. First, survey responses, each of which included both general and specific self-control related measures, were collected from three separate groups of 200 customers. Then, credit card data history was provided by the financial institution and matched to the survey respondents. As such, this study included real financial consequences as well as a series of more subjective consequences included in the surveys. To summarize the results, as a whole this data provided some support to both the general and domain-specific views of self-control. In favor of the general view, the GSC is associated with domain-specific measures and predicts outcomes across domains. There are some cross-domain effects with domain-specific chronic measures (e.g., CSSC) predicting outcomes in other domains (e.g., eating and body-weight). However, by and large, the intra-domain effects are stronger, and the domain specific self-control measures predict the actual financial outcomes to a greater degree than general measures.

Across both studies, our results consistently show a *duality*, whereby some aspects support the general perspective on self-control and others favor a domain-specific view. Overall, we conclude that while examining self-control as a general construct that applies across a variety of contexts has merit, it is also useful to consider more domain specific self-control constructs, and in fact, this domain-based approach may indeed be more valuable in helping to understand how to improve consumers’ decision making abilities in various meaningful arenas of consumption. Simply put, general self-control does not always translate into decision making considered to be relevant to self-control.

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# “Wanna Supersize That?” Consumers’ Choice of Superior Options

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## EXTENDED ABSTRACT

“Would you like to supersize that?” In many industries, consumers are offered the opportunity to revise their initial decision in return for a superior but more expensive product or service option. For instance, when checking in at an airport or hotel counter, consumers are frequently encouraged to reconsider their initial reservation and book a higher-quality but more costly flight or room (Vercellis 2009). This marketing technique is referred to as upselling. Even though upselling attempts are commercially appealing, there is little research on how consumers respond to upsell offers. While research on sequential decision making (Novemsky and Dhar 2005) and preference reversals (Bechwati and Siegal 2005; Okada 2001) may provide initial insights into this phenomenon, it does not explicitly examine when and why consumers decide to accept an upsell. Hence, the purpose of this research is to develop a conceptual model of the upselling decision process and to clarify when consumers may accept such offers. Specifically, we develop a theoretical model that argues that the upselling process is best conceptualized as a three-step decision process (step 1: initial decision; step 2: upsell offer; step 3: final decision). Based on this model, we propose that the cognitive effort invested in the initial choice stage affects the decision in the final choice stage and that the framing of the upsell offer moderates this relationship. According to the effort-accuracy framework, individuals strive to maintain a balance between cognitive effort and the accuracy of a decision strategy (Bettman et al. 1993). Moreover, choice tasks that require high amounts of effort raise switching barriers (Burnham, Frels, and Mahajan 2003) and lead to a cognitive lock-in (Murray and Häubl 2007; Zaubermaier 2003). In the context of upselling, consumers that invested high amounts of effort in the initial choice stage may thus be more likely to experience a cognitive lock-in regarding their initial decision. As a result, they may be more prone to stick to that decision even when they are offered a superior option. Hence, this raises the question of how cognitive lock-in may be attenuated.

Arguably, the goal frame used for communicating the upsell may help to reduce lock-in and to increase the effectiveness of upsell offers (Levin, Schneider, and Gaeth 1998). As such, upsells may either be framed in terms of the advantages of accepting the offer and revising one’s initial decision (gain frame) or in terms of the disadvantages of rejecting the offer and confirming one’s initial decision (loss frame). We postulate that consumers will respond more favorably to upsell offers that emphasize losses rather than gains, especially when they expended high amounts of effort in the initial decision stage. In such situations, loss-framed messages may enhance anticipated inaction regret and may suggest stronger reasons for a decision switch (Connolly and Zeelenberg 2002). In contrast, when cognitive effort is low, there should be little lock-in so that the effectiveness of upsell offers should not differ across different frames. Three studies were conducted to test this prediction.

Study 1 (n = 103) used a 2 (cognitive effort: low, high) x 2 (goal frame: loss, gain) between-subjects design in a hotel setting. A 2 x 2 ANCOVA revealed the predicted interaction between effort and goal frame. In the high effort condition, upsells featuring loss frames were more effective than those featuring gain frames. In the low effort condition, the likelihood of choosing the upsell did not vary across goal frames.

Study 2 (n = 155) was designed to replicate the results of study 1 and incorporated a number of important variations (e.g., different industry, sample of adult consumers, use of filmed scenarios). In addition, we also sought to provide evidence of the underlying process. As in study 1, the results revealed the critical interaction between effort and goal frame. When cognitive effort was high (but not when it was low), loss frames were more persuasive than gain frames. Moreover, a mediation analysis showed that anticipated inaction regret mediated the impact of different goal frames in the high effort condition.

Finally, study 3 (n = 301) was designed to identify a boundary condition for these effects. As such, loss frames may be more effective because they provide consumers with better reasons for justifying a decision change. If this is the case, then the difference between gain and loss frames should disappear when consumers feel that need for justification is absent. The results revealed a significant interaction between need for justification and goal frame. As such, loss frames were more effective when need for justification was present but not when it was absent.

Summarizing, all studies provide converging evidence that consumers’ responses to superior upsell offers depend on the amount of cognitive effort exerted at the initial choice stage and the goal frame (see Table 1). These results not only enhance our understanding of upselling processes, but may also contribute to research on preference reversals and decision justification. That is, our studies suggest that preference reversals may be more likely to be observed when loss frames rather than gain frames are used since the former may enhance anticipated inaction regret and may provide a better justification for revising one’s initial decision.

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# Share Your Life and Get More of Yourself. Experience Sharing in Couch Surfing

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## EXTENDED ABSTRACT

Sharing is the new talk of the town. Its advocates (Botsman and Rogers 2010; Gansky 2010; Sacks 2011) but also popular media like the Time magazine (Walsh 2011) or The Economist (“The Rise of the Sharing Economy” 2013) hold sharing to be a game changer for the world’s consumption patterns – or at least for those in the industrialized nations that such coverage usually centers on. Summarized under different labels like “collaborative consumption”, “sharing economy”, “the mesh” or “peer-to-peer economy”, we see a variety of “sharing businesses” that are rapidly gaining importance in the international marketplace. Commonly mentioned examples include bike- and car-sharing systems (Bardhi and Eckhardt 2012; Lambertson and Rose 2012), toy-sharing (Ozanne and Ballantine 2010), land-sharing and Community Supported Agriculture (Schnell 2007). One of the most prominent hallmarks of the “sharing economy” (Sacks 2011) is the hospitality platform CouchSurfing where members offer shelter and oftentimes food and entertainment to strangers. With almost six million people in over 97,000 cities worldwide (“Couchsurfing Statistics 2014” 2014) sharing their space with people they have never met before, the CouchSurfing project exemplifies that non-commercial sharing among strangers is more than a niche phenomenon. While the benefits for the “surfers” who use the offer of free accommodation are somewhat straightforward, the motivations of the hosts providing their space appear more bewildering. Given that there is a considerable range of market-based alternatives such as AirBnB, we wondered why people choose to share shelter, time and oftentimes even food and drinks with strangers whom they have never met before and will possibly never meet again, while consciously renouncing monetary gain or other tangible remuneration. The question guiding our research is hence why CouchSurfing hosts offer their hospitality to strangers.

We address this question by means of a multi-method multi-sited ethnography of the hospitality platform CouchSurfing over a three year period. Methods include qualitative in-depth interviews, participant observation and the analysis of online contents such as member profiles, blog entries, forum discussions and news articles. In-depth interviews were conducted with 37 CouchSurfing hosts aged 22-36 from Europe and the Americas, 15 of them being female. We interpreted our data by means of a hermeneutic approach (Thompson and Haytko 1997) and used our field notes and comparisons with web-content (i.e., participants’ online profiles and contributions on discussion boards) as sources of triangulation to validate the attitudes and behaviors reported in the interviews (Mays and Pope 1995).

Our results are structured into three main parts:

**Experience Sharing.** Our findings suggest that the jointly produced and consumed experiences are at the core of sharing in CouchSurfing. The actual time that the two (or more) CouchSurfing partners spend together constitutes the most important part of the CouchSurfing experience. The “couch” as shared material object in contrast has been found to merely serve as a catalyst and an enabler for sharing experiences in the context of CouchSurfing.

**Experiential Capital.** Although no money is involved and free accommodation and gifts as manifestations of material value merely play a subordinate role in the social exchanges of CouchSurfing, we still observe an emergence of lasting benefits for the involved parties.

We characterize these benefits as “experiential capital”, in the sense that they represent an assembly of identity-relevant meanings, skills and cultural learning that can be collected and are of lasting value to the individual. Four types of such experiential capital have emerged as outcome of experience sharing from our data: Ego boost, learning, an inner glow from helping others and self-authentication. In line with literature on experiential consumption we suggest that the consumption of such “experiential capital” can in fact contribute to self-enhancement (Keinan and Kivetz 2011)

Reciprocity and intermingled self-centered and other-related goals. We also discuss the role of reciprocity in the light of the particular win-win situation that we see occurring in CouchSurfing and revisit notions of reciprocity in hitherto existing theories on sharing. Existing literature on sharing assumes that true sharing comes about without the involvement of reciprocity. And although we see the interactions taking place on CouchSurfing as a form of sharing, we also found many indicators that point to the existence of reciprocal claims. However, the reciprocity that is implied here is neither an expression of direct, or tit-for-tat reciprocity (Sahlins 1972) 1972) nor of indirect or even generalized reciprocity that assumes a circular understanding of giving and taking. Rather, we find that self-centered and other-related goals are almost inseparably intermingled in the context of CouchSurfing. We see such intermingledness of pro-social and egoistic behaviors rooted in the close connection between pro-social enactments and their returns for the individual (Ariely, Bracha, and Meier 2009; Soosai-Nathan, Negri, and Delle Fave 2013), a finding that is in fact likely to also occur in other sharing contexts. Such intermingledness of egoistic and altruistic motives for pro-social action, which has similarly been put forward by Mauss (1925/1967) in his theory of gift giving, is however not addressed by Belk’s (2007, 2010) seminal sharing theory.

Our analysis of CouchSurfing contributes to the recent discussion on sharing in that it introduces the idea of experience sharing, which provides a complementary perspective to the focus on sharing material resources. Additionally, we introduce the concept of experiential capital and point out how such experiential capital can lead to self-enhancement as concrete outcome of sharing. Finally, we discuss the issue of reciprocity in shared experiences that we see as being rooted in an intermingling of self- and other-directed goals, a perspective that refines Belk’s (2007, 2010) definition of sharing.

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# Effect of Thinking Style on Donation: Moderating Role of Cause Type

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## EXTENDED ABSTRACT

In the past few years, a growing number of organizations have come forward with the initiative of connecting donors with charitable organizations and causes for donation. For example, Globalgiving is a non-profit that connects donors with grassroots projects. On their website, one can find a myriad of projects to support, with some aiming at human lives and others focusing on environmental issues. Donors can make a portfolio of the projects they intend to support. eBay also offers similar services through their 'giving works' program which allows sellers to list items on eBay to support nonprofits. These platforms are helping donors by providing them a large number of options to support and making it easier for them to build up a portfolio of donation. Unlike the early days when individual donation centered only on a few specific causes, the potential donors nowadays can experience more variety than ever before.

In this research we propose that the causes for donation differ in their nature of perceived outcome characteristics. For example, the outcome of donating to a humanitarian cause (e.g., fighting poverty) may be perceived as being more specific and more immediate by donors whereas the outcome of donating to an environmental cause (e.g., preventing ozone layer depletion) may be perceived as being more broad and delayed. We believe that depending upon individuals' thinking style, such differences in outcome characteristics can drive donors to choose one cause over the other in their donation decisions.

Individuals' thinking style can be classified as either holistic or analytic. A *holistic* thinking style is characterized by an orientation to the context or field as a whole, attention to relationships between objects and using complex dialectic logic in evaluation. On the other hand, an analytic thinking style is characterized by the detachment of the object from its context, focus on attributes of the object to assign it to categories, and using simple formal logic in evaluation (Nisbett et al. 2001; Peng and Nisbett 1999; Choi et al. 2007). The premise on which the present research proceeds is that analytic thinkers' tendency of separately evaluating objects will lead them to discriminate their helping behavior in favor of humanitarian causes more than environmental causes. In contrast, holistic thinkers make less of such discrimination since they think in terms of relations and connections among objects and may perceive the causes of donation as being interconnected.

In five studies, we investigate how individuals' holistic versus analytic thinking style influences their preference for humanitarian and environmental causes. Study 1 shows the cause specific differences between the humanitarian and environmental causes. We found that the outcomes of donating to humanitarian causes are perceived as more immediate ( $M_{\text{humanitarian}} = 2.65$ , specific ( $M_{\text{humanitarian}} = 5.24$ ) and concrete ( $M_{\text{humanitarian}} = 5.40$ ) whereas the outcomes of donating to environmental causes are perceived as more delayed ( $M_{\text{environmental}} = 4.68$ ), broad ( $M_{\text{environmental}} = 3.68$ ) and abstract ( $M_{\text{environmental}} = 3.68$ ). In study 2 we primed the respondents into either an analytic or a holistic mindset and provided them with a series of humanitarian and environmental causes to choose from. The respondents also allocated a hypothetical endowment of \$100 among the chosen causes for donation. We analyzed both their choice and allocation of donation money to humanitarian and environmental causes and found that analytic thinkers' portfolio was made up of a greater portion of humanitarian causes than environmental ones ( $R_{\text{humanitarian}} =$

86% vs.  $R_{\text{environmental}} = 14\%$ ); however, holistic thinkers' portfolio was equivalent to both types of causes ( $R_{\text{humanitarian}} = 55\%$  vs.  $R_{\text{environmental}} = 45\%$ ). Also, analytic thinkers allocated a greater percentage of money to humanitarian causes than to environmental ones ( $R_{\text{humanitarian}} = 86\%$  vs.  $R_{\text{environmental}} = 14\%$ ); however, holistic thinkers allocated equal amount of money to both causes ( $R_{\text{humanitarian}} = 53\%$  vs.  $R_{\text{environmental}} = 47\%$ ). In study 3, we manipulated both thinking style (analytic vs. holistic) and donation causes (humanitarian vs. environmental) between subjects and replicated our findings from study 2 (a two-way interaction between donation cause and thinking style ( $F(1,159) = 4.31, p < .05$ )). We found that participants in the analytic thinking condition had significantly higher donation intention to the humanitarian cause ( $M_{\text{humanitarian}} = 4.97$ ) than to the environmental cause ( $M_{\text{environmental}} = 3.44$ ;  $F(1,76) = 15.02, p < .01$ ). However, those in the holistic condition did not differ in their donation intention toward these causes ( $M_{\text{environmental}} = 4.31$  vs.  $M_{\text{humanitarian}} = 3.95$ ;  $F(1,83) = .79, p > .30$ ). In this study we also demonstrate the mechanism for the above effect. We show that analytic thinkers' greater empathetic reaction to humanitarian causes than to environmental causes lead to their greater intention to support the humanitarian causes than the environmental causes. On the other hand holistic thinkers' uniform empathetic reaction towards both types of causes leads to their uniform intention to support both types of causes. In study 4 we kept the cause for donation the same and manipulated the nature of impact as either on human beings or on the environment. A significant interaction effect of thinking style and type of impact ( $F(1,131) = 4.24; p < .05$ ) showed that analytic thinkers showed greater donation intention for humanitarian causes ( $M = 4.46$ ) than for environmental causes ( $M = 3.51$ ) ( $F(1,61) = 4.05; p < .05$ ). For the holistic thinkers, the difference ( $M_{\text{environmental}} = 3.87$  vs.  $M_{\text{humanitarian}} = 3.58$ ) was nonsignificant ( $F(1,70) = .59; p > .40$ ). Study 5 shows that framing the outcome characteristics of a donation cause in a certain way may influence peoples' attitude towards supporting the cause. A 2 (thinking style)  $\times$  2 (nature of outcome) ANOVA revealed that the analytic thinkers wanted to donate more when the outcome was framed as more specific and immediate than when it was framed as more broad and delayed whereas the holistic thinkers showed similar intentions to donate across the framing conditions ( $F(1,116) = 4.55; p < .05$ ).

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# Conceptualizing New Product Buzz

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## EXTENDED ABSTRACT

The immediate success of a new product can be crucial for its survival in the market. For this type of success to occur, a high number of consumers have to make adoption decisions before the new product is available (i.e., “shadow diffusion,” Peres, Muller, and Mahajan 2010). As no quality information from independent sources is available in the market before the release of a new product, action signals are especially relevant (Bikhchandani, Hirshleifer, and Welch 1992; De Vany and Lee 2001). In the popular press and the academic literature, the existence of “buzz” for a new product is frequently noted as an important driver of such shadow diffusion processes and as an action signal that determines early market success. For example, the success of iPhone models (Kissmetrics 2013), blockbuster movies (Strauss 1997), and even some IPOs (e.g., Facebook’s IPO; NM Incite 2012) have all been attributed to a firm’s ability to build “buzz” for its new product.

But what is buzz that plays such a crucial role for new product success? Is buzz just another term for word-of-mouth (WOM)? We conduct a systematic review of the academic literature that reveals that the term is mostly used in vague and heterogeneous ways. Among other notions, buzz is referred to the amount of interest in a new product (e.g., as expressed by search volume; Ho, Dhar, and Weinberg 2009) or associated with the contagiousness/spread of a product (e.g., via recommendations made by users; Biemans, Griffin, and Moenart 2010), in addition to being equated with word-of-mouth communications (e.g., Liu 2006). This lack of consensus among scholars makes empirical findings on buzz hard to interpret and to compare, as associated phenomena and measures differ strongly. This research employs qualitative methods to develop a rich understanding of the conceptual nature of the buzz construct and then uses this understanding to create a powerful, theory-based measure of new product buzz. This theory-based conceptualization is then tested using secondary data on all widely-released movies in the years 2010 and 2011.

After reviewing the use of buzz in the academic literature, study 1 isolates consumers’ theories-in-use regarding buzz by analyzing the data from depth interviews with 40 enthusiastic consumers across five different product categories. Three additional focus groups with a total of 39 respondents are further conducted to test emerging conceptualizations and to probe even deeper findings. We find that according to consumers’ theories-in-use buzz differs conceptually from word-of-mouth in multiple regards. Buzz not only relates to communication, but also comprises search and participatory activities. Moreover, it becomes clear from the data that buzz involves two dimensions, namely the amount of such behaviors, as well as their societal pervasiveness (i.e., their dispersion across the population; see also Godes and Mayzlin (2004) for a related construct in the context of WOM). We thus define buzz as *the amount and pervasiveness of consumer communication behaviors, search behaviors, and participatory experiences regarding a new product that are socially observable*.

Does such a multidimensional and multibehavioral conceptualization of buzz provide additional insights when it comes to explain-

ing buzz’ role for product success? Drawing on publically available data from multiple sources including Twitter, Facebook, Wikipedia, and Google, study 2 sheds empirical light on the usefulness of this conceptualization. The authors apply regression analysis to a sample of all 254 movies that were widely released between 2010 and 2011 in North American theaters. The findings confirm the significant positive association of prerelease buzz and early product success. When comparing different measures that reflect the different types of behavior and different levels of pervasiveness, we find that a multi-dimensional operationalization of buzz outperforms extant measures substantially in terms of opening weekend box office variance explained and reductions in prediction error. Comparisons among models further show that both volume and pervasiveness matter when conceptualizing buzz. Results also confirm that multiple behavioral facets are superior to single behavioral facets when it comes to modeling the true nature of buzz.

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# Reaction Utility

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## EXTENDED ABSTRACT

In some situations, individuals will experience an external stimulus – a change in the environment --after they exhibit a behavior, and other situations they do not. Will individuals be more likely to repeat the behavior if they experience a stimulus or if they do not? This is one of the most fundamental questions in psychology, as it concerns the basic relationship between stimulus and response. The most celebrated principle concerning this question is operant conditioning, according to which, the answer depends on the nature of the stimulus. With everything else being equal, an individual will be more likely to repeat a behavior if it is followed by a positive stimulus -- a reward -- than if it is not, and will be less likely to repeat a behavior if it is followed by a negative stimulus -- a punishment -- than if it is not (Skinner 1953, 1957, Thorndike, 1898).

In this research, we explore an additional principle orthogonal to operant conditioning. We propose that besides the valence of a stimulus, the presence of a stimulus alone carries a reinforcing value for two reasons. First, a stimulus that follows a behavior serves as a reaction to that behavior. A reaction usually conveys useful information if it represents something important to the person and tells the person whether she has control or influence over that, and if so, how much control or influence she has. Such information is useful because it can help the person adjust her behavior. In these situations, it is normative that the person will find a behavior more engaging and more motivating if it yields a reaction than if it does not, even if the reaction is non-positive. Second, because reactions often carry useful information, people have learned, through human evolution, one's learning history or both, to seek reactions and engage in behaviors that generate reactions. Existing research suggests that many tendencies (habits, heuristics, etc.) are learned and internalized through situations in which they are functional, yet they continue to operate even in situations in which they serve no particular functions (Amir and Ariely, 2007, Arkes and Ayton, 1999, Baron, 2000). Likewise, the tendency to seek reactions and hence to engage in reaction-generating behaviors may also generalize itself from situations in which reactions convey useful information to situations in which reactions do not.

Specifically, we submit two hypotheses. First, an individual will be more likely to repeat a behavior if the behavior is followed by a stimulus than if it is not, even if the stimulus is neutral or slightly negative, and does not convey useful information (i.e., the reaction effect). Second, this effect will hold if the stimulus is contingent on the behavior (i.e., the contingency effect). We conducted four studies that tested our two hypotheses, one about the reaction effect and one about the contingency effect. All of the studies involved real behaviors rather than hypothetical choices, and the last study was a field experiment involving real donations.

Study 1 demonstrated that the provision of a slightly but significantly negative image (i.e., a brown circle) could increase participants' continuance on a tedious cognitive activity (i.e., typing passwords on a computer) and that the effect occurred only if the provision of the stimulus was contingent on, and, hence, perceived to be a reaction to the activity.

Study 2 demonstrated that the presence of a neutral and non-informative sound could significantly increase individuals' persistence

on a physical exercise (i.e., one-foot hopping) and that the effect occurred only if the sound was contingent on the activity.

Study 3 was a replication of Study 2 using a negative sound, involving a different physical task (i.e., jumping). It showed that the presence of a negative and non-informative sound could significantly increase individuals' persistence on the physical exercise, willingness to continue, and feelings of engagement, and that the effect occurred only if the sound was contingent on the activity. It also provided some process evidence by showing that feeling of engagement mediated the effect of reaction on the target behavior.

Study 4 was a field experiment that applied the reaction effect to real donations behavior. We conducted the study in a coffee shop over a two-day period. The shop was running a campaign to solicit donations to feed homeless cats. The manipulation of the study lay in the donation box. It had two versions, one with and the other without sound. The sound version would emit a 0.7 second slightly negative sound every time one inserted a coin. The no-sound version would not emit any sounds. During each of the two days on which we conducted the study, we alternated the sound and the no-sound versions of the device every hour so that some customers would encounter the sound version and others the no-sound version. Replicated the reaction effect found in the other studies, we found that that customers in the sound condition donated significantly more coins than those in the no-sound condition. The sound manipulation did not influence the percentage of customers who donated.

The current research contributes to several existing bodies of literature. First, it complements the classical behavioral learning literature by showing that even neutral or slightly negative stimuli can serve to reinforce behaviors. Second, it contributes to the existing literature on feedback and task performance by showing that even non-informative reactions can induce people to work more or donate more. Third, it enriches the existing literature on control by showing that even behaviors that only allow one to control something trivial and meaningless can be engaging. Finally, the current research joins a growing body of literature showing that subtle psychological manipulations can influence people's behaviors in real life (Thaler and Sustein, 2008; see also Hsee et al., 2013, Jain et al., 2013, Larrick and Soll, 2008, Soman and Cheema, 2011, Zhao, Lee and Soman, 2012).

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# More Than Scarcity: How Consumers Make Sense of Stock-out Using Social Inference

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## EXTENDED ABSTRACT

Numerous researchers have pointed out that scarce objects are perceived to have high value (Dai, Wertenbroch, and Brendel 1998; Fromkin 1970; Lynn 1991). Such judgment is usually explained by one or the combination of the following reasons. First, scarce objects are more unique than abundant objects and therefore require more resources to acquire (Fromkin 1970). Second, people respond to the loss of the freedom of choosing certain options by wanting them more (Cialdini 2009). Third, people assume that the scarcity is a result of extensive choice by others, and further assume that others chose that object because it has higher value (van Herpen et al. 2009).

In the present research, we are interested in how stock-out, a typical and extreme case of product scarcity, affects consumers' choice among the in-stock options. In line with van Herpen et al. (2009), we argue that consumers react to product stock-out in accordance to their inference about why the focal product gets extensively chosen. However, extending the previous literature, we find that such inference goes beyond the judgment of the overall value of the product; rather, judges are sensitive to the context in which others made their choice. Consequently, the influence of stock-out on the judges' subsequent choice is affected by their attribution of others' choice according to others' expertise, goals, and choice constraints.

In study 1, we show that if other consumers have expertise on evaluating one of the multiple attributes of a product, that particular attribute would be identified as the key attribute that drove the focal product out of stock; consequently, other products that share this key feature (i.e. the same value on this key attribute) would gain choice advantage. Participants were told that there were three wine-cheese gift baskets: 1) Wine A + Cheese A, 2) Wine A + Cheese B, and 3) Wine B + Cheese A. Depending on conditions, participants were told that option 1 (Wine A + Cheese A) had been sold out either to a group of wine experts, or to a group of cheese experts, and were asked to choose between the rest two options. As a result, option 2, which shared the same wine as option 1, gained choice advantage when option 1 was sold out to wine experts. In contrast, option 3, which shared the same cheese as option 1, gained choice advantage when option 1 was sold out to cheese experts. This result suggests that the wine (vs. cheese) experts' choice of the gift basket is more informative about the wine (vs. cheese), as participants made inference based on other consumers' (i.e. the experts') expertise, and chose accordingly.

In study 2, we show that if other consumers have a shopping goal for which they need to focus on one of the multiple attributes of the product, that attribute would be identified as the key attribute, and other products that share this key feature would gain choice advantage in the judges' subsequent choice. This study is a field experiment conducted in a local restaurant. Customers visiting the restaurant were presented either a full menu which offered four meal combos to choose from (entrée A + drink A; entrée A + drink B; entrée B + drink A; entrée B + drink B), or the same menu with the first

combo (entrée A + drink A) marked as sold out. A pretest conducted in the lab identified that consumers' main goal in such a consumption situation is more likely to be "having good food" than "having a good drink". As a result, entrée A being superior was believed to be the main reason that would drive the first combo out of stock, and the second combo, which shares the same entrée, consequently gained choice advantage over the other two options in the field when the first combo was sold out.

In the last study, we show that if other consumers have to choose product with a certain feature on one of the two product attributes, the \*other\* attribute would be identified as the key attribute that drove the focal product out of stock, and other products that share this key feature would gain choice advantage. Participants were told that a tour company offered tours to watch sunrise or sunset, both of which could be enjoyed in a mountain or at a beach. Depending on conditions, they were also told that the sunrise tour to the mountain had been sold out due to a group of tourists with two different kinds of needs. As a result, participants were more likely to choose the sunset trip to the mountain in the condition where the other tourists needed to catch a flight at noon; in contrast, participants were more likely to choose the sunrise trip to the beach in the condition where the other tourists stayed at a hotel from which the beach was too far away to travel.

Taking together, the present research demonstrates that product stock-out can influence consumers' preference among in-stock products; that influence is shaped by consumers' inference on the reason of the focal product out of stock. The inference is not simply made on the overall value of the focal product, but rather on the attribute level and is based on contextual information such as the previous choice makers' expertise, goals, and choice constraints. Contributions to the literature of product stock-out and the literature of social influence on choice are discussed.

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# WWJD? The Effect of Religious Mindsets on Consumer Responses to Organizational Failures

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## EXTENDED ABSTRACT

Consumers encounter religious stimuli on a regular basis, not only through interactions with religious firms, but also via proximity to religious institutions, or exposure to religious music, symbols, or phrases that bear religious connotations such as the bumper sticker “WWJD?” (What Would Jesus Do?). As such, consumers may be influenced by religious mindsets more often than firms are aware, so it is important to determine how such mindsets affect consumer attitudes and behaviors. Mindsets are temporary, situation-activated frames of mind. In this paper, we focus on the effects of a religious mindset. We argue that, following an organizational failure, consumers in a religious mindset will demonstrate greater willingness to forgive the organization.

Forgiveness entails a transgressed victim’s reduction of negative (and usually increase in positive) thoughts, feelings, motivations, and behaviors toward a transgressing offender (Lawler-Row et al. 2007). Forgiveness is highly valued by religions and religious individuals (Barnes and Brown 2010). Forgiveness, however, can be conditional on repentance and other criteria. For example, in Judaism, an offended individual is only obligated to forgive if their transgressor has gone through the process of *teshuvah*, which includes an expression of remorse, compensation to the victim for the transgression, and a commitment to avoid repeating the offense (Rye et al. 2000).

Identified recovery tactics include apology, explanation, and compensation. Broadly, these take two forms: financial and socio-emotional (Smith and Bolton 1998). From a religious standpoint, we argue that socio-emotional recovery (implying remorse and repentance) may be more likely to prompt forgiveness than would financial recovery.

Together, we therefore hypothesize that:

*Hypothesis 1: Consumers in a religious mindset (vs. not) will respond more favorably to brand failure when accompanied by recovery (vs. not).*

*Hypothesis 2: For consumers in a religious mindset, socio-emotional recovery will be more effective than financial recovery.*

*Hypothesis 3: The positive effects of a religious mindset will be mediated by forgiveness.*

## Experimental Results

Across five experiments, we demonstrate that religious mindsets (as compared to neutral mindsets) promote greater consumer satisfaction and intentions with an organization following an organizational failure. Studies 1A and 1B employ pre-/post- designs to show that for participants drawn from both Judeo-Christian (1A) and non-Judeo-Christian (1B) populations those who are in a religious mindset (induced via sentence scramble) will demonstrate greater increases in satisfaction post-recovery. Studies 1A and 1B used recoveries that included apologies (socio-emotional) as well as compensation (financial) elements.

Study 2 used a religiously-themed advertisement to induce religious mindsets, while disentangling consumer responses to socio-

emotional versus financial elements of firms’ recovery efforts. This study demonstrated an interaction between mindset and socio-emotional content, but not between mindset and financial content, supporting H2. Specifically, participants in religious mindsets responded more negatively to recoveries with low socio-emotional content and more positively to recoveries with high socio-emotional content.

Study 3 followed up on study 2 by only manipulating socio-emotional recoveries, and extending beyond the restaurant context employed in studies 1A, 1B, and 2 to an athletic context. All participants then read a scenario that described a star player making costly mistakes that ultimately lead to a favored team losing an important game. The player later addresses the media in an apologetic or non-apologetic manner. Participants in a religious mindset reported more positive intentions following a strong socio-emotional recovery, as well as more negative intentions following a weak socio-emotional recovery.

Study 4 was designed to explore whether costliness of failure moderated the effects of religious mindsets and also to demonstrate the effects of religious mindsets in response to a real failure. Participants completed a survey that had an element which electronically failed, following which an error screen appeared that was apologetic or not. Costliness was manipulated by having to re-do the task associated with the error. There were no significant interactive effects of cost, but rather a 3-way interaction between mindset, socio-emotional recovery, and perceptions of message sincerity. Those in a religious mindset who perceived the message as insincere more negatively rated the organization.

Studies 1B, 2, 3, and 4 all measured forgiveness and found that these feelings mediated the reported effects.

## General Discussion

Across five studies, we demonstrate that a religious (vs. neutral) mindset drives more favorable responses to recovery following brand failure. Importantly, consumers in a religious mindset respond more positively to a recovery with sincere socio-emotional content, and negatively to a recovery with insincere socio-emotional content. In the absence of recovery, a religious mindset does not affect consumer response (such as reduced satisfaction with a brand failure)—pointing to the role of forgiveness prompted by firm recovery efforts.

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# Do Round Numbers Influence Consumer Debt Repayment?

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## EXTENDED ABSTRACT

It has long been known that retail prices are usually set at round numbers or at numbers that are just below round numbers. Price-ending incidence studies typically observe a characteristic three-peaked “E” shape, with peaks at numbers ending in 0, 5, and 9 (Schindler 2009; Schindler and Kirby 1997; Twedt 1965). Prior research has documented that the use of prices ending in 9 can sometimes have a substantial positive effect on sales. Although multiple psychological mechanisms have been offered for this phenomenon, one explanation that has received considerable empirical support is the meaning mechanism. According to this explanation, the number 9, particularly in the right-side digit of prices, has obtained a symbolic meaning which increases its attractiveness. For example, 9 or 99 may connote “bargain” or “low price” to consumers, thereby producing a local upward “spike” in purchases at 9-ending prices relative to other objectively similar amounts. However, little work exists to account for the over-representation of 0 and 5 endings. Thomas et al. (2010) have found that round numbers are perceived by consumers as larger, but that should make them less, not more, likely to be used by retailers. And while there is evidence that 0- and 5-ending prices may be a signal for high quality, they may also signify a high price or expensiveness (Naipaul and Parsa 2001; Schindler, Parsa, and Naipaul 2011; Stiving 2000).

In this research, we examine whether numerical spikes affect another type of financial decision that often follows the purchase of goods or services. Specifically, we explore whether and how consumers are influenced by number endings when considering debt repayment. Consumer debt is pervasive, particularly in the United States; yet, the psychological factors that determine whether or not consumers will quickly repay their debts are not well-understood. Our investigation centers on two related questions: If repayment rate spikes do occur at specific number endings, which numbers are the most likely candidates? And will these spikes point upward (i.e., indicating higher repayment rates) or downward (i.e., indicating lower repayment rates)?

With respect to the first question, one possibility is that the 9-ending spikes that arise when consumers evaluate prices also occur when they consider debts. Because both prices and debts are usually expressed as monetary terms, the same meaning mechanism might apply to both situations. That is, consumers may perceive 9-ending debts as “low,” which may in turn influence the likelihood of repayment. In support of this possibility, prior empirical work has documented 9-ending effects in non-price domains, including perceptions of product quality ratings.

On the other hand, the decision to repay a debt is very different from the decision to purchase a product; thus, the connotations of “bargain” and “low price” do not necessarily apply. Even if the meaning transfers, it is unclear if the direction of the resulting spike will be upward or downward in the context of debt repayment. If one’s debt amount is perceived to be low, a consumer may become more motivated to quickly “clear the books.” However, perceiving one’s debt as low could instead diminish the burden of obligation or the urgency of repayment, thereby making a consumer less likely to take action. If both of these effects occur simultaneously, they might cancel each other out, resulting in the absence of repayment spikes for 9-ending debts overall.

An alternative possibility is that repayment rates may spike at “round” numbers instead of at 9-endings. Although prior research sometimes designates round numbers as those used in approximate expressions (e.g., 10, 20, 25, 30, 40, 50, 100, 1000), we follow a broader definition that considers all zero-ending and 5-ending numbers as round but acknowledges variation in “roundness” among this set.

In contrast to the “low” connotation of 9-ending prices, round number prices may be imbued with the symbolic meaning of “high” or “large.” Indeed, prior research has shown that round prices (e.g., \$364,000) were considered larger than comparable “sharp” prices (e.g., \$364,578). This may be a learned association, formed because people tend to use round numbers when communicating amounts of large magnitudes. If round-number debts are considered to be high, opposing predictions can still be made about the direction of the ensuing repayment spike for the same reasons that were previously articulated when discussing 9-endings.

The potential debt repayment spikes discussed thus far all relate to a meaning mechanism wherein 9-endings are perceived as “low” and/or round-number endings are perceived as “high.” As already discussed, however, the link between perceived debt size and likelihood of repayment is not clear-cut. We therefore advance a different hypothesis which predicts only an upward round-number spike based not on meaning, but on a metacognitive mechanism.

Our proposal is that consumers may be inclined to repay round-number debts faster than other number endings because round numbers are cognitively fluent— they are easy to process, produce, and recall. We first tested these competing hypotheses in two field studies. In the first study, we obtained patron-level data from a university library on fines charged over a three-year period. We found that patrons were much more likely to take action on library fines (e.g., by paying them or by requesting a waiver) when the amount owed ended in a round number (e.g., \$.50 or \$.00) rather than a sharp number (e.g., \$.20, \$.40, etc.).

In a second field study, we examined data from an automated communications service used by a cable company to collect on delinquent payments. Applying logistic regressions on a cross-section of delinquent subscribers’ binary decisions of whether to pay off their balances, we found robust evidence that accounts with a balance ending in a round number (e.g. \$150, \$205, etc.) were much more likely to be repaid than accounts with a sharp-number integer balance (e.g. \$146, \$208, etc.). These results were obtained after potential confounding factors were accounted for, including the size of the delinquent account balance, the unique number of communication attempts to solicit payment, the tenure of the account, the gender of the subscriber, and the number of subscribed services (e.g., Internet, cable, etc.).

In a subsequent lab experiment, we provided converging evidence that consumers are more likely to repay round numbers versus debts ending in sharp numbers, including 9-endings. However, this effect was only observed when participants were under cognitive load. Under conditions of no load, consumers were equally likely to pay round and sharp number debts. This finding suggests that the round-number effect in debt repayment may be due to ease of processing, rather than any signaling-based explanation. In addition to its obvious managerial implications, this work provides a more nuanced picture of how round numbers influence important consumer financial decisions.

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# (The Lack of) Processing Fluency and Attitude Enhancement

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## EXTENDED ABSTRACT

Research has consistently found that stimuli with higher processing fluency are better liked. This paper reports three studies which show that a time delay of only a few minutes and a misattribution prime makes subjects attribute the experience of ease or difficulty to the decision making process, which results in a reversal of the traditional fluency effect. Studies 1 and 2 show that the attitudes toward less-fluent-difficult-to-read stimuli increased significantly after subjects were made to mis-attribute the efforts spent in processing the stimuli to the decision making task. The third study investigates the underlying phenomenon by manipulating the source to which subjects attribute the experience of fluency.

We suggest that, in a decision making scenario, the experience of processing ease can be attributed either to the features of the object or to the effort spent in making a decision. The former results in the traditional fluency effect while the latter influences the preference for the results of the decision. We show that, due to this process, the difficulty experienced in reading the attributes of the products in a “hard to read” font, results in an increase in the attitude ratings towards the chosen product. We conduct studies where subjects need to make a choice between two fluent options, between two disfluent options or between two options that are significantly different in processing fluency. With the help of these studies we show that the attitude towards the less fluent stimulus increases significantly after the attribution is made. In our third study we verify our ‘attribution’ based rationale for this phenomenon.

When subjects have to choose between multiple stimuli that are all low in fluency, they will need to expend more time and effort on the task. The spent effort can be misattributed to the decision making process. Their attitude towards the chosen option should increase significantly after such a misattribution because people value decisions for which they have expended a great deal of effort. Conversely, a similar increase in attitude should not be observed when subjects need to choose between multiple fluent (easy to read) stimuli. In this case, subjects will spend less time and effort on the choice task because subjects will find it easy to read and process the stimuli. Thus, the increase in attitude towards the stimuli after the misattribution should be significantly higher in the less-fluent-stimuli choice task scenario than in the more-fluent-stimuli choice task scenario.

Study 1 was a mixed factor design. A participant either made a choice between two highly fluent stimuli or two less fluent stimuli. The attitude towards the stimuli were measured both before and after the misattribution prime. The change in attitude was analyzed as the dependent variable. The results confirmed our prediction. The usual pattern of high fluency being associated with greater liking was replicated in the measures taken before the buffer task and choice task (-.669 Vs 2.10;  $F(1, 104)=55.50; p<.001$ ). However, after the buffer task, the attitudes increased significantly in the low fluency condition when compared to the high fluency condition (Attitude change= 2.053 vs. .056;  $F(1, 104)=30.225; p<.001$ ).

We hypothesized that similar results will be seen if fluency of stimuli is manipulated as a within subject factor using both low fluency and high fluency options in the same choice set. As shown in previous literature, before the misattribution task, the attitude towards the highly fluent stimulus will be higher than the less fluent stimulus. There will be less time taken to make a decision because the participants will choose the high fluency option over the low fluency option due to the positive affect caused by fluency. However, when the ease experienced is attributed to the decision making process, the attitude will decrease towards the highly fluent stimulus and will increase towards the less fluent stimulus.

Study 2 was a within subject design. Each participant was shown one high fluency stimulus and one low fluency stimulus. The attitude towards the stimuli were measured before and after the misattribution prime. Results showed that the attitude increase towards the less fluent stimuli was significantly more than the attitude increase towards the more fluent stimuli (.493 vs. -.282;  $F(1, 69)=6.245; p<.05$ ). Moreover, the attitude towards the less fluent stimuli increased significantly ( $p < .05$ ). In fact, the attitude towards the highly fluent stimulus marginally decreased after the time delay as per the hypothesis H2a ( $p= 0.118$ ).

We predict that we can remove the effect if the individual does not attribute the experience of ease (or difficulty) to the decision making process if, after the time delay, it is made salient to the individual that the effort was due to the readability of the font. Hence, the result mentioned above should be reduced when subjects do not consider the role of the decision making process in the experience of fluency.

Study 3 was a mixed factor design. All participants were shown two stimuli in a less fluent font. The attitude towards the stimuli for each participant were measured before and after the misattribution prime. Half the participants were made to misattribute the fluency experience to the decision making process and the other half of the participants were made to attribute the fluency to the readability of the stimuli. The results confirmed that the increase in attitude after the time delay in the ‘readability’ condition was significantly less than what it was in the ‘difficulty-in-decision-making’ condition (.799 vs. 1.869;  $F(1,81)= 5.537; p <.05$ ). Note that we had predicted that the attribution of experienced fluency to the decision making process is a cause for the change in attitudes towards the products. Study 3 validates this rationale.

In summary, we demonstrate in three studies that, in a decision making domain, the attitude towards the less fluent stimulus increases after the fluency experience is misattributed to the decision making process. We have shown that the increase in attitude favorability towards the less fluent stimuli is significantly more than that towards the more fluent stimuli. This result is shown in the scenario where subjects decide between a high fluent stimulus and a low fluent stimulus as well.

# Cultural Brand Engagement: The Roles of Brands in the Construction of Cultural Experiences

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## EXTENDED ABSTRACT

Without question, consumers and brands continue to be an important focus of consumer researchers, particularly in a global world, as consumers move across countries and encounter different contextually dependent meanings of products and brands. Notably, consumers' usage and involvement with brands vary across cultures (Strizhakova, Coulter, and Price 2008) and individual brand meanings may evolve or morph across time and place (Bengtsson, Bardhi, and Venkatraman 2010; Ligas and Cotte 1999; Kates and Goh 2003). Brand engagement, defined as "cognitive, emotional, behavioral activity in direct brand interactions" (Hollebeck 2011, 790), includes both experiential and instrumental activities with brands (Brodie et al. 2013) that may be influenced by the cultural context in which such brand activities take place. In this research, we explore cultural brand engagement; that is, how consumers engage with brands within a new cultural space, to shed light on the experience-dependent and contextual nature of consumer-brand engagement. In contrast to previous research, our work provides a nuanced understanding of how consumers react to, and negotiate, cultural brand meaning differences. In particular, we show that cultural border crossers purposefully and proactively use brands as part of experiencing a new cultural context.

We explore cultural brand engagements using an interpretive approach. Our research focuses on a specific border crosser; the sojourner, defined as a temporary resident of a culture. Specifically, we explore how cultural brand engagement is embedded in the specific cultural experience of international students studying at an American college; a microcosm within the broader American culture with specific culturally anchored activities (Moffatt 1991) where American students provide the idealized scripts for participation in college activities. Thus, the American college context provides us with an opportunity to fully explore the instrumental and experiential roles of brands in the construction of a temporary cultural experience.

We purposefully recruited international students from countries with different cultural, political, and economic environments (United Kingdom, France, Ireland, Iran, Turkey, China, Taiwan, India). An all-female sample was selected to focus on cultural differences in experience construction and instrumental and experiential brand use. Our sample included 16 females, age 20 to 30 who had resided in the United States for 3 months to 3 years before the first interview. With an objective to capture informants' emic perspectives (Wallendorf and Arnould 1991) of cultural exploration and brand use, we conducted two semi-structured interviews, three to four months apart, with each informant (Lincoln and Guba 1985; McCracken 1988). All interviews were audio-recorded and transcribed. Cultural brand engagement themes were uncovered by using an iterative process (Spiggle 1994), moving back-and-forth between informants and across the entire data set to uncover specific categories, concepts, and contextual influences which were subsequently compared to extant theory. Specific instrumental and experiential aspects of brand use were coded and compared both within informants and across informants to capture different types of brand engagement and the relationship between participation in specific cultural activities and brand usage.

Our findings document that sojourners' cultural brand engagement is embedded in (1) the desired cultural experience, (2) participation in cultural activities, (3) the instrumental and experiential role

of brands in cultural participation, and (4) the reliance on brand related semiotic cues for assessment and judgment of brand relevance to cultural participation. In particular, our findings highlight the importance of considering the sojourner's desired cultural experience as a driving force behind the degree of participation in cultural activities and the use of brands as part of the experience construction. For sojourners who desire cultural discovery, full cultural immersion is necessary and, as a consequence, these sojourners search for brands that can facilitate cultural insider status. In contrast, for sojourners who desire the realization of a specific and pre-determined cultural experience (often inspired by home culture media), participation in cultural activities is primarily focused on dramatically enacting their experiences according to expectations by using brands that are presumed to have cultural significance. Finally, for those sojourners who desire an exciting cultural experience that differs from what can be experienced in the home culture, participation in cultural activities is superficial and selective, and brands are seen as vessels for novelty exploration. Overall, these findings contribute to our understanding of consumer-brand engagement by showcasing the relationship between experiential motives, participation in cultural activities, and brand use.

Our work offers a theory of cultural brand engagement, making significant contributions to research on consumer-brand engagement and the role of brands in the construction of cultural experiences. First, we explore the experience-dependent nature of consumer-brand engagement. Specifically, we examine the importance of cultural immersion to consumers' instrumental use of brands within a temporary cultural context. Second, by relying on sojourners' emic understanding of what is "cultural" about their experience, we gain an understanding of the different types of cultural brand meanings and cues that are deemed as relevant by consumers when engaging with brands within a temporary cultural context. Our findings reveal that the meanings of brands not only morph across cultural contexts, but also that sojourners purposefully alter their interpretation of brand meanings to suit their pursuit of a rewarding cultural experience. Thus, our findings shed light on the importance of understanding how the cultural meanings (i.e. usage, representativeness, symbolism) associated with a specific cultural context influence how consumers engage with brands. Finally, we contribute to extant research on border crossers (i.e., tourists, global nomads, immigrants) by showcasing how sojourners use brands when constructing their cultural experience and how temporary cultural residence influences brand engagement.

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# Give 'Em a Boost: Descriptive Norms Encourage Booster Seat Use with Low Involvement Parents

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## EXTENDED ABSTRACT

Social marketing campaigns frequently tell consumers that “other people are doing it, so should you,” using descriptive norms to motivate compliance with the advocated behaviour (Cialdini 2003). We identify a previously overlooked benefit; namely, that descriptive norms can significantly affect behavioural intentions when consumers are uninvolved in the topic.

Social norms are “(a) what is commonly done or (b) what is commonly approved or disapproved” (Kallgren et al. 2000, pg. 1002). The former is a *descriptive* norm, given it describes what consumers actually do. Descriptive norms provide a quick and efficient way to determine the best course of action; if everyone else is doing it, it is probably right (Cialdini et al. 1990). The latter is an *injunctive* norm, describing what consumers ought to be doing (Reno et al. 1993), and require more effortful processing.

One factor that may influence the relative effectiveness of each norm type is topic involvement (Göckeritz et al. 2010; Smith and Louis 2008). Highly involved individuals will review messages carefully (Petty and Cacioppo 1986), and injunctive norms should prove particularly effective. However, in public health campaigns committed consumers are not the target. Instead, efforts focus on changing behaviours of the disengaged. These individuals know what they should be doing, and yet lack the interest in doing so. Given low involvement leads to superficial message processing (Petty and Cacioppo 1986), we expect descriptive norms to be particularly impactful for this segment. Formally:

*Hypothesis 1: Positive (negative) descriptive norms will increase (decrease) overall behavioural intentions.*

*Hypothesis 2: Topic involvement will moderate these effects; individuals with low topic involvement (high involvement) will be more persuaded (unaffected) by descriptive norms.*

We examine these hypotheses in a novel but important research context: booster seat use. Motor vehicle accidents kill more children than any other hazard (Cunningham et al. 2011), and most at risk are children aged 4–8 (Snowdon et al. 2009). There exists a “high risk” segment of parents who do not use booster seats correctly in spite of extensive educational efforts (Snowdon et al. 2008), suggesting a lack of interest in the topic.

Participants (N=144, 35% male,  $M_{\text{age}} = 36$ ) were parents of at least one child in the booster seat age range of 4–8, recruited equally from Alberta and British Columbia using an online panel. In Alberta booster seats are not mandatory, whereas they are legally required in British Columbia. The study employed a two-way (descriptive norm: positive vs negative) between-subjects design, with the proposed moderator variable of issue involvement as a continuous measured variable. Self-reported intentions to use booster seats served as our primary dependent variable.

Prior to seeing the booster seat poster – the same for both groups – participants were exposed to the descriptive norm corresponding with their province. Participants in British Columbia were

told that, “booster seats are required by law...many parents comply with BC provincial regulations,” and in Alberta that “booster seats are not required...most parents choose to use a seat belt alone”. Parents then reviewed the poster outlining the benefits of booster seats, and data was collected on behavioural intentions, topic involvement, and demographics prior to debriefing. To minimize the social desirability bias of the intention measure, “imagine that” questions were crafted based on scenarios taken from the literature of when parents might forgo using a booster seat (for example, “imagine your child was being bullied for using a booster seat”; Cunningham et al. 2011). Seven, seven-point likelihood questions were created and summed to form a composite behavioural intention score ( $\alpha = .88$ ) which served as the main dependent variable. A small pre-test conducted in the same sample population ( $n = 64$ ) revealed no correlation between our intentions scale and the Marlowe-Crowne social desirability scale ( $r = .036, p > .1$ ; Crowne and Marlowe 1960). This suggests our scale is not susceptible to social desirability bias effects (Kidwell et al. 2008), making it an attractive alternative to more standard behavioural intention measures. Topic involvement was measured using a single item sliding scale, where participants indicated how “involved they felt in the topic” (0 = not at all to 100 = extremely).

A series of t-tests comparing groups revealed no significant between-group differences on age, gender, or number of children (all  $ps > .1$ ). Most parents (92%) owned a booster seat. To test our hypotheses, we regressed intentions on condition (positive norm (BC) = 0; negative norm (AB) = 1), the continuous topic involvement scale measure, and the interaction of the two (Hayes 2013). In support of hypothesis 1, results show a significant main effect of descriptive norm ( $\beta = -.10, t(140) = -2.88, p < .01$ ), with British Columbia parents shown a positive descriptive norm indicating higher intentions to use booster seats ( $M = 44.4$ ) than Alberta parents shown a negative descriptive norm ( $M = 41.2$ ). There was no main effect of topic involvement ( $\beta = .02, t(140) = .54$ ). More importantly, there was a significant interaction of descriptive norm condition and topic involvement ( $\beta = .1079, t(140) = 2.17, p < .05$ ). To interpret the interaction, further analysis was conducted at one standard deviation above and below the mean of involvement (Aiken and West 1991). For participants who reported low involvement, positive descriptive norms significantly increased overall intentions as compared to participants shown negative descriptive norms ( $M_{\text{positive}} = 43.9, M_{\text{negative}} = 38.5; t(140) = -3.46, p < .01$ ). For participants reporting high involvement, descriptive norms had no impact on intentions ( $M_{\text{positive}} = 44.7, M_{\text{negative}} = 44.2; t(140) = -.37$ ).

Public health campaigns are not designed to target the committed; after all, they are already conforming. Motivating the disinterested can be a time-consuming, frustrating, and challenging endeavour, and yet these findings suggest that descriptive norms may be an easy and efficient solution. It appears that there is an important segment of the population who will be particularly swayed by descriptive norms – the uninvolved – providing social marketers a way to “boost” these high risk individuals in the right direction.



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# Shorter Physical Distance Makes an Event Seem More Likely to be True

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## EXTENDED ABSTRACT

People's estimates of likelihood judgments of an event can depend on their affective (Wright & Bower, 1992), visceral (Risen & Critcher, 2011), and cognitive state (Wakslak & Trope, 2009). However, few studies have examined subjective probability estimation from an embodiment perspective. In the present research, we propose that people's estimates of probability is grounded in their experience of physical distance (Van Boven, Kane, McGraw, & Dale, 2010) and that this experience can influence both these estimates and their behavioral consequences.

Trope and Liberman (2010) distinguished four types of psychological distance - physical, temporal, social and hypothetical - that have analogous effects on judgments. That is, individuals use more abstract concepts to judge stimuli if the stimuli (a) are physically distant from them, (b) are more likely to occur in the future rather than immediately, (c) are socially distant rather than close, and (d) are unlikely to be true. Moreover, the similar effects of different types of psychological distance on judgments of stimuli suggest that the dimensions themselves are related (e.g., Bar-Anan et al., 2007). We were particularly concerned with the effects of physical distance on judgments of hypothetical distance, as reflected in estimates of the likelihood that a proposition or description of a stimulus is valid, or that an event will occur.

In most previous studies of these cross-dimensional effects, however, physical distance was not directly manipulated. That is, participants did not directly experience differences in physical distance but rather, were told to assume that stimuli varied in this respect (Trope & Liberman, 2010). Thus, although the effects observed reflected the semantic relations among the concept involved, they might not reflect the spontaneous effects of people's subjective experience of distance on their judgments. A possible reason is that temporal, social and hypothetical distances are metaphorical, so that manipulations along these dimensions do not map directly into subjective experience. However, although physical distance, unlike other dimensions of psychological distance, can be directly experienced, the effects of this experience have not been investigated to our knowledge.

The research we report examined this possibility. That is, we predicted that stimulating participants to experience stimuli at different physical distances would activate concepts of closeness or remoteness and that these concepts, in turn, would affect judgments of the closeness or remoteness of the events being described along a dimension of hypothetical distance, that is, judgments that the events were more or less probable.

To obtain preliminary support for our hypotheses, we conducted two field surveys. The first survey was delivered to people who had seen a metaphorical movie "The Life of Pi". We found that the closer people sat to the screen, the more likely they were to believe that that story was real rather than metaphorical. A second field survey was conducted in a class for undergraduates who had listened to a lecture on consumer psychology. After controlling for students' general seating preference, the proximity of students' seat to the front of the room was positively correlated with their agreement with that the lecture's content reflected "real marketing practice".

The interpretation of both studies, however, were compromised by the fact that participants' physical distance from the stimulus be-

ing rated was not random, and could have reflected participants' a priori interest in the material they saw or heard and their disposition to believe in its validity. Four lab experiments we conducted as follows eliminated this problem.

Experiment 1 and 2 provided direct evidence that people have a greater expectation of winning a computerized lottery when they are physically close to computer than when they are not, and that this is true regardless of whether the lottery outcome positive (i.e., receiving a reward) or negative (i.e., dancing in public).

Given that Experiment 1 and 2 manipulated physical distances by asking people to lean forward (i.e., proximal) or backward (i.e., distant) to the computer screen, it therefore seemed possible that people can sometimes infer the desirability of a stimulus from the physical sensation of approaching it (Labroo & Nielsen, 2010). In other words, participants' tendency to lean forward (approach) or backward (avoid) accounted for the effects we observed. To rule out this possibility, physical distance in Experiment 3 was manipulated by assigning participants to seats in the experimental room at different distances from the stimuli being judged. In this study, participants judged a product claim to be more credible when they are physically close to the information than when they are distant from it. We empirically found that this was the case in Experiment 3.

Experiment 4 examined whether people's physical distance from a communication that described aversive consequences of sleeping late could influence their estimates of the likelihood that the consequences would occur and the intentions to avoid the behavior. An additional consideration arises, however. Research on ego-protective motivation suggests that threatening information can induce defensive biases that also affect how the information is constructed, interpreted, remembered, and evaluated (Agostinelli & Miller, 1994). For example, anti-smoking advertisements have less effect on smokers' beliefs than on nonsmokers' beliefs (Agostinelli & Grube, 2003). Based on these considerations, we expected the effects of physical distance on beliefs to be less pronounced among people who are chronically disposed to stay up late than among those who go to bed early. Results of Experiment 4 confirmed this prediction.

To sum up, the present research found that physical distance decreased people's beliefs in the likelihood of both positive and negative events that participants encountered subsequently. These effects were not mediated by the effects of physical distance on processing difficulty, vividness or desirability. These results therefore support the hypothesis that the effects of these differences are grounded in and influenced by the sensory experience of physical distance. Although we only focused on probability estimates in the present research, physical distance seems likely to influence judgments other dimensions of psychological distance as well.

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# The Endowment Effect for Experiences

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## EXTENDED ABSTRACT

Products can be distinguished according to their relevant material and experience natures. Experience purchases are intangible, made with the primary intention of acquiring “a life event” or “series of events that one lives through”, whereas material products are “tangible objects, kept in one’s possession” (Van Boven and Gilovich 2003). Past research has shown experiences are more satisfying than material products (Van Boven and Gilovich 2003). What has not been examined is whether people value experience and material products differently and whether this valuation depends on the seller or buyer perspectives. This paper examines the difference between experience and material products in the market place -- willingness to pay (WTP) and willingness to accept (WTA), and how type of estimates (selling prices vs. buying prices) interacts with product type to influence valuation. Based on the literature on imagery processing (Macinnis & Price, 1987; Shiv and Huber 2000), we propose that experience elicits more mental imagery processing than material products for sellers, who focus on the benefit of the products, but not for buyers, who focus on the expenditure. As a result of this, experiences are valued more than material products for sellers but not buyers, leading to greater endowment effect for experience products. In line with this proposition, we show when mental simulation is encouraged, the greater endowment effect for experience (vs. material) product is exacerbated.

The paper contributes to the endowment effect literature, by demonstrating that the endowment effect depends on product type, and the experience products literature, by demonstrating the difference between experience and material possessions in imagery and valuation. Understanding this difference could give marketers insight into better pricing experience products.

*Hypothesis 1: The endowment effect is greater for experience products than material products.*

*Hypothesis 2: Selling experience products evokes more mental imagery processing than material products, and mental imagery mediates the effect of product type on willingness to accept (WTA). However, buying experience products evoke the same level of mental imagery processing as buying material products, and mental imagery does not mediate the effect of product type on willingness to pay (WTP).*

*Hypothesis 3: Prompting participants to form mental imagery exacerbates the greater endowment effect for experience products, but not for material products.*

Study 1 was a 2 x 2 design with product type (experience vs. material) and the type of estimate (selling prices vs. buying prices) as between-subject factors. We included three product categories as repeated measures and randomized the order. In the experience [material] product condition, the three product categories were ticket to one’s favorite author’s talk [one’s favorite author’s new book], ticket to one’s favorite band’s performance [one’s favorite band’s DVD collection], and movie ticket to a special one-time re-screen of the Lord of the Rings in 3-D [reprint of a signed movie poster of the Lord of the Rings]. Prices for all products were presented and were

kept the same for the experience and material counterparts in the corresponding category (e.g., DVD collection vs. concert). Participants in the seller condition imagined they possessed the products and indicated the minimum prices they were willing to sell the products; participants in the buyer condition indicated the maximum amount they were willing to pay for the products. Finally, they indicated the extent to which they like each of the product on a 1-7 scale (1 = not at all; 7 = very much).

We standardized the prices according to the market price (dividing participant’s valuation by market price), and used the standardized price estimates as the dependent variable. An ANOVA reveals a main effect of product type, a main effect of sell/buy perspective and a significant interaction between product type and type of estimates.

In the material product condition, the endowment effect was present. The endowment effect was present in the experience product condition, and the effect was greater than in the material condition, indicated by the significant product type x sell/buy perspective interaction.

Study 2 followed the same 2 x 2 between-subjects design as study 1 with the following modification. After participants indicated their WTP/WTA, they were then asked to answer three questions that capture mental imagery and one question that capture closeness to the self.

The effect of study 1 is replicated. Furthermore, we tested mental imagery as moderated mediator. We proposed and tested for Hayes model 8, in which the seller/buyer type of estimates moderated both the relationship between product type and mental imagery (indirect path) and the relationship between product type and price (direct path). A bootstrap with 5,000 draws was administered to examine the conditional indirect effects (Hayes 2012, model 8). Mental imagery mediated the relationship between price and product type for sellers (95% CI: 0.05, 0.20) but not for buyers (95% CI: -.08, .05). Closeness to the self does not serve as a moderated mediator.

In study 3, we tested H3 regarding the moderating effects of mental simulation on the endowment effect. If mental imagery is the mechanism, we would expect encouraging participants to form mental imagery would change the endowment effect. Because experience products are more compatible with mental imagery processing, we propose encouraging participants to mentally simulate will increase the endowment effect more for experience products than for material products.

Study 3 was a 2 product type (experience vs. material) x 2 type of estimates (selling prices vs. buying prices) x 2 mental simulation instruction (presence vs. absence) between-subject design. Mental simulation was manipulated by asking participants to imagine what the experience [material] product will be like and rate their anticipatory satisfaction for the experience [material] product (adapted from Shiv & Huber 2000).

An ANOVA with standardized price as the dependent measure and product type, type of estimates, mental simulation, and their interactions as independent variables, revealed main effects of product type, seller/buyer role, and mental simulation, three two-way interactions and a three-way interaction. We included subject ID as a fixed effect to control for subject-specific variation. The significant three-way interaction was such that the difference in endowment effect between experience products and material products was exacerbated when we encouraged participants to form mental images of products. Specifically, when mental simulation was absent, the endowment effect was present for

both material products and experience products; there was a marginally significant product type x type of estimates interaction. When mental simulation was present, the endowment effect was present for both material products and experience products. There was a significant product type x type of estimates interaction, indicating the endowment effect was greater for experience products than material products.

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# The Embodied Psychology of Time Limits: How Unrelated Motion States Shape Intentions to Act by a Deadline

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## EXTENDED ABSTRACT

Time limits designed to enhance desirable behaviors and decisions are ubiquitous in various domains from marketing to health to public policy to politics. Nearly all retail sales have a deadline to accelerate profits, auctions always launch countdowns to encourage bidding, flu shots are promoted by highlighting the need for early immunization, electors vote by deadlines, and professionals generally use self-imposed deadlines to boost their productivity. And deadlines are ubiquitous because they often work (Brannon & Brock, 2001; Cialdini, 2001; Lynn, 1991; for a recent review, see Brock & Mazzocco, 2004). Products become more popular when scarcity is imminent (Brannon & Brock, 2001; Aggarwal, Jun, & Huh, 2011), employees sign up for health plans more immediately before a deadline (Shu & Gneezy, 2010), auctions with a tight deadline motivate more late bidders (Ariely, Ockenfels, & Roth, 2005; Roth, & Ockenfels, 2002), and self-imposed deadlines improve work outcomes among professionals (Ariely and Wertenbroch, 2002). Despite the ubiquity of deadlines, their efficacy is not monolithic and seems to depend on the strength of the information associated with the deadline (Brannon & Brock, 2001; Ramanathan & Dhar, 2010), how difficult it is to meet the deadline (Janakiraman & Ordóñez, 2012), and the person's need for closure (Vermeir & Van Kenhove, 2005). In addition to these factors, we propose that the motion state of decision makers is likely to influence the effectiveness of deadlines by altering the perception that people are capable of making the deadlines. In this context, our research was guided by the following questions: Will decision makers who are in motion (e.g., walking, running) perceive that they can meet a deadline to a greater extent than decision makers who are static (e.g., standing)? Will these perceptions influence intentions to enact a behavior by a deadline? Will the effect of dynamic vs. static states be present even though the movement is objectively unrelated to the deadline?

In this paper, we propose that the motion state of deadline-information recipients can provide information about their ability to meet a deadline, even when the movement is objectively irrelevant to the deadline information. Moving immediately before exposure to marketing or health communications, for example, may lead people to attribute the high (vs. low) dynamism associated with walking (vs. standing) to their ability (vs. inability) to make a deadline. As a result, relative to people who are standing, those who are moving may infer greater ability to make the deadline and have stronger intentions to enact the recommended behavior (Ajzen, 1991; Bandura, 1977; Sniehotta, Scholz, & Schwarzer, 2005; Strecher, DeVellis, Becker, & Rosenstock, 1986).<sup>1</sup>

The proposed misattribution of motion states to perceived ability is supposed to be contingent on the presence of a deadline and may derive from various aspects of the psychological process of misattribution or source confusion (Johnson, Hashtroudi, & Lindsay, 1993; Kumkale & Albarracín, 2004; Schwarz & Clore, 1983). First, a time limit may lead people to reflect on their ability to act simply because the feelings of ability to move speedily are likely to be more diagnostic when there is a deadline than when there is not. In the absence of a deadline, people can expect to have the ability to comply with the recommendation regardless of their movement and thus pay less attention to their movements as a source of information. Second, people without a deadline should have enough time to process informa-

tion thoroughly (Cialdini, 2001; Zakay, 1993) and may be less prone to misuse irrelevant information perceived from motion states. This expedient misuse of movement information, however, may diminish if decision makers are induced to pay attention to relevant temporal information and discount objectively irrelevant movements.

We tested our hypothesis in five experiments (summary see Table 1) manipulating imagined or actual movement before giving the subjects information about an upcoming behavioral decision with different time limits. Imminent deadlines were expected to increase the likelihood of complying with the recommended behavior only when participants were moving and thus felt able to make the deadline. A fixed-effects meta-analysis (Hedges & Olkin, 1985; Lipsey & Wilson, 2000) revealed a significant effect of movement, as this effect did not reach significance ( $\alpha = .1$ ) in our first experiment<sup>2</sup>. When the deadline was tight or present,  $d$  was moderately positive and a significant effect of movement,  $d = 0.64$ ,  $SE = 0.11$ ,  $95\% CI (0.42, 0.86)$ . In contrast, when the deadline was loose or absent, the same  $d$  was small and not significantly different from a zero standard,  $d = -0.20$ ,  $SE = 0.11$ ,  $95\% CI (-0.41, 0.004)$ . Overall then, our findings consistently indicated that deadlines lead people to decide on enacting a behavior as a function of their previous, unrelated motion states.

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# Pride and Licensing Effects: When Being Good Gives Us Permission to Be A Little Bad

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## EXTENDED ABSTRACT

The current research investigates how authentic and hubristic pride influence licensing effects in indulgence. Previous research examining the influence of pride on indulgence has generally found that pride could lead to both indulgence and self-control. The current research suggests that the reason for the discrepancy within the previous research is that pride is not a unitary construct. Rather, the two distinct types of pride—hubristic and authentic—have different consequences on indulgence. Consistent with prior literature, the results from the first two studies suggest that authentic pride leads to more licensing in indulgence than hubristic pride. We further demonstrate how cognitive resources moderate the effect of pride on indulgence. By manipulating pride in different ways and using different measures of indulgent choice, the results from the last three studies confirm that authentic pride leads to more indulgence than hubristic pride, especially when cognitive resources are available. However, when cognitive resources are limited, hubristic pride leads to more indulgence. We further demonstrate how resisting temptation mediates indulgence licensing. This research contributes to our basic understanding of the dynamics of pride on licensing effects.

Pride is a powerful self-conscious emotion, which involves both self-assessment and self-awareness (Cheng, Tracy, & Henrich, 2010; Tracy, Shariff, & Cheng, 2010). Marketers sometimes try to generate a sense of pride in consumers through their commercials. For example, P&G's "Best Job Sochi 2014 Olympic Game" commercial shows a proud mother watching her child win in the Olympics. From a managerial perspective, if marketers want to tap into this powerful emotion, they should understand its complex effect on choice. Although pride is important in consumer decision-making for both theoretical and empirical reasons, researchers have just begun to investigate how it works to influence consumer decision processing and decision-making (Aaker & Williams, 1998; Fredrickson, 2001; Patrick, Chun, & MacInnis, 2009; Wilcox, Kramer, & Sen, 2011). This paper builds on existing research by examining how different types of pride (authentic vs. hubristic pride) influence licensing effects.

Pride is too broad a concept to be considered as a singular and unified construct (Lewis 1993). Instead, pride is more appropriately viewed as having two distinct facets: authentic pride and hubristic pride (Tracy and Robins 2004). Specifically, authentic pride is associated with self-confidence and accomplishment. Hubristic pride is associated with arrogance and self-aggrandizement. McFerran, Aquino, and Tracy (2011) showed that authentic pride increases the preference for luxury brands in consumer behavior. Prior research has shown that the act of doing something good (e.g., eating a healthy diet, engaging in pro-social behaviors) can sometimes give individuals a reason for indulging (Khan & Dhar, 2006; Merritt, Effron, & Monin, 2010; Witt Huberts, Evers, & De Ridder, 2012). Based on prior research, we predict that authentic pride, associated with self-accomplishment, will lead to stronger licensing in indulgence than hubristic pride, especially when consumers have the cognitive resources that allows one to justify the indulgence after one feels pride about his/her earned accomplishment. However, this effect will be different for hubristic pride. Hubristic pride is more likely to lead to indulgence when the cognitive resources are low.

The objective of study 1 was to test our hypotheses that authentic pride leads to more indulgence than hubristic pride. Undergraduate students ( $N = 160$ ) were randomly assigned to one of four conditions (authentic pride vs. hubristic pride vs. happy vs. control). Participants were asked to write about a time when they had succeeded through hard work and effort (authentic), behaved in a self-important manner (hubristic), felt happy (happy), or did laundry (control). Indulgence was measured with the choice of a movie ticket vs. gas card. As predicted, authentic pride (41.86%) led to more indulgent choice (movie ticket) than hubristic pride (22.97%; Wald's  $\chi^2 = 4.67$ ;  $p < .05$ ), happiness (12.90%; Wald's  $\chi^2 = 7.94$ ;  $p < .01$ ) or the control (23.91%; Wald's  $\chi^2 = 4.26$ ;  $p < .05$ ).

In study 2, we replicate the findings of study 1 using a different manipulation of pride and different measures of indulgence. Undergraduate students ( $N = 78$ ) were randomly assigned to one of three conditions (authentic pride vs. hubristic pride vs. control), where they wrote about a time when they felt accomplished (authentic pride), snobbish (hubristic pride) or the geography of their state (control). A one-way ANOVA that participants in the authentic pride condition ( $M = 7.91$ ) were willing to pay for more for a luxury watch than those in hubristic pride condition ( $M = 6.84$ ;  $t = 2.50$ ,  $p < .01$ ) and control condition ( $M = 6.83$ ;  $t = 2.59$ ,  $p < .01$ ). The results of study 2 support our prediction that feelings of authentic pride can lead to more indulgence than hubristic pride.

The aim of study 3 was to replicate our earlier findings that authentic pride leads to more indulgence than hubristic pride. Participants ( $N = 140$ ) were randomly assigned to one of three conditions (authentic pride vs. hubristic pride vs. control), where they wrote a brief story about themselves using the following four words: successful, confident, fulfilled and productive (authentic pride), or snobbish, conceited, arrogant and smug (hubristic pride) or a typical day of life (control). A one-way ANOVA showed a significant main effect of emotion on indulgence ( $F(1, 96) = 3.75$ ,  $p < .05$ ), such that participants in the authentic pride condition ( $M = 5.96$ ) were willing to pay for more for a luxury product than those in hubristic pride condition ( $M = 5.56$ ;  $t = 2.16$ ,  $p < .05$ ) and those in the control condition ( $M = 5.48$ ;  $t = 2.51$ ,  $p < .01$ ).

The aim of study 4 was to examine whether authentic pride always leads to more indulgence than hubristic pride. The overall design of the study was a 3 (emotion: authentic pride vs. hubristic pride vs. control) \* 2 (cognitive resource: high vs. low) between-subjects design ( $N = 108$ ). The manipulation of pride was the same as in study 1. After writing stories, participants were asked to remember a "password," in order to manipulate cognitive resources. The analysis revealed a significant interaction between emotion and cognitive resources ( $F(1, 98) = 3.39$ ,  $p < .01$ ), such that when cognitive resources were available, participants in the authentic pride condition ( $M = 17.20$ ,  $SD = 6.12$ ) assigned higher prices to the products than did those in hubristic pride condition ( $M = 13.30$ ,  $SD = 5.98$ ,  $t = 2.01$ ,  $p < .05$ ). However, when cognitive resources were limited, participants in the hubristic pride ( $M = 17.16$ ,  $SD = 5.57$ ) condition assigned significantly higher prices to logo products than did those in authentic pride condition ( $M = 11.67$ ,  $SD = 4.66$ ,  $t = 2.32$ ,  $p = .02$ ).

Finally, the overall design of the study 5 was a 2 (emotion: authentic pride vs. hubristic pride) \* 2 (cognitive resource: high vs.

low) between-subjects design ( $N = 134$ ). The procedure was identical to study 4, except that we measured indulgence by asking participants to make a choice between a \$10 movie theater ticket and gasoline card. Logistic regression showed a significant two-way interaction of emotion and cognitive load on indulgent choice (Wald's  $\chi^2 = 6.73$ ;  $p < .01$ ). The results of study 5 again showed that feeling authentic pride leads to indulgence, especially when cognitive resources are available, but that when cognitive resources are limited feeling hubristic pride leads to more indulgence than authentic pride.

This research provides the evidence that two-faced nature of pride influence indulgence in different ways. Further, we show that authentic pride leads to more indulgence than hubristic pride especially when cognitive resources are available. Prior research has shown that authentic pride leads to more indulgence than hubristic pride or happiness (McFerran, Aquino, & Tracy, 2014; Wilcox, et al., 2011). The past research, however, only examines this effect when consumers have ample cognitive resources (e.g., not being distracted when making a decision). In fact, consumers usually make decisions with limited cognitive resources (e.g., while being distracted). Therefore, by taking cognitive resources into account, this research advances the theory on pride and indulgence by demonstrating that authentic pride leads to more licensing in indulgence than hubristic pride, but only when cognitive resources are available; yet, when cognitive resources are limited, hubristic pride leads to more of a licensing effect in indulgence. Further analysis shows that perceived resistance to temptation mediates this effect. Thus, this research provides a unique theoretical contribution to pride on indulgence by advancing our understanding of emotion and decision-making.

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# Why Are Some Brand Co-Creation Activities More Effective Than Others?: The Effects of Brand Knowledge Potential and Self-Brand Connection on Brand Engagement Intentions

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## EXTENDED ABSTRACT

Under Armour recently launched a Stories website tied to its “Protect this House. I will.” campaign, where consumers could craft their own story of how they protect their Houses or rate other consumers’ stories. Though this example is found online, brand co-creation campaigns exist offline as well and are employed by over 85 percent of marketers (Deloitte 2012). The objective of co-creation campaigns is to provide consumers with a means of interacting with the brand, thereby encouraging deeper brand engagement via social media or other public outlets (Van Doorn et al. 2013). In this paper, we examine how marketers can design co-creation activities that lead consumers to engage further with the brand.

Based on the notion of customer-based brand equity (Keller 1993, 2003), we suggest that consumers are more likely to further engage with the brand when co-creation activities allow consumers to generate new, personal brand meanings or strengthen existing ones. We propose that brand engagement intentions will be affected by two factors: consumers’ self-brand connection and the co-creation activity’s potential for creating brand knowledge. Self-brand connection (SBC) refers to the link between the brand and the consumer’s values and identity (Escalas 2004; Escalas and Bettman 2005; Park et al. 2010). Compared to those with low SBC, consumers with high SBC pursue self-goals through the brand (Kirmani 2009; Kopetz et al. 2012), have more complex autobiographical memory structures for the brand (Escalas 2004) and higher brand loyalty (Escalas and Bettman 2003; Ferraro, Kirmani, and Matherly 2013). This would imply that those with high, rather than low, SBC will have more motivation to co-create and greater ability to generate meanings.

However, we suggest that the co-creation activity’s potential for brand knowledge creation moderates the effect. Some co-creation activities, such as writing one’s own brand story or posting an idea, have greater brand knowledge potential (BKP) than other activities, such as evaluating others’ brand ideas or playing a game because they better enable consumers to express personal brand meanings. A pretest provides support for the notion that activities vary on this dimension and serves as the basis for manipulations in the studies. Based on motivation and ability, we predict that consumers with high self-brand connection will be more likely to engage with the brand after participating in an activity with high, rather than low, brand knowledge potential.

Three experiments examined the effects of brand knowledge potential (BKP) and self-brand connection (SBC) on brand engagement. In study 1, we hold the activity constant and examine whether high SBC consumers are more motivated to co-create. Participants ( $n = 101$ ) first reported SBC using Escalas and Bettman’s 7-item (2003) scale ( $\alpha = .94$ ) and then were assigned to a high or low BKP condition. As a measure of motivation, participants were given the choice to co-create. Brand engagement was measured as an average of “How much would you like to check out Chiquita’s brand page on Facebook” (1 = not at all, 7 = very much); “I would Like Chiquita’s brand page on Facebook next time I login to my Facebook account” (1 = definitely would not Like Chiquita, 7 = definitely would Like Chiquita); and “How likely would you be to share a new Chiquita brand promotion with friends or family?” (1 = very unlikely, 7 = very likely;  $\alpha = .91$ ). We observe the expected effect that high SBC consumers were more motivated to co-create in general ( $\beta = .04$ ,

Wald = 2.53,  $p = .1$ ; 57.4% vs. 42.6%,  $\chi^2 = 4.55$ ,  $p < .05$ , based on median-split SBC). For those who choose to co-create ( $n = 54$ ), we find main effects of both SBC ( $p < .01$ ) and BKP ( $p < .05$ ) and an interaction effect ( $p < .03$ ). Using spotlight analysis, we see that, as predicted, consumers with high (vs. low) SBC express increased brand engagement intentions in the high vs. low BKP condition ( $p < .01$ ; Aiken and West 1991; Fitzsimons 2008). Low SBC consumers were not affected. Enjoyment does not explain the pattern, and there is no interaction effect for those who choose not to co-create ( $n = 47$ ).

In study 2, 153 participants read about the My Starbucks Idea campaign website. In the high BKP condition, participants voted and wrote about the idea that best expressed what the brand meant to them. In the low BKP condition, participants rated the same three ideas (on a seven-point bad-good scale). Brand engagement and SBC were measured as in study 1. Regression analysis found an effect of SBC ( $p < .01$ ) and BKP  $\times$  SBC ( $p < .05$ ) on brand engagement intentions. Participants with high SBC (+1 SD) had increased brand engagement intentions in the high vs. low BKP condition ( $p < .01$ ); participants with low SBC (-1 SD) were unaffected. In addition, these differences could not be attributed to involvement, time spent co-creating, or process effort.

In study 3 we replicate this pattern in a different brand and product category, using Under Armour’s “Protect this House. I will.” Stories campaign. Participants ( $n = 126$ ) either wrote a story (high BKP) or rated someone else’s story (low BKP). SBC was measured after brand engagement. Regression analysis reveals a significant effect of SBC ( $p < .01$ ) and a significant interaction effect ( $p < .01$ ). A spotlight analysis showed that participants with high Under Armour SBC (+1 SD) expressed greater brand engagement intentions in the high vs. low BKP condition ( $p < .02$ ). In contrast, participants with low SBC (-1 SD) were unaffected. A behavioral measure of brand engagement also follows this pattern.

The paper contributes to the branding literature by considering customer-based brand equity in the context of co-creation. We distinguish brand co-creation activities from more extensive product-based interactions, such as co-production (Moreau and Herd 2010; Troye and Supphellen 2012) or participation in user-maintained brand communities (Kozinets 2001). The paper also contributes to managerial and empirical knowledge of the types of brand co-creation activities that are likely to affect the engagement of loyal consumers in brand-related social media.

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# Life-changing Events Foster Favorable Responses to New Products

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## EXTENDED ABSTRACT

Recent research has encouraged manufacturers of unfamiliar products and brands to target consumers who are experiencing, or who have recently experienced, life-changing events (Wood 2010). Wood (2010) finds that consumers in states of high (vs. low) life change are more likely to be attracted to unfamiliar products. In a similar vein, Eelen, Millet, and Warlop (2011, 2012) show that even minor changes, such as performing an unfamiliar task, trigger consumers' openness to new consumption experiences and motivate them to choose unfamiliar options. From a marketing perspective, it is important to establish which product features it is that make new options attractive to consumers experiencing change.

The degree of product unfamiliarity for consumers is likely to depend on both the unfamiliarity of the brand and the novelty of the product's attributes. In light of consumers' "chronic orientation to newness" in times of change (Wood 2010, 953), we suggest that consumers experiencing life change respond particularly positively to highly unfamiliar product options that do not possess any familiar traits, but they are not that attracted by products that still have some familiar characteristics.

*Hypothesis 1: Consumers' perceived life change positively influences their attitudes toward unfamiliar brands with novel attributes. However, perceived life change does not affect consumers' attitudes toward unfamiliar brands with known attributes or familiar brands with novel or known attributes.*

If, as suggested, consumers in high (vs. low) states of change respond more positively to highly unfamiliar products, how can marketing make the best use of this phenomenon? Directing advertising toward consumers who are experiencing, or who have recently experienced, changes in their personal lives (e.g., moving house, having a baby) may be an option for manufacturers of highly unfamiliar products. The latter can be done, for example, by choosing where to place print advertisements: home decoration magazines, magazines aimed at new parents. However, it is only possible to a limited extent to control who watches these advertisements. Thus, the question arises of whether perceptions of life change can also be triggered by means of advertising (Wood 2010). Wood (2010) demonstrates that manipulating perceptions of high (vs. low) life change is basically possible by asking consumers to list eight (vs. two) major changes that they are experiencing (listing task). This manipulation is based on the idea that reasoning about major changes triggers a change mind-set which makes consumers open to unfamiliar options. Previous literature has shown that mind-sets are not only activated by listing tasks, but also by scenarios which describe events that occur to a (fictional) person (Galinski and Moskowitz 2000). While, in listing tasks, participants are specifically asked to think about life changes, priming effects of scenarios are considered to be self-generated (Galinski, Moskowitz, and Skurnik 2000), and may thus be used in advertising. For example, depicting life-changing events in advertisements may lead to consumers thinking about changes in their personal lives. It is thus conceivable that advertisements for highly unfamiliar products that refer to life-changing events induce perceptions of high life change which trigger consumers' openness to new products, generating positive responses to the products advertised.

*Hypothesis 2: Advertisements that refer to life-changing events (vs. everyday life events) foster consumers' openness to new products and improve their attitude toward unfamiliar brands with novel attributes.*

In two experiments, we examine how consumers' perceived life change influences their responses to products with differing degrees of unfamiliarity. In study 1, participants were shown one of four TV commercials for a known or novel flavor of potato chips of a familiar or unfamiliar brand. As expected, we found a significant three-way interaction between participants' perceived life change, brand unfamiliarity, and novelty of the product attributes: For the unfamiliar brand with the novel flavor, participants' perceived life change positively influenced brand attitudes. However, brand attitudes were not affected by perceived life change for the other combinations of brand unfamiliarity and novelty of the product attributes (unfamiliar brand and known flavor, familiar brand and novel flavor, and familiar brand and known flavor). These results were replicated in a second study using a different product category (chocolate instead of chips) and a different advertising media (print advertisements instead of TV commercials). In a third experiment, participants were shown one of two advertisements for an unfamiliar brand with novel product attributes, the advertisements referring to life-changing events or everyday life events. As expected, the participants' perceptions of life change were influenced by the manipulation. The results further showed that referring to life-changing events (vs. everyday life events) in advertisements fosters consumers' openness to new products, which in turn leads to better attitudes toward unfamiliar brands with novel product attributes.

In our research, we examined the impact of life changes on consumers' attitudes toward products with differing degrees of unfamiliarity in terms of their brand and their characteristics in the context of advertising. We found that changing circumstances lead to consumers having more positive attitudes toward products that are highly unfamiliar in terms of their brand and their characteristics, but not toward products that are relatively unfamiliar or familiar (studies 1 and 2). These results contribute to the fields of variety seeking behavior and product innovation. They extend the research done by Wood (2010) by revealing that important changes in consumers' environments benefit, in particular, highly unfamiliar products that do not have any familiar traits. Study 3 further reveals that advertisements that refer to life-changing events (vs. everyday life events) evoke higher perceptions of life change. This indicates that advertising can create particular mind-sets for consumers.

Besides, our findings have important practical implications for marketers of unfamiliar products and brands. It would appear that such products can compete better with well-established brands by choosing appropriate advertising strategies, such as highlighting the novelty of the product attributes in question, targeting consumers who are experiencing major life changes, and referring to life changes in the advertisements. Future studies should assess the effect of perceived life change on consumers' responses to highly unfamiliar options for product categories with different features (e.g., technical innovations) and under real-life conditions of exposure to advertising.

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# When Opposites Attract: Incorporating Trait Complementarity into the Measurement of Self-Brand Personality Alignment

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## EXTENDED ABSTRACT

Academics and managers alike continually seek improved explanations of why consumers engage with some brands more than others. Since the seminal works on self-brand congruence (Sirgy, 1982) and brand personality (Aaker, 1997), an enduring explanation has taken hold: consumers invest brands with human personality characteristics and are drawn to brands with characteristics that align with their own traits. Over the years, numerous empirical studies have found support for this (Birdwell, 1968; Dolich, 1969; Sirgy, 1985; Stern, Bush, and Hair, 1977), and for the positive consequences of self-brand congruence on desirable outcomes (Bellenger, Steinberg, and Stanton, 1976; Kressmann et al., 2006). However, an underlying premise in the literature is that trait alignment in self-brand congruence exhibits a similarity configuration, that is, consumers are drawn to brands that essentially mirror their own traits. To date, there has been surprisingly little critical investigation of this premise, neither through examination of trait alignment patterns in self-brand congruence, nor exploration of alternative conceptualisations of alignment. Drawing from interpersonal psychology and the notion that ‘opposites attract’, we investigate the existence of complementarity configurations in self-brand alignment, where consumers are drawn to brands with traits that complement, rather than mirror their own. Specifically, we 1) examine patterns of self-brand trait alignment for evidence of complementarity configuration, 2) derive a measure of alignment that captures complementarity configuration, and 3) test the predictive power of this measure for a range of desirable outcomes.

Self-congruence theory proposes that when judging brands, consumers psychologically compare brand meanings with their own self-concepts, resulting in a perception of congruence (Malhotra, 1988; Sirgy, 1982). Brand personality studies have lent weight to this theory, proposing that as human personality traits may be attached to brands (Aaker, 1997), consumer-brand relationships may be conceptualised as configurations of personality traits between both parties, which may be harmonious or discordant depending on their patterns. In the psychology of human interpersonal attraction (Gross, 1987; Martin, Carlson, and Buskist, 2007) two forms of trait configuration are proposed: similarity and complementarity. In similarity configurations, relationship partners’ personal characteristics essentially mirror each other. In complementarity configurations, partners’ characteristics are different but in a complementary way, for example in the attraction between two individuals, one extrovert and one more introspective. Kerckhoff and Davis (1962) argue that complementarity is more critical to attraction in an enduring relationship, as partners’ self-growth can be enhanced by accessing the qualities not held individually. As brands have been demonstrated as active relationship partners (Fournier, 1998), we propose that complementarity trait configurations may exist in consumer-brand relationships (P1), particularly amongst those enduring over a longer timescale (P2).

To measure self-brand personality alignment, a scale of trait items is needed for human and brand personality (HP and BP), along with a technique for measuring the congruence between them. Our chosen scale was the Five-Factor Model (FFM) (Costa and McCrae, 1985), recognised as both a reliable HP measurement instrument, as well appropriate for examining brand personality (BP) (Huang, Mitchell, and Rosenbaum-Elliott, 2012). For a congruence measure,

we followed the discrepancy score approach, which involves recording participants’ perceptions of their own personality and a brand’s personality on a scale of trait items, and then computing a score representing the difference between the ratings. However, as existing formulas allow only similarity configurations to be revealed, we applied a modification: calculation of a predicted score for each BP dimension measured, based on a weighting derived from a canonical correlation analysis of participants’ HP and BP scores, that captured both similarity and complementarity configurations. Our alignment scores were therefore computed as the difference between observed and predicted BP scores. We proposed these scores would have stronger predictive power than measures based on similarity alone (P3).

To test all propositions, we conducted a survey of 206 students at a UK Business School, in which participants rated, respectively, their own personalities and the personalities of their favourite brands, on the same 40-item scale (Saucier (1994) mini-markers of the FFM). They also answered questions on their relationship with their chosen brand (e.g. perceptions of quality, loyalty). These comprised the desirable outcome measures of the analysis.

To investigate P1, we first conducted a principal component analysis of participants’ HP and BP ratings, both of which revealed 5-factor solutions. HP factors loaded exactly as expected for the FFM. Four of the BP factors corresponded broadly with the HP factors, whilst the fifth (Emotional Instability) comprised all the unfavourable items of HP Emotional Stability, plus the negative items from the other HP dimensions (e.g. sloppy, careless, harsh). We then conducted a canonical correlation analysis of participants’ HP and BP factor scores, summed from their raw ratings. The model generated two significant functions, each containing three significant variables (Table 1). In Function 1, these were HP Agreeableness, HP Emotional Stability, and BP Emotional Instability. This striking alignment of traits clearly represented a complementarity configuration, thus supporting P1. In Function 2, the significant variables were HP Openness, HP Extraversion (negatively loaded) and BP Reflectiveness. Function 2 therefore exhibited a similarity configuration. To test P2, we derived our alignment discrepancy scores as described above, split participants into two sub-samples based on the relationship length with their favourite brand, and performed an independent samples t-test. The result was not significant, hence P2 was not supported. Finally, we conducted a series of discriminant analyses to investigate P3, revealing five outcomes for which our alignment measure performed best (perceptions of quality, fit, passion, pleasure, resistance to negative word-of-mouth), three outcomes where it performed comparably to similarity-based measures (future loyalty intentions, brand separation distress, overall love) and three outcomes which were better predicted by similarity-based measures (loyalty, frequent thoughts, contribution to life meaning). Moderately good support was therefore shown for P3. Overall, the study contributes to the branding literature by revealing for the first time the existence of complementarity configurations in self-brand alignment, and by offering an original technique for incorporating such configurations in an alignment measure, which in turn performs well in terms of predictive power.

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# Investigating Brand Cheating in Consumer-Brand Relationships: Triadic and Dyadic Approaches

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## EXTENDED ABSTRACT

Consumers develop strong, committed and meaningful relationships with brands (Fournier, 1998) yet such consumers sometimes still buy or use options that compete directly with these 'relationship partners'. Consistent with an interpersonal metaphorical view of consumer-brand relationships, this activity might be understood as a form of cheating or infidelity, a topic that has been reviewed at length in the interpersonal literature but is emergent in marketing. In the context of brand relationships, it remains to be explored how cheating operates. Do consumer-brand relationship partners adhere to rules of exclusivity? From a behavioral point of view, what does commitment to a particular cherished brand look like? In what ways might cheating manifest? Informed by extant social and consumer psychological research, we report the results of two studies that together examine this nascent area of brand cheating.

Relationship theorists have pointed out that brands may be either a means to maintaining other social interaction or an end unto itself (e.g. Fournier, 2009). This seems to be a consideration for many people who are so active in communities that revolve around brands (e.g. Schouten and McAlexander, 1995), even while brand relationships that involve only two parties also seem to exist (e.g. Thomson, MacInnis and Park, 2005). We theorize that in the context of cheating, if a brand implicates a preexisting interpersonal relationship, this 'triad' will protect against cheating behavior. In buying or using a competing brand in the same category, a person involved in such a brand relationship may feel as if she is betraying a person who is important to them. Conversely, when a brand relationship is dyadic, consumers may not think interaction with the brand is governed by norms of exclusivity, making emotional or behavioral 'cheating' more likely.

With little extant work on brand cheating, we first carried out a series of phenomenological interviews with non-student consumers on the topic. We identified recurrent themes, some of which seem to resonate with the interpersonal literature. For example, respondents distinguished between the idea of cheating (e.g. feeling tempted or longing for something new and exciting) versus the act of cheating (e.g. actually buying a different brand). This result parallels the emotional and behavioral infidelity reflected in past psychological research.

Four other major themes emerged. First, many consumers do not believe that cheating can occur in a branding context (e.g. "I don't feel unfaithful. No. I don't think an item deserves faithfulness."). Second, many respondents do behave 'exclusively' with a focal brand (e.g. "I don't even look at other brands to be honest."). Third, many respondents thought to remain committed to a focal brand, it was enough not to be exclusive but to give the focal brand the first chance to satisfy their needs (e.g. "I always look to Nike first before something else."). Finally, many respondents who seemed to believe cheating was possible and that rules of exclusivity might apply also talked about the brand relationship facilitating an interpersonal relationship (e.g. "it's actually a little thing I have with my sister"). This last theme underscores our main research question outlined above, that a possible reason some consumers feel like cheating is possible and that rules of consumer-brand exclusivity might apply is the involvement of a third party.

With these corroborating qualitative results and informed by additional theorizing, we conducted an online survey, analyzed with structural equation modeling, in which we assessed relationship strength (Thomson et al., 2005; Park, MacInnis, Priester, Eisingerich and Iacobucci), the extent to which the brand relationship was characterized as dyadic vs. triadic, as well as measures of brand substitutability, monogamy/exclusivity, right of first refusal, emotional cheating and behavioral cheating.

Relationships that had higher scores on Interpersonal Connection (capturing this dyadic/triadic concept) were stronger ( $\gamma = .56$ ,  $p < .05$ ) and more closely linked with monogamous expectations ( $\gamma = .41$ ,  $p < .05$ ), which in turn helped to guard against emotional cheating ( $\gamma = -.16$ ,  $p = .08$ ). Thus, it seems that triadic relationships simultaneously bolster brand relationships and provide a protective mechanism against infidelity. Further, more monogamous relationships were tied to perceptions that the focal brand would be more difficult to replace ( $\gamma = .53$ ,  $p < .01$ ), which itself impacted the right of first refusal ( $\gamma = .20$ ,  $p < .01$ ). Those who gave a particular brand this right of first refusal were less likely to engage in emotional cheating ( $\gamma = -.38$ ,  $p < .01$ ) while more materialistic people were more likely to engage in emotional cheating ( $\gamma = .16$ ,  $p < .01$ ). Behavioral cheating was predicted only by emotional cheating ( $\gamma = .63$ ,  $p < .01$ ) and whether the brand was product (=0) or service (=1) oriented ( $\gamma = .24$ ,  $p < .01$ ).

We show that triadic brand relationships are different from dyadic ones. The involvement of a third party protects against both emotional cheating and behavioral cheating, and reinforces a focal brand's special status as having the 'right of first refusal'. For certain consumers, brands are a means to an end and help to prop up important interpersonal relationships. Such triadic consumer-brand relationships are guided by expectations of monogamy while dyadic relationships are ends to themselves. Consumers involved in such relationships do not feel it is 'wrong' to fantasize about or actually buy competing brands in the same category.

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# The Divergent Effects of External Systems of Control on Early Stage Goal Pursuit

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## EXTENDED ABSTRACT

There is a generalized belief that external sources of control are detrimental to goal pursuit. Past research (e.g., psychological reactance and social loafing theory) has suggested that feeling the presence of a powerful other exercising control over one's life undermines people's willingness to provide effort in service of goal achievement. However, we argue that thinking about external systems of control – that is, the overarching institutions, organizations, and norms within which individuals live their daily life (Cutright, Wu, Banfield, Kay, and Fitzsimons 2011) – need not always lead to demotivation. Specifically, we predict that in the early stage of the pursuit of long-term goals, reminding people that goal striving occurs within external systems of control positively affects their motivation when goals are planned in a specific (*vs.* vague) way.

We base our predictions on the following reasoning. When people start planning a long-term goal (e.g., savings, dieting) using very specific implementations, they experience low self-efficacy due to the anticipated efforts and obstacles that such a type of planning underlies (Dalton and Spiller 2012, Townsend and Liu 2012). To the extent this is so, then anything that makes the individual feel like the goal is attainable should increase motivation. What might help the individual feel this way? Compensatory Control Theory (CCT; Kay, Gaucher, Napier, Callan, and Laurin 2008) suggests that people can compensate for feelings of low self-efficacy by reminding oneself of the various ways in which order and structure are present in the environment. When feelings of personal control are experimentally lowered, CCT research shows that people fluidly turn to external sources of control to maintain the belief that the world is under control, even if the source of control is not the self, and that doing so, in turn, increases confidence in goal pursuit (Kay et al. 2014).

Thus, we propose that reminders of external systems of controls should flip or reverse the negative effect of specific planning on motivation at early stages of goal pursuit by heightening feelings of goal attainability. We tested our proposition in five studies using the consumer-relevant context of savings goals, and external systems ranging from religions (study 1, 2, and 3) to brands (study 4A and 4B).

In study 1 ( $N = 204$ ), we observed that reminding participants of a controlling God led to significantly higher levels of motivation to pursue a savings goal, relative to a no-reminder neutral condition ( $t(198) = 1.94, p = .05, M's: 5.27$  *vs.*  $4.48$ ), and relative to reminding participants of a God that created the world but does not provide any control ( $t(198) = 2.03, p = .04, M_{\text{creating God}} = 4.50$ ). This additional comparison condition was included to demonstrate it was the controlling aspects of religion, rather than just religion belief per se, that drives the effect.

In study 2 ( $N = 161$ ), we sought to demonstrate the effect was strongest when the goal was specific rather than vague. To this end, we varied the degree of specificity of the savings goal by asking participants to either select one of six ranges of sums for their project or to enter the savings amount and thereafter to plan their savings in numeric terms. Controlling for age, income and goal importance, we found a significant effect of the external system of control reminder on savings motivation when participants were asked to plan very specifically ( $p = .03, M_{\text{controlling God}} = 6.04$  *vs.*  $M_{\text{neutral}} = 5.61$ ). No effect were detected when participants were asked to make moderately specific plans.

In study 3 ( $N = 194$ ), to provide evidence of mechanism, a moderated mediation analysis demonstrated the above effect was mediated by perceived goal attainability.

In study 4A and 4B, we adopted a new reminder of external systems of control: brand reliability, which we define as the consumer's perception of a brand's ability to make him/her reach his/her goals. Accordingly, study 4A ( $N = 151$ ) tested first the compensatory relationship between a controlling God and brand reliability when planning was specific (*vs.* vague). Controlling for age, income, and goal importance, a moderated mediation analysis revealed a conditional indirect effect of specific planning on brand reliability through self-reported anxiety when beliefs in a controlling God were low. As expected, it was not significant when such beliefs were high.

Finally, in study 4B ( $N = 273$ ), we tested our hypotheses by priming the belief that brands can be conceived as overarching institutions that bring order into the consumers' life to help them reach their goals. A regression analysis found that, as reminders of religious control, when planning was vague, framing brand as external systems of control made participants less willing to engage in financial activities, relative to those in the baseline condition ( $t(264) = 2.71, p < .01, M's: 5.28$  *vs.*  $5.77$ ). When planning was specific, they were more willing to do so, relative to those in the baseline condition ( $t(264) = -2.32, p = .02, M's: 5.74$  *vs.*  $5.35$ ). Honing in on the specificity of this effect, when brands were only depicted as trustworthy agents, rather controlling agents, no similar effect were obtained.

In sum, this research demonstrates divergent effects of reminding consumers that their long-term goals occurs within external systems of control. By demonstrating that reminders of external systems of control can reverse an established effect, our findings contribute to the recent stream of research investigating the negative impact of planning (e.g., Dalton and Spiller 2012, Townsend and Liu 2012) as well as the recent infusion of compensatory control research to understanding consumer behavior (e.g., Cutright 2012).

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# Stumbled Upon: Impact of Framing as Expected versus Unexpected on Product Evaluations

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## EXTENDED ABSTRACT

Consumers often discover unexpected uses of a product, that is, they stumble upon benefits of a product that are neither marketed by the company nor expected by the common users. In fact, searching for the 'unexpected uses of ...' online could generate numerous such interesting cases. Such experience creates interesting and unique consumption experience for consumers, which, in turn, creates increased buzz or conversations about the product (Berman, 2005; Derbaix and Vahamme, 2003). Since discovering unexpected product benefit is not uncommon and is often accompanied by strong response from consumers, it is important to understand how such experience of unexpectedness impacts consumers. Therefore, in this research, we ask the following question: could the simple knowledge that a certain product feature was unexpectedly discovered as opposed to intentionally developed impact consumers who lack the actual experience of unexpectedness positively? In departure from previous research, we investigate the role of *vicarious* unexpectedness, rather than *real* unexpectedness on consumers' product evaluations.

Based on prior research, we make two diverging predictions on the role of unexpected framing on product evaluations. First, unexpected framing can serve as some type of conceptual incongruity, leading to enhanced general attitude toward the product. Much of work on unexpectedness in marketing has focused on documenting the positive impact of 'unexpected' element in an advertisement for attitude formation (Heckler & Childrens, 1992; Houston et al., 1987; Lee, 2000; Lee & Mason, 1999). According to this stream of research, unexpectedness or a mismatch amongst various elements in an advertisement leads to increased elaboration which results in general enhanced attitude. On the other hand, a stream of research (Bromberg-Martin et al., 2010; Di Chiara, 2002; Horvitz, 2000) in neuroscience which has shown that unexpectedness enhances reward salience would predict a rather targeted positive impact of unexpected framing only on desire-related product evaluations.

Although both are possible, we think that unexpected framing is unlikely to create incongruity causing cognitive elaboration because, in our context, any form of incongruity that exists between two features exists equally for both the products with or without unexpected framing. Therefore, we predict vicarious unexpectedness to serve as a reward-salience enhancer rather than general attitude enhancer, resulting in a targeted positive impact only on desire-related product evaluations (e.g., willingness-to-pay) but not on non-desire-related measures (e.g., perceived effectiveness). Furthermore, we expect this positive impact of unexpected framing on desire-related product evaluations to be moderated by reward sensitivity, such that the positive impact of unexpected framing is observable when reward sensitivity is high, but not when reward sensitivity is low. Across four studies, we document the targeted impact of unexpected framing on desire-related product evaluations and show that this relationship is observed when reward sensitivity is high, chronically (study1) or situationally (study2-4).

In the first study, we test our basic research hypothesis related to the targeted positive impact of unexpected framing on desire-related product evaluations and test the moderation by individual reward sensitivity. If unexpected framing enhances reward salience of the product as we argue, we should observe the positive impact of un-

expected framing on desire toward the product to be driven by those who are high on chronic reward sensitivity (measured by behavioral activation scale (BAS)) but not for those who are low.

Participants were randomly assigned to the product conditions (expected versus unexpected) and saw a print advertisement of a dietary supplement. Participants in the expected condition were informed that the dietary supplementary was a powerful antioxidant for skin and eye, developed and found to be effective in supporting healthy skin and healthy eye function, whereas participants in the unexpected condition were informed that the dietary supplement was a powerful antioxidant for skin, developed and found effective in supporting healthy skin, and the product unexpectedly found to be effective in supporting eye health as well. They were then assigned to a product evaluation condition (desire-related versus non-desire-related). In the desire-related condition, participants indicated their WTP for the antioxidant dietary supplement whereas in the non-desire-related condition, participants indicated how much they believe the product description and perceived effectiveness of the product. Afterwards, participants completed the BAS scales. As expected, participants who viewed a product with unexpected framing were willing to pay significantly more for the product than participants who viewed a product without unexpected framing and this effect was driven by those who have high reward sensitivity (see Table1). Furthermore, as hypothesized, there was no such positive impact of unexpected framing on non-desire-related measures.

In next three studies, we provide a further support for our argument by manipulating reward sensitivity situationally. Furthermore, across next three studies, we use different stimuli to operationalize vicarious unexpectedness (dietary supplement, sunscreen, body lotion). In the second study, we manipulate reward sensitivity by having participants imagine consumption situation to be hedonic (vacation) or utilitarian (business trip) and show that there is a positive impact of unexpected framing on desire toward the product only under a hedonic consumption situation (see Table2). In the third study, we manipulate mindset prior to the product evaluation task (adapted from Hsee & Rottenstreich, 2004) and show that there is a positive impact of unexpected framing on desire toward the product only when one is under affective mindset (see Table3). Finally, in the fourth study, we heighten general motivational state by having participants sample appetitive cues (food pictures) versus neutral cues (nature pictures) prior to the product evaluations (Li, 2008; Wadhwa, Shiv, Nowlis, 2008). As expected, we found that participants who have high reward sensitivity due to heightened motivational state indicated greater desire toward the product with unexpected framing compared to product without unexpected framing, but no such difference was found for those whose motivational state was not heightened (see Table4).

In sum, findings from this research show that *framing* a certain feature of a product as unexpected can lead to positive evaluation of a product when one's reward sensitivity is high and the dimension of evaluation is desire-related.

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# It's Alive! How Kinetic Property in Ads Shapes Novelty Perceptions

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## EXTENDED ABSTRACT

Past marketing research has proposed that how novel consumers perceive a product to be is predominantly determined by aspects inherent to the products themselves; for instance, their technology and/or functionality (Hirschman 1980; Wasson 1960). When a new product provides new attributes that substantially expand an existing category, consumers accord greater novelty to it (Chandy and Tellis 1998). In contrast, the psychology literature conceptualizes novelty as a collative property, indicating that the novelty of a stimulus is determined by comparison amongst different elements within it (Berlyne 1970). As such, stimulus novelty can be subjectively determined by perceptual reactions to visual elements. This insight on stimulus novelty suggests an opportunity to examine how physical properties of elements within an advertisement affect product-related novelty perceptions. We propose that perceptions of product novelty may also be determined by perceptual reactions to kinetic property of advertising elements, specifically, speed and direction changes in motion of embedded visual ad elements.

We base our proposition on the fundamental impact of motion on social perceptions (Michotte 1963; Scholl and Tremoulet 2000). Extant psychology literature suggests that lower-level kinetic properties of visual stimuli may be diagnostic antecedents to higher-level perceptions. For example, simple geometric figures are perceived as alive when their motion involves changes in speed and direction simultaneously (Tremoulet and Feldman 2000). Drawing on this notion, we argue that speed and direction changes embedded in ad elements enhance product novelty perceptions. We propose perceived ad aliveness and judgments of product atypicality as relevant intervening process constructs in our theory. We argue that speed and direction changes would lead to greater aliveness perceptions because such kinetic property typically represents how living agents move (Tremoulet and Feldman 2000). Further, perceived aliveness from the ad would lead to the product being judged as atypical which, in turn would enhance novelty perceptions.

While prior research has focused on static ad elements, to the best of our knowledge, our research is the first to systematically investigate dynamic aspects of advertising as a driver of consumer behavior. Managerially, kinetic ad elements such as motion graphic and kinetic typography are becoming increasingly important as the current multimedia environment allows advertising to easily adopt motion.

Study 1 (N = 59) examines the novelty-enhancing effect of kinetic property and its underlying process. Study 1 followed a single factor (kinetic property: high vs. low) between subject design where an ad for a fictitious new smartphone was shown to participants. In the high kinetic property condition, smartphone images and text appeared with changing speed and direction, while in the low kinetic property condition the same ad elements appeared at a constant speed and without directional changes. We manipulated kinetic property in the same way in studies 2 and 3. As predicted, participants perceived the smartphone as more novel when the kinetic property in the ad was high vs. low ( $M_{\text{high kinetic}} = 4.21$ ,  $M_{\text{low kinetic}} = 3.26$ ;  $F(1, 57) = 9.69$ ,  $p < .01$ ). We conducted a serial multiple mediator model to test the underlying process (Hayes 2012; model 6) and bootstrap analysis showed that the causal chain involving ad aliveness and product atypicality was significant (.2460, 95% CI = .08 to .59). This result indicates that the novelty-enhancing effect of kinetic property was

serially mediated by perceived ad aliveness and product atypicality perceptions.

Study 2 (N=117) further investigates the novelty-enhancing effect of kinetic property by crossing kinetic property (high vs. low) and new product type (RNPs vs. INPs). Since RNPs naturally contain advanced functionality, RNPs should be perceived as more novel than INPs. Further, if kinetic property enhances product novelty perceptions, the difference in novelty perceptions between RNPs and INPs should decrease when kinetic property in the ad is high.

We created ads for a fictitious new tablet: in the INP condition we utilized a commonly available tablet whereas in the RNP condition, we showed a new type of tablet providing advanced functionality (flexible display, interchangeable hardware). As predicted, in the low kinetic property ad, the RNP was perceived as more novel than the INP ( $M_{\text{RNP}} = 4.61$ ,  $M_{\text{INP}} = 2.98$ ;  $F(1, 113) = 20.31$ ,  $p < .001$ ). However, in the high kinetic property ad, the INP was perceived as novel as the RNP ( $M_{\text{RNP}} = 4.06$ ,  $M_{\text{INP}} = 3.77$ ;  $F(1, 113) = 0.57$ ,  $p > .10$ ).

Study 3 (N=75) examines a boundary condition involves consumers' ability to engage in visual processing by manipulating perceptual load. Lavie (1995) defines perceptual load as demands imposed on available perceptual capacity to process relevant stimuli. In our context, when the ad background is visually demanding, it would increase perceptual load. In this case, kinetic property in the ad will be less likely to "pop-out" from the ad background, and thus its impact on novelty perceptions will be mitigated.

We developed an online ad for a fictitious new digital camera. In the high perceptual load condition, we placed a visual graphic that induced an optical illusion in the ad background whereas in the low perceptual load condition this graphic was modified so as to not produce the optical illusion. As predicted, when perceptual load was low, novelty perceptions were greater in the high (vs. low) kinetic property ad ( $M_{\text{high kinetic}} = 4.47$ ,  $M_{\text{low kinetic}} = 3.45$ ;  $F(1, 71) = 7.75$ ,  $p < .05$ ). However, when perceptual load was high, novelty perceptions were equivalent across two ads ( $M_{\text{high kinetic}} = 3.70$ ,  $M_{\text{low kinetic}} = 3.83$ ;  $F(1, 71) = .12$ ,  $p > .70$ ). These results indicate that when the ad background is visually demanding, the novelty-enhancing effect of kinetic property is mitigated.

Across three studies, we provide strong evidence that kinetic property enhances product novelty perceptions. We theoretically contribute to potential determinants of product novelty judgments and show that even purely perceptual and ad execution factors can significantly influence product novelty perceptions. Managerially, our findings imply that favorable novelty judgments about new products may be elicited by minor adjustments to visual marketing stimuli. This implication opens up opportunities for low-budget brands or low-innovation firms to sustain their products in a competitive market.

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# The Topography of Generosity: Nonlinear Evaluations of Prosocial Actions

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## EXTENDED ABSTRACT

It is difficult to think of generosity and selfishness without also thinking about praise and scorn, respectively. There is a widespread tendency to admire prosociality and disdain selfishness. *A child who shares a bite of his cookie will be liked more than one who shares none of it. A wealthy person who gives 10% of her income to charity will appear more caring than one who gives none of his income. In terms of one's reputation, it pays to be nice.*

*Does it pay to be even nicer? That is, does behaving even more prosocially lead to an even more positive reputation? Is a child who gives away an entire cookie liked more than one who shares only a bite? Is the wealthy person who gives 50% of her income seen as more caring than one who gives away only 10%?*

Researchers studying the reputational consequences of prosociality typically compare only a pair of discrete points along a continuum, such as a selfish versus a generous action (Berman & Small, 2012; Gray, Ward, & Norton, 2014), or fair versus unfair actions (Adams, 1965). In contrast, we study evaluations of the entire continuum of actions ranging from extremely selfish to extremely selfless.

*The research reported here is important for at least two fundamental issues in consumer research. First, earning a positive reputation through prosocial actions represents an investment in the goodwill of others at a cost to oneself. Companies and consumers who benefit other consumers should understand how their actions are perceived by others. If evaluations of prosocial actions are linear, then reputational benefits are commensurate with the personal costs incurred. If, however, evaluations of prosocial actions are nonlinear, then discrepancies may emerge between the costs and benefits of prosocial actions.*

Second, the reputational value of prosocial actions creates incentives to repeat those actions. This in turn shapes social norms, which are partially created through evaluations of appropriate and inappropriate actions (Fehr & Schmidt, 1999). If selfless behavior is evaluated more favorably than merely equitable behavior, then selflessness would be encouraged and selfish behavior discouraged. If, however, selfless behavior is evaluated no more favorably than merely equitable behavior, then fairness would evolve as the common social norm.

In Experiment 1, we visited our university orchestra. Our orchestra concerts are free, but include a suggested donation of \$10. We asked actual concertgoers ( $N=103$ ) to evaluate the character of a person ("Tom") who behaved relatively selfishly (donating \$0), fairly (donating \$10), or generously (donating \$20, twice the suggested amount).

Participants rated Tom's character on 5 traits related to warmth (tolerant, warm, good-natured, sincere, and caring), and 5 traits related to competence (competent, confident, independent, competitive, and intelligent), in counterbalanced order.

Results showed that Tom was judged more negatively when he behaved selfishly (donating \$0) than when he behaved fairly (donating \$10),  $t(48)=5.24, p<.001$ , but was not judged more favorably when he behaved generously (donating \$20) than when he behaved merely fairly,  $t(40)=.40, p=.69$ . No relationship between Tom's donation and evaluations of his competence was found.

These results suggest an asymptotic pattern in evaluations of prosociality. Giving the suggested donation led to positive impres-

sions, but giving twice as much led to no more positive impressions. It paid to be nice, but it paid no more to be nicer.

Experiment 2 ( $N=195$ ) used sharing candy as the prosocial action of interest. We gave one participant (the Actor) the opportunity to give candy to another participant (the Target) while a third watched (the Observer). By subtle inducement, Actors behaved either selfishly (gave away only 1 of 10 jellybeans), fairly (gave 5 of 10), or generously (gave 9 of 10). Both Observers and Targets then reported their impression of the Actors' warmth and competence.

The results showed that both Observers and Targets evaluated Actors more negatively when Actors gave only 1 out of their 10 jellybeans. However, neither Observers nor Targets evaluated Actors more positively when they gave 9 out of 10 jellybeans than when Actors gave merely 5 out of 10 jellybeans. These results again demonstrate asymptotic evaluations of prosociality.

Actors, however, predicted that they would receive credit for their generosity. This result tentatively suggests that people may not have a full understanding of how their generous actions are evaluated by others.

In Experiment 3, participants ( $N=182$ ) evaluated Bob D., a person we said came to our laboratory and received \$6 to divide between himself and another person (the "dictator game"). Participants learned that Bob gave away either \$0, \$1, \$2, \$3, \$4, \$5, or \$6 (manipulated fully between-subjects).

The results again revealed asymptotic evaluations. Bob earned an increasingly more negative reputation as he behaved more selfishly (giving \$0, \$1, or \$2), but did not earn an increasingly more positive impression as he behaved more selflessly (giving \$4, \$5, or \$6).

In Experiments 4a and 4b, we tested a mechanism responsible for these effects. In particular, we suggest that asymptotic pattern—sensitivity to selfishness but not selflessness—comes because people are less likely to evaluate acts of selflessness in context (by spontaneously comparing them against other selfless outcomes) than acts of selfishness. Participants in Experiment 4a evaluated a person who gave away some amount of a large financial windfall, or took some amount from a bag of money found on the street before returning it to police. Consistent with previous experiments, we found that a person who gave away 10% of the windfall was judged as favorably as someone who gave away all of it (or any 10% increment in between), but that someone who took money was judged negatively commensurate with the amount taken.

We tested our comparison mechanism by presenting participants with all possible outcomes in a within-participants design that makes such relative comparisons explicit. Participants in Experiment 4b therefore evaluated all outcomes from Experiment 4a. The within-subjects results revealed that evaluations of donations were now linear rather than asymptotic, suggesting that when participants can easily compare between generous actions of varying magnitudes, they evaluate those actions in a monotonic fashion.

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# Humanity Assertion and Anticipated Reckoning: Insights from Gift Exchange in a Crisis Context

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## EXTENDED ABSTRACT

Decades ago, Belk (1976) and Sherry (1983) called for a better understanding of how situational conditions shape gift exchange. Nevertheless, the literature reflects a fairly narrow range of gift-giving contexts (e.g., romantic dyads, family holiday exchanges, and workplaces; Belk & Coon 1993; Caplow 1984, Otnes et al. 1993; Ruth 2003), among relatively affluent people. Little is known about gift exchange in impoverished or constrained settings, including crisis situations.

This paper examines gift exchange occurring within Nazi concentration camps. Life in the camps was degrading and humiliating by design, and prisoners endured persistent assaults on their self-worth, dignity, and autonomy. Extreme deprivation demanded a focus on individual survival, and prisoners struggled to attain extremely scarce resources through black markets and other unofficial exchange mechanisms, including gift exchange. In exploring gifting within this context, we draw upon the theory of Identity-Based Motivation ("IBM;" e.g., Oyserman 2007; Oyserman, Bybee, & Terry 2003) which views identity as malleable, and emphasizes how cultural and social contexts can trigger self-goals related to a given identity. These salient identities then influence perceptions, judgments, and behavior.

We conducted a careful textual analysis of 28 personal memoirs of Holocaust survivors from various countries, and academic accounts of the camps, focusing on gift-giving incidents within the extreme-deprivation contexts of the camps. Our sources were not selected *a priori* because of their focus on gift-giving; rather, each was reviewed in its entirety and included in the study. We analyzed each memoir to locate acts that could reasonably be interpreted as "giving." We subjected these incidents to the constant comparative method of data analysis outlined by Strauss and Corbin (1994). We first analyzed the motivational aspects of each unit of analysis, and then linked the ways each motive impacted the identity of the giver and/or recipient. As such, we cycled iteratively between the archival material and our emergent findings to ensure that we reported phenomena that could enrich and expand our understanding of gift exchange. We are confident that the memoirs we analyzed provided saturation, because in analyzing the last few memoirs in our selected set, no new themes arose (Glaser & Strauss 1967).

Three clear motivations for giving emerge from the data: instrumental, connective, and humanity assertion. Instrumental giving is motivated by the giver's possibility of gaining something in return. For example, recipients are often other prisoners with greater access to goods. In connective giving, prisoners give to re-establish desired social connections and identities. Such giving plays a formative role for prisoners in developing new social groups. Because of space/time constraints, in this paper we focus on the third emergent motivation: humanity assertion. We explore the following emergent research questions: 1) How does humanity assertion shape behavior in crisis contexts?; and 2) What are the implications of this motivation for the identities of givers and recipients?

We find that giving motivated by humanity assertion is agapic in nature: it is neither pragmatic nor instrumental, is unlikely to be reciprocated, and is idealistic and altruistic. In keeping with IBM, we find that numerous acts of giving are propelled by the givers' desires to adhere to a moral code that allows them to rise above the primitive struggles and conflicts of the camp. Recipients of gifts via humanity assertion are often strangers, mere acquaintances, or people unlikely to be able to reciprocate. The type of giving allows the giver to assert his or her humanity: to see oneself as human and moral. Recipients, in turn, are bestowed not only with a gift, but also with a sense of their own humanity.

In contrast to extant research, we find that agapic giving extends beyond the contexts of romantic partners, close friends or family members. In the camps, it reinforces identities of "human" and "alive" for givers and recipients. Furthermore, prior research does not consider commodities as agapic gifts, because their blatant market value tends to usurp any symbolic value (Belk & Coon 1993; Ekeh 1974). Yet we find that much agapic giving in a crisis context takes the form of commodities, as extreme deprivation imbues gifts of food and other commodities with strong symbolic value.

According to IBM, our identities continuously develop in response to environmental pressures. Yet people respond to these pressures in different ways. In this case, we see that humanity assertion is associated with the self-standpoint, or point of view from which a person judges him or herself. The self-standpoint is oneself in the distant future, the survivor self who must live with one's past actions. The present self is thus regulated by an anticipated future self who looks back to judge the present self. We label this construct *anticipated reckoning*. The future self regulates the actions of the current self; the future self is, in a sense, watching. We offer evidence that anticipated reckoning is particularly relevant for self-regulation in a crisis. Yet how well people adhere to the moral standards of their pre-crisis selves depends on the pressures within the crisis context, and the individual's ability to self-regulate behavior in a context where socially-derived moral standards of selfishness may conflict with internal pre-crisis standards. After emerging from a crisis, the individual carries forward a self-digest of the crisis self, which can spur negative affect; the survivor must reintegrate into a world where moral standards are likely very different than those in the crisis context.

We thus make several contributions to gift-giving research. First, we demonstrate the efficacy of the IBM and related theories to understand the interplay between gift exchange and identity. Second, we expand the theoretical domain covered by existing models of giving by highlighting distinctions between giving in commonplace versus crisis contexts. Third, we illustrate the fundamental role gifts play in establishing moral identities and basic human dignity, demonstrating that agapic gifts are not just reserved for closely-held others, but are offered to strangers as well. Within conditions of extreme crisis, agapic gifts allow the giver to reaffirm his or her own humanity.

# Groups Can Detect White Lies

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## EXTENDED ABSTRACT

Lies are both common and potentially very costly if undetected (DePaulo et al., 1996). Many economic transactions involve asymmetric information between buyers and sellers, in which one party must the other is making accurate representations. Consumers increasingly rely on user-generated web content when reading products reviews to make more informed purchases. The legal system relies on judges and juries to detect lies from defendants. These examples illustrate that the ability to detect lies can forestall significant economic and psychological costs to consumers and society.

However, detecting deception is difficult. Accuracy rates in experiments are only slightly above chance, even among trained professionals (Ekman & O'Sullivan, 1991; Mattson, Allen, Ryan, & Miller, 2000; Vrij, 2000). This meager accuracy rate appears driven by a modest ability to detect truths rather than lies. In one meta-analysis that includes 206 experiments, individuals accurately identified 61% of truths, but only 47% of lies (Bond & DePaulo, 2006). These results have led researchers to develop costly training programs targeting individual lie detectors to increase accuracy (e.g., Bull, 2004; Frank & Feeley, 2003; Shaw, Porter, & ten Brinke, 2013). In this research we test a different strategy: asking individuals to detect lies as a group.

There are three reasons that groups might detect deception better than individuals. First, because individuals have some skill in distinguishing truths from lies, statistically aggregating individual judgments could increase accuracy (a "wisdom of crowds" effect; Hastie & Kameda, 2005; Larrick, Mannes, & Soll, 2011). If individuals detect truths better than lies, aggregating individual judgments would increase truth detection more than lie detection.

Second, individuals show a reliable "truth bias," assuming others are being truthful unless given cause for suspicion (Bond & DePaulo, 2006). If groups are less trusting than individuals (Wildschut et al., 2003), then they could detect lies more frequently because they guess that someone is lying more often.

Finally, group deliberation could increase accuracy by providing useful information that individuals lack otherwise (Bonner, Bauman, & Dalal, 2002; Franz & Larson, 2002; Stewart & Stasser, 1995). This predicts that group discussion alters how individuals evaluate a given statement to increase accuracy. Because individuals already possess some accuracy detecting truths, unique improvement from group discussion would increase accuracy detecting lies.

In Experiment 1a ( $N=180$ ), participants watched ten different statements (from different people) and guessed whether each was a truth or lie, either individually or in a group of three. This tested whether groups were more accurate than individuals in detecting truths, lies, or overall than individuals.

Experiment 1b was a replication of 1a, using different stimuli and nearly double the sample size ( $N=351$ ).

The results of Experiments 1a revealed that real groups were more accurate ( $M=61.7%$ ,  $SD=18.2%$ ) than individuals ( $M=53.6%$ ,  $SD=16.0%$ ),  $t(118)=2.32$ ,  $p=.02$ ,  $d=.47$ . The group advantage came primarily from detecting lies more accurately than individuals,  $t(118)=2.66$ ,  $p<.01$ ,  $d=.57$ . There was no group advantage when detecting truths,  $t(118)=.86$ ,  $p=.39$ ,  $d=.18$ .

The group advantage in lie detection, but not truth detection, could come from a response bias if groups are more likely to guess that someone is lying. However, there was no significant difference

in the frequency of guessing 'truth' between groups ( $M=50.3%$ ,  $SD=11.0%$ ) and individuals ( $M=53.6%$ ,  $SD=14.4%$ ),  $t(118)=1.12$ ,  $p=.26$ ,  $d=.26$ . In addition, a linear regression predicting overall accuracy from condition (individual versus group), controlling for the propensity to guess 'truth,' still yielded a significant effect of condition,  $\beta=.08$ ,  $t=2.32$ ,  $p=.02$ . Groups were not better lie detectors because they were more likely to guess that someone was lying.

We further assessed whether the statistical aggregation of individual judgments can increase accuracy. We therefore statistically aggregated judgments of participants in the individual conditions in Experiment 1a. Statistical aggregation did not improve accuracy.

Experiment 1b fully replicated the results of Experiment 1a.

In Experiment 2 we sought to understand the mechanism responsible for improvement in lie detection gained through group discussion. Group discussion could increase lie detection skill for two reasons. First, group discussion could identify the most accurate individual within a group, increasing accuracy through a sorting mechanism. Second, group discussion may elicit conjectures and observations about the target that provide the information needed to make an accurate assessment, increasing accuracy through synergistic mechanism by exposing individuals to each other's preliminary points of view.

The critical difference between sorting and synergy is that individual judgments are formed *before* discussion on the sorting account and discussion then identifies the best judge, whereas individual judgments are formed *during* discussion on the synergy account and discussion itself creates a more accurate judgment.

We tested between these mechanisms in Experiment 2 by having participants make judgments both as a group *and* individually for each target, manipulating the order in which they did so. The sorting mechanism predicts that making individual judgments first will not affect the subsequent group advantage in lie detection, whereas the synergy mechanism predicts that forming an individual judgment first will disable the group advantage because accuracy comes from the additional information acquired *while* forming a group opinion.

The results revealed a clear order effects, whereby the group advantage in lie detection was erased when individual judgments were taken before group judgments, supporting the synergy account and arguing against the sorting account.

Together, these experiments reveal that group discussion can improve accuracy in lie detection through synergies created during discussion.

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# Multisensory Brand Search: How the Meaning of Sound Guides Consumers' Visual Attention

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## EXTENDED ABSTRACT

Building on models of crossmodal attention, we propose that brand search is inherently multisensory. This proposal was assessed in three experiments. The results demonstrate that the presentation of spatially non-predictive auditory stimuli associated with a product (e.g., usage sounds or product-related jingles) can crossmodally facilitate consumers' visual search for that product.

We used a speeded single-target visual search task with repeated trials (Quinlan 2003). This task involves active scanning of a visual scene for a target object and therefore models the actual search for products by consumers. On each trial, the participants were first shown the name of a target product, then a central fixation cross, and finally a virtual shelf display containing the target among several (randomly-selected) distractor products. Sound was manipulated as a within-participants factor (congruent vs. incongruent with the target product vs. no sound) and presented together with the visual search displays. The sound did not carry any spatial information and the location of the target product was counterbalanced across sound conditions. Participants were instructed to localize the target product (Experiment 1) or to make target present/absent responses as quickly and accurately as possible (Experiments 2 and 3). Reaction times (RTs; Experiments 1-3) and saccadic eye movements (Experiment 2) were recorded.

Experiment 1 ( $N = 50$ ) revealed that participants located the target product significantly faster when exposed to a congruent product usage sound rather than to no sound. Incongruent sounds did not significantly influence RTs relative to the no-sound condition.

Experiment 2 ( $N = 50$ ) provided evidence concerning the time-course of the audio-visual facilitation effect by examining participants' eye movements during their visual search: Target-congruent sound (vs. no sound) sped up the onset of the last saccade to the target, and, albeit less clearly, the onset of the initial saccade. Participants also made fewer fixations prior to fixating the target when the sound was congruent (vs. absent). Incongruent sound (vs. no sound) did not significantly affect these eye movement measures. This indicates that sound modulates later visual attention, with effects trending even in the earliest stages of consumers' attention allocation.

Experiment 3 ( $N = 49$ ) examined whether a similar facilitation effect would emerge even when the association between a product and a sound had been learned just before the experiment. To this end, participants learned sound-brand associations between unfamiliar jingles and brands (in three trials). We then tested their effect on RTs in a visual search task. The results confirmed that even such newly formed associations between short jingles and unfamiliar sounds can elicit the kind of crossmodal facilitation that was observed in Experiments 1 and 2.

To summarize, characteristic sounds can crossmodally facilitate the visual processing of products in displays that resemble realistic, everyday situations such as scanning a supermarket shelf for a specific product. The associative meaning of short product-related sounds affected how rapidly both visual attention could be deployed and subsequent manual responses could be executed. As demonstrated by the eye gaze analysis, sounds influenced the earliest stages of visual attentional allocation, as well as later decision-related aspects of visual search.

The current results provide robust evidence for the view that consumers' brand search is inherently multisensory. Substantiated by eye movement data, the semantic content of a product-related sound seems to reflexively attract a participant's (visual) attention to the (visual representation of the) associated product or brand. We reason that sound can enhance the perceptual saliency of the associated product or brand, thereby guiding the "spotlight" of visual attention (Posner, Snyder, and Davidson 1980).

Our findings contribute to the evidence for a multisensory saliency map that weighs not only visual object features but also features from other modalities, such as audition and olfaction (see, e.g., Chen et al. 2013). This extends earlier, unisensory research into the competitive saliency of brands at the point of sale (Van der Lans, Pieters, and Wedel 2008). Examining brand search in a multisensory setting, our study demonstrated that it is not only visual, but also auditory brand features that may drive a brand's competitive saliency. Recent research has further examined how audio-visual interactions based on the *spatial* congruency between sounds and products affect consumers' attention and decision making (Shen and Sengupta 2014). Complementing this work, we examined the role of *semantic* congruency in the modulation of audio-visual attention. This is an important contribution since semantic associations between products and sounds play a central role in marketing.

The results of the present study also shed light on earlier findings concerning the priming effect of music on product choice (North, Hargreaves, and McKendrick 1997, 1999). In their seminal study, North and colleagues demonstrated that playing French (vs. German) instrumental background music dramatically increased sales of French (vs. German) wines. Our findings highlight the possibility that attention-orienting processes had a mediating role in the music-decision effect. As the allocation of visual attention is known to influence choice (Shimojo et al. 2003), once consumers' attention was focused on the French bottles, it may have influenced the associated decision processes.

Finally, we contribute to the extant psychological literature on crossmodal modulation of spatial attention and multisensory learning. To our knowledge, this research is the first to demonstrate that crossmodal facilitation based on semantic congruency is not only induced by preexisting long-term semantic associations, but also by short-term (three-trial) audio-visual learning. Such minimal exposure is unlikely to lead to the emergence of strong representations in long-term memory or extensive synaptic learning. The fact that crossmodal facilitation was still observed raises the question of what neural mechanisms underlie this effect, and to which extent synaptic plasticity is implicated (Jääskeläinen et al. 2011).

Practitioners may use auditory-visual crossmodal facilitation to aid consumers' visual search for products and brands. Hearing auditory stimuli associated with specific products may help consumers to more rapidly detect the product they are looking for among other, visually distracting, products. Similarly, auditory stimuli may be used to crossmodally facilitate visual search performance for a specific element in an (online) user interface (e.g., by playing a ka-ching sound if the target happens to be a "checkout" button).

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# The Effects of Comparative Processing and Mitigating Information on Customer Choice of a Brand with Negative Attributes

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## EXTENDED ABSTRACT

As consumers, we hear negative news stories about companies and also hear positive information about the benefits of those companies' products. How does this mixture of information influence purchases? Firms would benefit from being able to understand how consumers process the information gained from news sources and knowing how these stories impact purchase patterns. This research examined customers who have learned negative information about a company to see how comparative processing of information impacts product choice. In comparative processing, individuals give an evaluation on one object based on how it compares to suitable alternative options (Sanbonmatsu et al. 2011). This is different than selective processing, in which individuals instead make judgments based on an object's own features while ignoring other options.

This paper explores how positive and negative information regarding a brand influences consumer decision-making when comparative processing is encouraged. The results show that when consumers receive mitigating information about a brand's negative actions or features (e.g., that a firm's pollution levels were out of its control due to government regulations), that mitigating information influences choice when the consumer engages in comparative processing and is thinking about the tradeoff between positive and negative information.

Prior research has found that limiting cognitive resources appears to decrease comparative processing and favor selective processing (Sanbonmatsu et al. 2011). Additionally, people engaging in selective processing have a propensity to focus on positive information (Posavac et al., 2006). This positivity bias means that people focus on the positive aspects of a product when making an evaluation while discounting the value of negative information. This suggests that someone engaging in comparative processing will focus less on a product's positive attributes and give more weight to negative information than someone engaging in selective processing. This greater weight to negative information suggests that those engaging in comparative processing when making purchase decisions should have a lower propensity to select a brand with negative information than those who are not engaging in comparative processing.

*Hypothesis 1: Engaging in comparative processing prior to choice decreases consumers' choice of a brand that has a negative attribute when compared to a customer who is not engaging in comparative processing.*

When a firm has done something negative, its customers are likely to have a more negative reaction to the company's actions if the customers believe that the firm had control over the problem when compared to customers who do not feel the failure was controllable by the firm (Folkes, 1984). If that company provided mitigating information that suggested the cause of the negative information was uncontrollable, this could affect customer perceptions. This mitigating information can have different effects depending on whether the consumer is engaging in comparative processing. If engaging in comparative processing, the customer is more likely to be influenced by mitigating information than customers who are not.

*Hypothesis 2: Customers engaging in comparative processing about a product with negative information are more likely to be influenced by mitigating information about the company than customers who are not engaged in comparative processing.*

An experimental study with a 2x2 between-subjects factorial design in which the manipulated factors were the ability to engage in comparative processing and whether participants received mitigating information about the firm's pollution was conducted. The results of the study support the above hypotheses.

When engaged in a purchase-related task, there was a significant main effect for cognitive processing for the negative brand, with participants rating the negative brand lower if engaging in comparative processing when compared to a distraction condition.

However, in a non-purchase related task in which participants were choosing a sample, participants who were engaged in comparative processing and received mitigating information about the negative information were more likely to want to sample the negative brand than other participants. These results suggest that the thought process was different from when participants were thinking about actually purchasing a product. In the purchase situation, the comparative processing seems to have made participants less willing to validate the negative information about the brand.

The study advances the theory on comparative processing by exploring how consumers process product information when they have access to both positive and negative information about the product and its manufacturer. Selective processing of information in which a person focuses on an object's features in making judgments results in a bias towards positive information about the target (Posavac et al., 2006). Because people focus on the positive information, this means that selective processing (i.e., when people do not engage in comparative processing) leads to greater likelihood of choice for a product when compared to someone engaging in comparative processing. Comparative processing, on the other hand, focuses attention away from the positive aspects of the product and includes more of a focus on negative information compared to selective processing.

These results provide some insight as to what managers can do to help reduce the negative impact of negative news stories. Most obviously, firms can release mitigating information that helps reduce the negative impact of these stories. Since there was a main effect for the presence of mitigating information on attitude towards the brand, providing this type of information will help improve consumer attitude. If the company does release mitigating information, it should encourage consumers to focus on the tradeoff between the negatives and positives of the product's features. For example, the company could issue a release that not only acknowledges the issue (pollution), but also informs consumers about the steps being taken to correct the issue (apply for permits to upgrade equipment) or provides other mitigating information such that the facilities met prior emission standards.

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# The Dark Side of Marketing Tactics: Scarcity Promotions Induce Aggressive Behavior

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## EXTENDED ABSTRACT

Each year, violent incidents are reported on Black Friday and other shopping-crazed holiday events. In fact, a website called *Black Friday Death Count* has been created to tally and detail the injuries and deaths that occur directly from Black Friday promotional sales (<http://blackfridaydeathcount.com/>). The current research contributes by showing that aggressive tendencies from scarcity not only occur in such contexts, but more importantly that aggression can *originate* from exposure to scarcity promotion advertising.

This research centres its investigation on scarcity promotions, a marketing tactic that emphasizes limited availability of a specific product or event (Ku, Kuo and Kuo 2012), and explores three research questions. We seek to empirically test the hypothesized relationship between scarcity promotions and consumer violence, a link previously confined to mass media observation and speculation. Specifically, we examine not only whether exposure to scarcity promotions leads consumers to behave more aggressively, but also whether this aggression can actually originate from exposure to a promotional ad. We also explore the underlying psychological mechanism that determines *why* scarcity promotions lead (or do not lead) to such aggressive behavior. This research is the first to show that exposure to a scarcity promotion can lead to increased aggressive behavior among consumers (studies 1-3). Importantly, we find that this unfortunate and costly outcome occurs not because one is competing for scarce goods to ensure one's survival (e.g., food, water), but merely for desirable non-necessities (e.g., electronics, luxury goods). Importantly, we also uncover the underlying process driving this aggression and find that exposure to scarcity promotions lead consumers to perceive others as threats to obtaining the desirable focal good. This increased interpersonal threat, in turn, leads consumers to draw on established aggressive behavioral responses to mitigate this threat (studies 2-3). Finally, we also identify a boundary condition to the proposed effects: the ability to participate in the promotion (study 4).

In study 1, one hundred forty undergraduates were randomly assigned to one of two conditions in a 2 (Promotional Ad: Scarcity, Control) between-participants design. Participants reviewed one of two promotional ads for an iPhone 5S from the home university's bookstore that served as our scarcity manipulation. To manipulate scarcity, we varied the quantity of iPhone 5s available to consumers via the promotion. In the scarcity (control) promotion, only 3 (3,000+) iPhones were available to consumers. Pretesting confirmed the efficacy of the manipulation. After reviewing the Bookstore's promotional ad, participants answered cover story questions before moving to our measure of aggression, ostensibly described as a separate study on classic video games. Specifically, participants were told that marketing researchers were investigating the recent trend among video game players towards classic video games (e.g., Super Nintendo), and that they would be randomly assigned to play a classic game and report on their experience. In actuality, all participants were directed to play an online first-person shooting game called "Deadeye" for 1-2 minutes. In this game, participants use the mouse to aim a gun to shoot at moving targets. We operationalized aggression as the shooting behavior of participants; specifically,

we recorded and measured the number of bullets participants fired. As predicted, participants exposed to the scarcity promotion fired significantly more bullets than participants exposed to the control promotion

Study 2 sought to provide process evidence and to use a more direct measure of aggression. One hundred and seven undergraduates participated in this study in a 2 (Promotional Ad: Scarcity, Control) between participants design. Upon arrival, participants completed the scarcity manipulation from study 1. Upon completion, participants were given the same classic video game cover story as study 1, but were instead assigned to play the Wii boxing game. Participants physically assaulted a defenceless human opponent. Sessions were recorded and coded for punches thrown. Participants then completed the following question to measure perceived interpersonal threat on a scale from 1 (not at all threatening) to 7 (very threatening): "How much do you perceive other people as a threat to you obtaining the product in the promotion?" Replicating study 1, participants threw more punches at the defenceless opponent and perceived other consumers as higher threats to obtaining the product after exposure to the scarcity promotion than after exposure to the control promotion. The indirect effect of scarcity promotion on aggressive behavior through perceived threat was significant.

Study 3 manipulated perceived threat to further support our process claim using a different sample and aggression dependent variable. One hundred sixty participants from an online sample were randomly assigned to conditions in a 2 (Promotional Ad: Scarcity, Control) x 2 (Perceived Threat: High, Low) between-participants design. Before viewing the promotional ad, in the high (low) threat condition, participants identified two ways in which they were different (similar) to people from their city. Upon completion, they viewed one of the two scarcity ads, then read a scenario about lining up to participate in the sale and being positioned near the front of the line to rush inside once the doors opened. After completing cover story questions, participants moved on to the dependent measure: preference for violent classic video games. ANOVA revealed the predicted interaction: when perceived threat was high, scarcity participants choose significantly more violent games than control participants; however, when perceived threat was low no differences emerged.

Study 4 examined a boundary condition of our effects. Two hundred thirty-nine undergraduates were randomly assigned to one of four conditions in a 2 (Promotional Ad: Scarcity, Control) x 2 (Ability to Participate: High, Low) between-participants design. We manipulated scarcity using the same ads used in studies 1 and 2. To manipulate ability to participate, we varied the bookstore location (close vs. far). Aggressive behavior was assessed as in study 1. ANOVA revealed only the predicted interaction: participants in the high ability to participate conditions fired significantly more bullets after reviewing the scarcity versus control promotion. However, in the low ability to participate conditions, no effects emerged.

In conclusion, our research demonstrates merely exposing consumers to a scarcity (versus control) promotional ad leads to increased aggressive behavior, even outside the direct consumption domain when there are no other individuals present to compete and aggress against, and when the scarce item itself is not attainable. We



find that this outcome results after exposure to scarcity promotion advertising because consumers perceive a potential threat of other consumers trying to obtain the desired product. To mitigate this perceived threat, consumers resort to aggression.

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# Giving by the Bucket, Taking by the Grain: The Gap between Health Communicators and Consumers

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## EXTENDED ABSTRACT

Health campaigns are often limited in their impact (Evans 2006), especially when they employ assertive language (Dillard and Shen 2005; Grandpre et al. 2003; Quick and Considine 2008). Research has recently developed around the need for effective health communication (e.g., Bryan, Karlan, and Nelson 2010; Fishbach and Dhar 2005; John, Loewenstein, and Volpp 2012). The current research reveals a motivational gap between health communicators and consumers to explain why health communication is oftentimes ineffective.

Linguistically speaking, the type of messages in health communication is advice. Advice situations are ground for asymmetrical motivations, such that the advice giver perceives herself to be at a higher position than the advice receiver (Hansun 2005; Waring 2005, 2007), whereas consumers perceive health communication as intrusive (DeCapua and Dunham 1993) and that it does not presuppose control of the speaker over the outcomes (Hansun 2005). Thus, advice, especially in health communication, is a fertile ground for conflicts. We propose that one of the key reasons for this conflict is a gap between the motivations of advice givers and advice receivers. Following Searle (1969), we make a distinction between two constructs: (1) addressee's objective need for advice and (2) addressee's subjective wish for advice. In many cases advice givers are not concerned about, nor take into account the addressee's wish for advice (Locher and Hoffmann 2006). We suggest that when making their choice of the degree of assertiveness, health communicators rely more on addressee's *need* for advice and less on addressee's wish for advice. Relying on need for advice, as advice givers perceive it, leads to use of assertive language because of perceived importance of the health issue (Kronrod, Grinstein and Wathieu 2012). Conversely, when reacting to advice, consumers base themselves mainly on their subjective *wish* for advice (MacGeorge et al. 2004) for simple egoistic reasons (Carpendale and Racine 2011).

First, we collected 3 evidences for our general predictions: **1.** Preliminary hard data collection demonstrates the ubiquity of assertive advice in health communication: an analysis of real health slogans (N=153) shows an astounding 42% of health slogans that are assertively phrased. **2.** In a survey among 56 health experts specializing in smoking cessation, participants answered the following question: "Do you think that smoking cessation messages should be: A. Assertive (e.g., "Quit Smoking!") or B. Non-Assertive (e.g., "Thank you for Not Smoking!")". Within this sample, 66% supported the assertive argument. **3.** Analysis of 330 Q&A on "Ask the Doctor" online forums revealed that doctor's assertiveness depends on patient's need for advice, rather than wish for advice (see table 1 for results).

Next we present 4 lab and semi-field studies involving the perspective of the advice givers and then of advice receivers. **Study 1** examines advice givers' perspective. Participants (N=66) read a description of an imaginary person, John, presenting him as either leading a healthy (e.g., John prefers walking or riding a bicycle to driving his car) or unhealthy (e.g., John prefers driving his car to walking or riding a bicycle) lifestyle. Then, participants rated John's need and wish for advice about his health. Next, participants indicated their preference for one of two messages encouraging people like John to exercise twice a week, using a 7-point semantic differential de-

sign with an assertive message ("To keep your weight and be healthy you must exercise twice a week!") and a non-assertive message ("To keep your weight and be healthy you could exercise twice a week") as anchors. Regression results suggest that participants' assertiveness choice depended significantly on their evaluation of John's need for advice, whereas John's wish for advice did not have an effect on assertiveness level. In **Study 2**, 160 participants were randomly assigned to a 2 (low/high need for advice) by 2 (low/high wish for advice) design and chose between an assertive/non-assertive message to Kate, an imaginary protagonist, whose health condition was described as somewhat/very ill and her wish to get advice as high/low. Regression analysis indicates a significant weight for need for advice and a non-significant weight for wish for advice in preference for assertive message, even when respondents were *explicitly told* that Kate *does not want* advice. Moving to an advice receiver perspective, in **Study 3**, 82 participants read an assertive/non-assertive message encouraging them to exercise and indicated their intention to exercise more and their wish for health advice. Need for advice was measured by participants choosing a body form that most describes their own, on a figure chart. Regression analysis indicated a significant impact for *wish* for advice and no significant effect of *need* for advice on compliance with health messages. This result is in direct opposition to all our advice giver experimental results, emphasizing the gap in linguistic motivations between advice givers and receivers. **Study 4** is a field study where 200 students received an email from the main office encouraging them to add 5 minutes of abdominal exercise every day. The message was either assertive or non-assertive. A week later, the students reported the number of days they added abdominal exercise and indicated their wish to receive health advice and their body form on the chart. Regression results indicate significant role for wish for advice in adherence with assertive health communication, with no significant role for need for advice.

Our results highlight the gap between the motivations of advice givers and receivers in health communication. This gap explains why health communication is oftentimes ineffective. This work contributes to research in consumer persuasion by suggesting a novel way to analyze health communication, beyond studying the potential positive impact of assertive language (Kronrod, Grinstein, and Wathieu 2012). Health communication is a specific case of social marketing and is different, for example, from environmental marketing in that the beneficiary of one's making healthier lifestyle choices is first and foremost the person who engages in the behavior, whereas often in social marketing the society/environment is the main beneficiary. By studying both advice giver's and receiver's perspective this work extends former studies, which focused only on message receivers, and provides a holistic view of health communication.

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# In Pursuit of Good Karma: When Charitable Appeals to Do Right Go Wrong

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## EXTENDED ABSTRACT

The saying “you reap what you sow” embodies a guiding principle of the karmic doctrine, suggesting that one’s current actions have future consequences (Krishan 1997). Intuitively, individuals who strongly believe in karma should be more likely to engage in good deeds, such as volunteering, resulting in karmic rewards. However, we propose that it is not the virtue of the prosocial behavior per se, but the altruistic versus egoistic motivation driving it that determines the impact of karmic beliefs on responses to charitable appeals. Since karmic rewards accrue to those who do good deeds to benefit others (rather than themselves), individuals who believe in karma should respond more favorably only to those charitable appeals that highlight other-benefits compared to self-benefits.

Karma claims that current actions will affect future outcomes, which supports the importance of committing righteous acts. However, good deeds can be engaged in for either altruistic (Batson 1991; Krebs 1970) or egoistic (Campbell 1975) motivations. Since motivations to engage in prosocial acts are not always selfless, we argue this can have implications for individuals who strongly believe in karma because interpretations of the karmic doctrine take into consideration the individual’s motivation behind committing a particular action (Ghose 2007; Reichenbach 1998). We contend that charitable appeals framed as self-benefit (vs. other-benefit) will moderate the relationship between strength of belief in karma and propensity to engage in prosocial acts.

Study 1 investigates the moderating role of framing charitable appeals as self-benefit (vs. other-benefit) on propensities to engage in prosocial acts among individuals who strongly believe in karma. One hundred and forty-one individuals participated in a 2 (prime: karma vs. control) x 2 (charitable appeal: self-benefit vs. other-benefit) between-subjects study. First, participants in the believe in karma condition read a passage highlighting the central tenants of karma, while the participants in the control condition read a passage about routine activities (see Kopalle et al. 2010). Participants evaluated a fictitious charitable appeal, where those in the self-benefit (vs. other-benefit) condition read a charitable appeal that focused on donating to protect you (others). The dependent variable was likelihood of volunteering for the charity. Participants completed the Belief in Karma Scale (Kopalle et al. 2010,  $\alpha = .71$ ) and Belief in a Just World Scale (Dalbert 1999,  $\alpha = .91$ ). An ANCOVA yielded a main effect of belief in karma ( $F(1,135) = 4.18, p < .05$ ) and hypothesized belief in karma by charitable appeal type interaction;  $F(1, 135) = 4.53, p < .05$ . In particular, only participants primed with karmic beliefs expressed greater volunteer intentions following the other-benefit appeal ( $M = 6.16$ ) compared to the self-benefit appeal ( $M = 5.57$ );  $F(1, 54) = 5.89, p < .05$ .

Study 2 operationalizes self-benefit versus other-benefit charitable appeals through the presence (vs. absence) of incentives for donation. Sixty-two English-speaking female individuals participated in the study that consisted of 1 manipulated factor (incentive: present vs. absent) and 1 measured factor (belief in karma, continuous). Participants evaluated a fictitious charitable appeal for Planned Parenthood, which was consistent across conditions, except the incentives present appeal highlighted the chance to be entered into a drawing for a gift card conditional upon donating. The dependent variable was likelihood of volunteering. Participants completed the Belief in Karma Scale (Kopalle et al. 2010,  $\alpha = .64$ ), the Religious Commit-

ment Inventory-10 (Worthington et al. 2003,  $\alpha = .97$ ), involvement and frequency of volunteering.

Regression analysis found a main effect of belief in karma ( $\beta = .44, t(57) = 2.58, p < .05$ ), and a significant incentive and belief in karma interaction ( $\beta = -.43, t(57) = -2.53, p < .05$ ). A spotlight analysis one standard deviation above the mean of belief in karma showed a significant difference such that individuals with strong beliefs in karma indicated greater donation intentions when incentives were absent (vs. present);  $\beta = -.35, t(57) = -2.05, p < .05$  (Aiken and West 1991). There was no difference between incentive conditions for those with low levels of belief in karma;  $\beta = .34, t(57) = 1.75, p < .05$ .

Study 3 operationalizes self-benefit versus other-benefit charitable appeals through varying levels of identification. Two hundred and ninety-four respondents participated in a study that consisted of one manipulated factor (gender identity salience: high vs. low) and one measured factor (belief in karma, continuous). The gender identity salience manipulation consisted of a low versus high identification condition, following prior research (Puntoni and colleagues 2010). The dependent variable was likelihood of volunteering with the charity. Participants rated the degree to which their donation decisions were influenced by thoughts of themselves (vs. others), the Belief in Karma scale (Kopalle et al. 2010,  $\alpha = .75$ ), and familiarity with the disease.

A regression with analysis yielded a significant interaction between gender identity salience and belief in karma ( $\beta = -.21, t(290) = -2.39, p < .05$ ). Spotlight analysis showed a significant difference such that individuals with strong beliefs in karma indicated greater donation intentions when gender identity was not salient (vs. salient);  $\beta = -.16, t(289) = -1.97, p = .05$  (Aiken and West 1991). There was no difference between gender identity salience conditions for those with low levels of belief in karma;  $\beta = .13, t(289) = 1.60, p > .05$ .

To examine if other-focus mediated the interactive effect of beliefs in karma and the incentive conditions on volunteer intentions when gender identity was salient, we employed the bootstrapping approach to derive confidence intervals, using the SPSS-macro syntax developed by Hayes (2012, model 8) with 5,000 resamples. Analysis showed that the indirect effect of the highest order interaction was negative and significant (95% CI:  $-0.3064, -0.0164$ ).

This research adds to the peculiar beliefs literature by showing that belief in karma manifests a causal link of current actions resulting in either future rewards or consequences that ultimately impact consumers’ behaviors. It also contributes to the literature on charitable appeals by providing evidence that the framing of an appeal as a self-benefit (vs. other-benefit) moderates the relationship between an individual’s belief in karma and propensity to engage in prosocial acts.

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# Are Firms Perceived As Safer After An Information Breach?

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## EXTENDED ABSTRACT

While companies have taken great efforts to collect consumer information in order to improve consumers' overall experience, hackers have been equally active in their attempts to steal this data. For example, Facebook was attacked by the Ramnit worm in 2012 which stole Facebook login credentials from over 45,000 users (Karlin 2012) and Target was hacked with 70 million of customer information being compromised (Smith 2014). Research has shown that firms that experience information breaches are financially impacted by stock market reactions (Malhotra and Malhotra 2011; Campbell et al. 2003). Investors apparently expect consumers to leave when a firm is breached which could explain the drop in valuations.

We propose the idea that the customers of a firm that has been hacked may prefer to stay with the firm that has been hacked (rather than leave), provided that the attack were perceived to be a random event. Gambler's fallacy provides an explanation for this counter-intuitive response. Gambler's fallacy refers to the mistaken belief that the randomness expressed in large samples will be expressed even in small samples (Ayton and Fischer 2004; Tune 1964). Thus, when individuals see heads in the tosses of a coin they believe to be fair, they are more prone to predict that the next outcome is more likely to be a tail than a head. In our context, when attacks are considered random, individuals would expect future attacks as less likely given that an attack has already occurred. Conversely, when people believe that the source of a sequence of events is non-random (systematic), they would expect the previous outcomes to repeat into the future and expect future attacks as more likely. Hence, our study examines how the perceived nature of the attack--whether random or systematic -- influences how consumers feel about the safety of their information and their intention to stay or switch from a firm after a hack attack. Four studies are conducted to examine the relationship between the effect of the perceived nature of the attack (random vs. systematic) on consumers' intention to stay with the firm.

Four experiments show that consumers by default tend to switch from a firm after an information breach as they assume the attack is systematic. However, when the attack is considered random, consumers tend to stay with the firm regardless of the security level at the firm. This is because when the attack is random, consumers predict a lower likelihood of future attack and hence perceive the firm to be safer. However, if the attack is considered systematic, consumers are only willing to stay if the firm has an excellent security system (vs. average security system). Additionally, consumers are less likely to stay when they are *almost* breached than when they are actually breached if the hack attack is considered random, lending credence to the expression that 'the bark is often worse than the bite'.

In study 1 we conducted a 2 (nature of attack: random vs. control) x 2 (level of security system: excellent vs. average) between-subject design. The results show that consumers are more likely to stay with the breached firm if they consider the attack to be random. However, no interaction was found in study 1 showing that the effect of randomness holds true in both excellent and average security conditions.

In study 2 we conducted a 3 (nature of attack: random vs. systematic vs. control) x 2 (level of security system: excellent vs. average) between-subject design. We also included an "undecided" option to tease out the potential confound of status quo effects. The results show that after excluding the undecided participants, a higher percentage of participants choose to stay with the firm if the attack

is consider random than systematic, regardless of the security level at the firm. Interestingly, those in the systematic condition respond similarly as those in the control group and indicate a greater likelihood of staying only if the security level at the firm is excellent. This shows that consumers by default perceive the attack to be systematic if no additional cue on the randomness of attack is provided. Perceived safety at the firm is found to mediate these effects.

In study 3 we take into account of "near-miss" events and examine consumers' responses to random and systematic attacks when the attack results in a hit, resilient near-miss, and a vulnerable near-miss. Thus, a 2 (random vs. systematic) x 3 (breach condition: hit vs. resilient near-miss vs. vulnerable near-miss) between-subject design was conducted. We find that consumers are more likely to stay with the firm if the attack results in a resilient near-miss than a hit. Interestingly, consumers are less likely to stay with the firm if the random attack results in a vulnerable near-miss than an actual hit, lending credence to the expression that "the bark is often worse than the bite" where the fear of threat (vulnerable near-miss) can sometimes be greater than the actual harm (hit).

In study 4 we consider a dynamic setting which stimulates a sequence of attacks. This allows us to examine whether consumer feel safer after a random attack is due to their lower perceived likelihood of future attacks. A one factor, two level (random vs. systematic) design was conducted. Participants were shown different patterns of attack sequence ("OXOXXOXOO" vs. "OOOXXXXXOO" with "O" refers to no attack attempt and "X" refers to attack attempt being made) that differ in their switching rates as prior research has shown that people tend to perceive greater randomness when the switching rate is higher (Falk 1981). As expected, when consumers perceive an attack to be random, they predict that the firm is less likely to be hacked in the future and thus feel safer to stay with the breached firm.

In summary, this study contributes to the marketing literature by focusing on how individuals respond to information breaches in a digital economy rife with information theft. With a different perception of nature of attack, consumers will feel safer to stay with the firm.

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# Speeding Away from the Here and Now: Velocity and Mental Representation

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## EXTENDED ABSTRACT

We experience life at a pace—whether it is “slow as molasses” or “faster than the speed of light.” What, then, is the effect of perceived velocity on the mental representation on things we encounter?

Over a decade of work in construal level theory has demonstrated a relationship between distance from the here and now and mental representation (Trope and Liberman, 2010). However, we can move from the here and now at different rates. The goal of this research is to examine the relationship between the velocity at which we move from the here and now and our mental representation of the world.

Construal Level Theory proposes a bi-directional relationship between psychological distance from a target and the abstractness of the mental representations used to represent that target (Liberman and Trope, 2008; Trope and Liberman, 2010). Whether the distance is temporal, spatial, social, or hypothetical, greater distance is associated with more abstract mental representation.

Work in visual perception suggests that as objects move with faster velocity, people are forced to take on a more gestalt view as secondary features simply cannot be observed. For example, as the speed of objects increases, the number of individual objects that can be tracked in the human visual field decreases (Alvarez and Franconeri, 2007), and when the speed of an object sufficiently increases, it is no longer seen as an object moving across the visual field, but as a single, visually integrated “motion streak” (Geisler, 1999). Visual objects moving at a fast rate force people to rely upon a higher-level, “visual gist” representation.

Thus, I hypothesize that when people feel they are moving at a faster velocity, they are also more likely to rely on abstract, high-level mental representations. The results of three experiments provide evidence of this relationship. Experiment 1 illustrates that greater perceived velocity promotes reliance on more abstract (versus concrete) mental representations. Participants were primed to feel as though they were moving with either fast or slow velocity through a space ship game where white stars moved over a black background with either fast or slow velocity. They then completed a version of the Vallacher and Wegner (1989) behavioral identification form where a series of actions were each described with a high-level action item and a low-level action items. Those participants in the fast velocity condition selected more abstract action identifications. These results provide evidence that the perception of moving at a faster velocity leads participants to rely on more abstract mental representations.

In a bi-directional relationship, Experiment 2 demonstrates that under an abstract (versus concrete) mindset, people perceived visual images as moving with faster velocity. Participants were primed with either a concrete or abstract mindset by asking participants to complete a category (abstract) or exemplar (concrete) manipulation (Fujita, Trope, Liberman and Levin-Sagi 2006). Participants they completed a representational momentum paradigm where a series of static images appeared to be rotating with some implied velocity (Freyd and Finke 1984). Those participants primed in an abstract mindset perceived that these images moved with faster velocity relative to those participants in a concrete mindset.

Furthermore, perceived time moderates the relationship between perceived velocity and mental representation—the greater the perceived passage of time, the stronger the relationship between velocity and reliance on more abstract mental representations in the context of product choice (Experiment 3). Participants completed an alignable v. non-alignable attributes choice task with a fast versus

slow moving starfield in the background. Perceived time from the beginning of the choice task to the moment of choice was measured. For participants who perceived that less time had passed during the choice task, there was no difference in the product choice made by velocity. However, for those participants who perceived more time had passed during the choice task, those in the fast velocity condition more strongly preferred the option attractive along non-alignable attributes, consistent with previous work that indicates that when relying on abstract mental representations, people prefer options more attractive along non-alignable attributes.

The results of these experiments demonstrate a relationship between perceived velocity and the relative abstractness of mental representations. Greater perceived velocity promoted reliance on more abstract mental representations (Experiment 1). Under an abstract (versus concrete) mindset, people perceived a series of visual images as moving at faster velocity, with greater implied momentum (Experiment 2). Furthermore, the greater the perceived passage of time, the stronger the relationship between velocity and reliance on more abstract mental representations (Experiment 3). This is the first research to examine the relationship between velocity and the abstractness of mental representations and provides evidence that beyond forcing people to adopt more visually gestalt representations, greater velocity can also promote reliance on more abstract mental representations. These suggest a rich area of future research examining the relationships between velocity, time, and distance in the context of mental representation.

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# The Effect of Distinctive Peaks on Evaluations of Experiences Represented as Wholes or Parts

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## EXTENDED ABSTRACT

Two streams of research suggest that experiences may be represented in two ways. In the first type of representation, consumers convert the components and features of experiences into abstract representations of those experiences called prototypes (e.g. Kahneman, 2003; Shreiber and Kahneman, 2000). A second stream of research in consumer experiences contends that consumers store individual components of experiences in memory (e.g. Ahn, Liu, and Soman, 2009; Montgomery and Unava, 2009; Morewedge, Gilbert, and Wilson, 2005). I refer to these components as exemplars.

Distinctive components of experiences are weak inputs into prototype representations. Kahneman (2003) draws the concept of prototypes from the categorization literature (e.g. Rosch and Mervis, 1975), which suggests that distinctive components of experiences may not be integrated into the experience prototype. Because of their lack of feature overlap with their surroundings, distinctive items or experiences tend to be atypical, having little in common with the category prototype. As a result, evaluations from prototypes will put little weight on distinctive components.

In contrast, distinctive components produce robust exemplar representations. Work from the memory literature suggests that distinctive exemplars are often more accessible than non-distinctive exemplars. Distinctive words and images are more easily recalled than the non-distinctive stimuli that surround them, particularly after a delay (e.g. Rundus, 1971; Waddil and McDaniel, 1998; Watkins, LeCompte, and Kim, 2000; Wollen and Cox, 1981). Evaluations based on exemplars will be biased toward distinctive components of an experience.

In this paper, I examine the processing styles that produce prototype and exemplar representations. Distinctiveness effects in memory may be a product of relational and item-specific processing (e.g. Hunt, 2006; Hunt & Smith, 1996; Worthen, 2006). These authors suggest that non-distinctive items promote relational processing, emphasizing the common features among items, while distinctive items promote item-specific processing, emphasizing the distinctive features that set each item apart. Relational processing will tend to favor prototype formation, while item-specific processing will create robust exemplars. As a result, distinctive components should have a greater (lesser) weight in overall evaluations when consumers process an experience item-specifically (relationally). In three studies, I manipulate relational vs. item-specific processing in three ways: in Study 1 I use Navon figures to manipulate processing style directly, in Study 2 I manipulate processing style using temporal construal, and in Study 3 I manipulate processing style by asking participants to choose between components of different experiences or between groups of components. Inducing item-specific processing (Study 1), proximal temporal construal (Study 2), or choices between components of experiences rather than whole experiences (Study 3) increases consumers' reliance on distinctive components of an experience when making overall evaluations.

### Study 1

2 (Processing style: relational vs. item-specific) X 2 (Valence of distinctive components: highly enjoyable vs. moderately enjoyable)

Participants viewed and rated 10 pieces of modern art, 2 of which were distinctive. I induced processing style by presenting

participants with large letters, formed out of many smaller letters and asking them to type either the large letter or the smaller letters (Navon, 1977). Typing the large letter should induce a relational processing style, while typing the small letter should induce an item-specific processing style. I manipulated the valence of the distinctive piece by presenting participants with 8 moderately enjoyable sculptures and 2 paintings, with the paintings either highly enjoyable or moderately enjoyable between conditions. The addition of the highly enjoyable paintings only improved overall evaluations when participants were in the item-specific processing condition.

### Study 2

2 (Temporal construal level: distant vs. near) X 2 (Valence of distinctive components: highly enjoyable vs. not at all enjoyable) X 2 (distinctive component replicate: cat carving vs. owl carving)

Participants viewed and rated 10 carved pumpkins, 2 of which were distinctive. I induced processing style by telling participants that the pumpkins were carved for a high school Halloween contest either two years earlier or in the last week. I manipulated the valence of the distinctive pumpkins by presenting participants with either 8 moderately enjoyable pumpkins of one type (either cat or pumpkin) and 2 either highly enjoyable or not at all enjoyable pumpkins of the other type (either pumpkin or cat). The addition of the highly enjoyable pumpkins increased overall evaluations more when participants were told the pumpkins were carved in the last week. Similarly, the addition of the not at all enjoyable pumpkins reduced overall evaluations more when participants were told the pumpkins were carved in the last week. There was no significant difference between the replicates.

### Study 3

2 (Choice: Choose between wholes vs. Choose between components) X 2 (Valence of distinctive components: highly enjoyable vs. not at all enjoyable) X 2 (distinctive component replicate: red beans are distinctive vs. yellow beans are distinctive)

Participants were presented with four containers of jelly beans, each containing 4 beans. Two of the cups contained 3 red beans and 1 yellow bean while the other two cups contained 3 yellow beans and 1 red bean. Depending on the condition, all the distinctive beans were either highly enjoyable or low in enjoyment based on pretests. Before eating any jelly beans, participants were told that at the end of the experiment they could pick a mix of jelly beans to receive as a reward for participating. Depending on condition, participants were asked to choose between (1) a mix consisting of both the mostly-red bean cups mixed together or a mix consisting of both the mostly-yellow bean cups mixed together or (2) a mix consisting of one of the mostly-red cups mixed with one of the mostly-yellow cups or a mix consisting of the other mostly-red and mostly-yellow cups mixed together. After eating all the jelly beans, participants rated all 16 jelly beans overall. When participants were told they would choose between the two mostly-red mixes combined or the two mostly-yellow mixes combined (choose between wholes) the valence of the distinctive beans had a smaller impact on overall evaluations than when participants were told they would choose between the combinations of one mostly-red and one mostly-yellow mix (choose between components). There was no significant difference between the replicates.

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# The Warmth of our Regrets: Regulating Regret through Temperature

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## EXTENDED ABSTRACT

Individuals can regret their actions (errors of commission), as well as their inactions (errors of omission) (Gilovich and Medvec 1995). Action regret is the result of an individual's active decision (e.g., purchasing a stock that subsequently plunges in value), whereas inaction regret is caused by a failure to act (e.g., not purchasing a stock that subsequently rises in value). Recent research has shown how temperature influences product perceptions and consumer decision-making (Lee, Rotman, and Perkins 2014; Zwebner, Lee, and Goldenberg 2014). For instance, Zwebner and colleagues (2014) reported a temperature-premium effect as it relates to product perceptions, finding that exposure to physical warmth activates emotional warmth which in turn increases product evaluations. Recent developments in this field have not only strengthened the physiological-psychological connection in embodied processes, but also provide insights into consumer behavior and potential managerial implications for marketing decisions.

With regards to regret, we believe different forms of regret may lead to different emotional states, and that the type of regret experienced may have a distinct physiological state mapped in our neural system. This is consistent with recent research (Nummenmaa et al. 2013) that demonstrates different emotions correspond with different self-reported physiological states. In Wilkowski et al. (2009), people primed with anger-related thoughts felt physically warmer suggesting a systematic link between heat and anger. Based on classic associative theories of semantic memory, heat and anger could be associated concepts in memory such that one concept would activate the other. Given that action regret has been associated with anger (Kedia and Hilton 2011), it is likely that the emotional experience of action regret will result in an elevated physiological heat response. Thus, it is plausible that action regret will induce people to feel hotter. On the other hand, inaction regret is likely to be linked with coldness. When individuals experience inaction regret, the feeling of "missed opportunity" is borne from the person's inability to achieve a sense of self-fulfillment (missing a chance to be in a better state than their current state), which subsequently induce other emotions such as wistfulness and sadness (Gilovich et al. 1998). Thus, we suggest that different forms of regret lead to different physiological responses resulting from the conflation of physiological and psychological metaphorical associations between hot and cold, and that these different physiological responses to feelings of regret directly affect subsequent consumption behavior. To our knowledge, no research to date has examined how regret might affect physical perceptions of temperature or how the physiological response to the cognitive emotion of regret might affect subsequent consumptive behavior, and whether marketing efforts (i.e., advertisements) might mitigate the effects of regret.

Results from three studies suggest that experiencing regret induces a change in psychological temperature, motivating individuals to ameliorate that change via interaction with consumptive objects that are perceived to be physically or psychologically opposite in temperature. Furthermore, we find that promotional material, such as advertisements that represent warm or cold climates or beverages that can be served either hot or cold, can serve as a source for temperature mitigation and regret reduction. We further contribute to the mechanisms underlying embodied cognition effects. Although other research has examined the role of construct accessibility (e.g.,

Lee and Schwarz 2012), we demonstrate an opposing mechanism: self-regulation. Specifically, we argue that just as an individual will seek to regulate their temperature by desiring warmth when they feel cold and to cool off when they are too warm (e.g., homeostasis, see Benzinger 1969). Individuals will similarly desire hot or cold objects when they experience embodied temperature change through experiencing emotions. Given that emotional responses to experiencing regret are negative (Gilovich and Medvec 1995), we posit that the motivation to self-regulate is due to a desire to alleviate a negative emotional state. Research has shown that people are motivated to seek remedies to reduce the negative emotions that they are feeling (Cooper et al. 1995). Thus, it is reasonable to believe that self-regulation observed here is a response to people's desire to reduce their regretful emotion. If one was to experience a positive emotion (e.g., joy), it is unlikely that they will employ self-regulatory strategies to regulate their positive state. These self-regulatory effects also coincide with research on compensatory consumption. Indeed, prior research has demonstrated that individuals attempt to use products to "fill their emotional gap". For example, individuals made to feel powerless seek products that help them maintain or enhance their status (Rucker and Galinsky 2008). We argue here that such regulatory compensatory effects can be embodied in nature.

Understanding why consumers feel regret is critical to marketers as it is part of their objective to minimize the negative emotion experienced by their customers. Here, we provide a simple solution for businesses to help ameliorate the effects of consumer regret. If people are experiencing action regret, a customer service attendant can offer a cold drink to subtly mitigate their negative emotion. If people are experiencing inaction regret, the attendant can offer a hot drink to subtly mitigate their level of experienced regret. Finally, companies trying to sell 'risky' products (e.g. one that may elicit action regret) would likely benefit from keeping the store a little cooler or offering colder drinks. Exploring the link between risk and temperature may be a fruitful investigation in the future.

Finally, we believe that the embodied phenomenon discovered in this research is not just limited to regret. Future research may benefit from investigating regulatory mechanisms in other negatively-laden emotions (i.e., anger, sadness, guilt, fear, depression, etc). Given that our research shows that products or ads can mitigate people's level of regret, it may be a worthwhile endeavor to investigate whether physiological remedies (e.g., hot/cold drink) can also mitigate psychological discrepancies that arise from other negative emotions.

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## I Anthropomorphize Therefore I Am: A Metaphorical Explanation to the Reflectional Functions of Product Anthropomorphism

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### EXTENDED ABSTRACT

Anthropomorphism is the assignment of human characteristics or behaviors to non human objects, concepts, symbolic concepts (e.g. Brands), phenomena and animals (e.g. Epley et al. 2007). Gurthrie (1993) distinguished two forms of anthropomorphism: Partial anthropomorphism, in which a person partially projects some personality traits to the anthropomorphized object, but does not consider the entity a human being as a whole, and Literal anthropomorphism, in which individuals not only project human traits to the object, but also assume the object to be an actual person. A review of prior literature reveals that while partial anthropomorphism has been intensively studied, issues in literal anthropomorphism have not yet been much explored so far. The current study investigates the issue of literal anthropomorphism to advance our understanding of this important consumption phenomenon.

Literal anthropomorphism can help consumers build relationships with their possessions (e.g. Chandler and Schwarz 2010). The present study proposes that in order to develop intimate relationships with their possessions, consumers may anthropomorphize the product to reveal their identities and differentiate themselves from others.

A total of 23 informants participate in the face-to-face interviews. Two trained raters coded the data independently, with the third rater resolving inconsistent coding between the two raters. Overall, the inter-rater reliability was relatively high at 80.90%, 88.81%, 84.86% for content coding, causal relationship coding, and overall coding, respectively.

In describing the personification of animals, Kwan et al. described two types of animal personification in which people project human personality traits to animal: egocentric anthropomorphism and homocentric anthropomorphism (Kwan et al. 2008). Parallel with this distinction, the current study suggests that consumer would engage in either egocentric anthropomorphism (see possessions as self) or homocentric anthropomorphism (see possessions as other humans). The following analyses present the result based on these two types of anthropomorphism.

### Homocentric anthropomorphism – Possession’s role as others

#### *Anthropomorphic possession as friends*

One of the informants, Tom perceives his post card possessions as best friends, knowing that they are always there for him: “These postcards become very good friends of mine. I would love to meet new (postcards) friends from many different countries or cities. I meet these postcards, and I like to talk to them. The first one you saw was from Korea. I have a friend who lives in Korea I asked him to send me a postcard, and here it is. I remember I said: “Hey! Look I just got a new Korean friend! Nice to meet you!” Eventually, we build up friendship. “

#### *Anthropomorphic possession as family members*

The informant Sunflower anthropomorphized her car “Silver” as her child. Giving Silver a responsibility in her family means that she is pulling together towards a harmonious family: I called my Renault 21 “Sliver”. For years she has been accompanying me, and I can never truly express my gratitude enough. I have so many great

memories with my husband and my children, thanks to Silver. One of my best memories was my family trip to the Kenting beach. My kids, my husband, and I were together in “Sliver”, and we were talking, laughing, and having magic moments.”

#### *Anthropomorphic possession as partners*

Homocentric anthropomorphism is the means that helped Ken to survive the emotional roller coaster of his mind-numbingly tiresome job. This study recognizes that desire for control motivates Ken to anthropomorphize his scooter as a “reliable partner”: “When I am riding my T-Max, I get my passion for life back again. I twisted the throttle around until I could feel the grip throb in my hand. My wife always shuts me in the back when I pulled over for speeding. Whenever I looked at my T-Max, my faithful little steed, I feel I could break some rules sometimes. My T-max is not just a friend to me, but also a highly reliable partner.

### Egocentric anthropomorphism- Possession’s role as extended self

#### *Possession as ideal self*

Elaine anthropomorphizes her Elmo and uses Elmo to remind herself of the person she wants to be, and reconnects with the representation of her ideal self whenever she begins to anthropomorphize Elmo as a real person: “I want to be the person who can light up a room, make people laugh and feel like friends with each other. People pay more attention to me when they think I am up to something. I must have something that represents me and the very “me” ..... Here is Elmo. Elmo is actually the ideal reflection of me.”

#### *Possession as Actual self*

The informants who anthropomorphized their possessions as their actual selves become attached to the possession, reporting that their possessions to be more like who they truly are. Projecting humanlike attributes to the vehicle helps Amy convey her actual self: “My license plate number is 3118. I think she is such a vital part of me and my life. Therefore, I named her (the car) by her plate number, 3118. With that little car, my world expanded. I drove to work alone, enjoyed the music and scenes on the way. Sometimes I spread myself too thin; I think I just need a little space to think. I feel alive, relaxing here with my 3118. Everything was alright until a few years later when my son had seriously injured in a car accident while driving his friend’s car. It made me feel heartbroken and guilty. I should have been able to protect him and his friends if I gave him my car. I just gave 3118 to my son last year. Now, 3118 helps protect my son as I do.”

This study found that some individuals may use anthropomorphic possessions as a way to project ideal self-concept for managing social relationships, whereas others may use anthropomorphic possessions as a means of affirming their actual self-concept. In sum, egocentric anthropomorphism enables consumers to view possessions as representing themselves, both ideal and actual. Homocentric anthropomorphism enables consumers to view possessions as others. Given these preliminary results, further research should be conducted to investigate related issues brought up by the present findings.

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# Colorful or Black-and-White? The Role of Temporal Distance on How You See the Future

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## EXTENDED ABSTRACT

Construal Level Theory (CLT; Trope and Liberman 2003) provides a theoretical framework for understanding how people construe temporally distant objects or events. When contemplating events in the immediate future (i.e., are psychologically proximal), people use their perceptual systems to construct rich and detailed representations of the events based on their current experiences. When representing the same event but in the distant future (i.e., beyond the scope of direct perception), people face a challenge in that specific details of the event are either unknown or are subject to change. In response to this challenge, people engage in high-level construal, in which they focus on the essential and defining components of an event while ignoring incidental details. This process is highly functional in that essential and defining features tend to be invariant over time relative to secondary and incidental features.

There are a couple of reasons why distant vs. near future is associated with grayscale vs. color, respectively. One reason for this belief stems from people's tendency to associate bw vs. color media with the distant vs. near past, respectively, given that bw relative to color is an older medium of communication. This association could even be generalized to the future domain as well. Thus, people may view bw imagery as representative of distant future and color imagery as representative of near future. The second reason is that color imagery reflects our direct experience whereas bw imagery reflects indirect experience. The human eye has four types of light receptors; among them are three types of cones, each of which responds to a different range of color (i.e., red, green, and blue), working together to allow perception of the entire rainbow spectrum (Gegenfurtner and Sharpe 2001). Thus, people's direct experience of their environments is predominately in color. Compared to color imagery, however, bw imagery deviates from our actual experience of the "here-and-now," reflecting psychologically distant, indirect experience. The third reason for an association between temporal distance and color is that cognitive operations entailed in visualizing the distant vs. near future are highly similar to those entailed in processing bw vs. color imagery, respectively. Visual perception research suggests that bw imagery promotes attention to global form and shape, whereas color imagery directs visual focus to constituent detail (Arnheim 1974; Janiszewski 1998). The focus on global form prompted by bw imagery (vs. the focus on detail facilitated by color) is akin to high-level (vs. low-level) construal in two ways. First, form is generally more invariant to environmental changes compared with color (Arnheim 1974). Whereas color tends to fade away over time and its perception varies according to the brightness of the environment, shape and form are less affected by such situational variation. Second, form more so than color detail provides essential information about depicted objects (Biederman 1987). In general, color is considered as redundant information (Dooley and Harkins 1970) while shape and form deliver the essential nature and meaning of the object.

Based on this theorization, Study 1 establishes the association between temporal distance (distant vs. immediate) and color (bw vs. color) via an Implicit Association Test (IAT; Greenwald, Nosek, and Banaji 2003). Based on this association, Studies 2-3 further show that people's visualizations of distant (vs. immediate) future are more likely to be in grayscale rather than in full color. Study 4 highlights

the implications of these time-dependent visual representations for consumers' judgments and decisions.

In the first study, using an IAT, we show that people are faster to categorize color pictures and near future-related concepts (vs. bw pictures and distant future-related concepts) than color pictures and distant future-related concepts (vs. bw pictures and near future-related concepts). Thus, bw appears to be related to distant future and color appears to be related to near future in people's minds.

In the second study, we asked participants to imagine themselves in three scenarios (e.g., being in a park) either a week from that day or a year from that day. Holding the image in their minds, they were asked to choose which of three images (e.g., park) shown to them was the best match to what they imagined. The three images shown to participants varied in the amount of color saturation. Participants imagining being in a park in the distant future were more likely to indicate a match with low saturation pictures while those being in a park in the near future indicated a higher match with high saturation pictures.

Addressing the alternative explanation that the content of distant future images may be impoverished, and it is the lack of clarity that is manifesting as lack of color rather than people's tendency to represent future in less color, experiment three equated the content of the image generated by people. Participants were given a task to imagine the living room of their friend in the near vs. distant future, based on a description of the living room given to them. Since everyone got the same description, their image content should be the same. They were then given a coloring page which depicted the description as an outline, and some crayons to color the picture as they imagined. Participants imagining the distant future used less color than participants imagining near future.

Study 4 matched a donation request to save Orcas by contributing to a fund either immediately or in the distant future. A picture of Orcas was presented in bw or color. A matching effect was found; donation likelihood was greater if a bw picture was used for a donation request in the distant future while the opposite was true for a donation request in the near future.

Our research contributes to CLT and to communication practices. Whereas how high vs. low construal is conceptually characterized in decision making has been extensively researched, much is still unknown about what high vs. low construal look like in our mind's eye, and our research fills the gap. Our data also suggest that marketers can strategically use bw vs. color in designing effective communication strategies to achieve their goals.

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# “Get Lucky, Get Punished”: The Effect of Serendipity on the Perception of Innovations.

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## EXTENDED ABSTRACT

Innovations are crucial for science, companies and society in general. One way to look at innovations is by considering how they are discovered. Specifically, while some innovations are mainly the result of an intentional search for a particular product, others are mainly the result of serendipity (i.e. accidental discovery). Although the importance of both types of innovation cannot be underestimated, we are not aware of research investigating whether the evaluation of an innovation depends on whether it results from serendipity or a more intentional search.

This is an important research question to address. Specifically, if an interesting innovation is regarded as less attractive merely because of the way it was initially conceived, this may hinder the process of innovation.

In this manuscript, we show that, relative to intentionally developed products, people may have more negative evaluations of innovations that are accidentally discovered. Building on research on just world theory (Lerner 1980), we hypothesize that, to protect their view of the world as a just place, people may regard researchers who profited from randomness as less deserving of success. As a result, relative to intentional innovations, people may regard serendipitous innovations as less attractive.

In study 1, we aim to find support for this proposition. In this study, 81 participants ( $M_{age} = 28$  years old, 30 females) were recruited from Amazon's Mechanical Turk. Every participant was presented with a description of the “Actifry”. The exact description stated: “The Actifry is a healthy alternative to traditional deep fryers. It uses a limited amount of oil for frying.”

In the serendipity condition, we explained that the pulsating heat system driving this effect was discovered **totally by accident**. In the intention condition, participants were told that the pulsating heat system driving this effect was discovered by planning and theorizing about how frying could be made more healthy. To keep objective quality constant, one additional sentence (present in both conditions) stated that Consumer Reports gave the Actifry a score of 7/10.

Afterwards, they were asked to rate the product attractiveness on a seven-point scale (1 = not attractive at all; 7 = very attractive), perceived effort and perceived luck. To check whether participants had read the product description, we asked participants to report the quality rating at the end of the experiment. Only participants ( $N = 71$ ) who gave the correct quality rating were retained for analysis. One outlier was excluded (more than 3SD's from the mean), leaving the final sample size at 70 participants.

As expected, relative to the intention condition, the company was seen as more lucky ( $M_{serendipity} = 6.03$  vs.  $M_{intention} = 4.26$ ;  $t(68) = 5.41$ ,  $p < .001$ ) but exerting less effort in the serendipity conditions ( $M_{serendipity} = 3.57$  vs.  $M_{intention} = 5.89$ ;  $t(68) = -7.41$ ,  $p < .001$ ). Further analysis of the results showed that, relative to those in the serendipity condition, participants in the intention condition thought the product was more attractive ( $M_{serendipity} = 4.83$  vs.  $M_{intention} = 5.46$ ;  $t(68) = -2.17$ ,  $p < .05$ ).

The aim of the second study was to provide insight in the process driving the effect. More specifically, people may defend their belief in a just world by punishing companies who gained from serendipity. Hence, consumers feel that these companies “deserve” it less to be successful compared to those who intentionally looked for an innovation.

In total, 156 Mturk participants were recruited. We used an identical set up as in study 1, except that participants completed three additional items measuring deservingness (“I think the company that developed the Actifry deserves to be successful.”; “I feel that the company deserves to make a lot of profit.”; “I feel appreciative to the company that developed the Actifry.” Cronbach's  $\alpha = .75$ ). Thirty participants were excluded from the analysis (After checking for outliers and quality score recall).

We replicated the effect of frame on product attractiveness ( $M_{serendipity} = 4.61$  vs.  $M_{intention} = 5.06$ ;  $t(123) = -2.09$ ,  $p < .05$ ). Also, ratings of deservingness were marginally higher in the intention condition effect ( $M_{serendipity} = 4.21$  vs.  $M_{intention} = 4.63$ ;  $t(123) = -1.94$ ,  $p = .054$ ). A mediation revealed an indirect effect ( $a \times b = .20$ ,  $SE = .11$ ), with a 95% confidence interval excluding 0 (.004 - .44).

In a final study, we aim to show that serendipitous innovations are only evaluated negatively by people who have a strong belief in a just world.

In total, 121 Mturk participants were recruited. Participants were presented with a description of the “Chocolate Finesse”. The description stated: “The Chocolate Finesse is a new type of chocolate. It is the new flavor of a Belgian Chocolatier (Mean quality score of 7.9/10).”

In the serendipity condition, we explained that “the recipe of this new chocolate was discovered totally by accident! Researchers at the company accidentally mixed some ingredients and discovered that it tasted great.”. In the intention condition, participants were told that “the recipe of this new chocolate was discovered by planning and theorizing about how tastes would fit together. They had set a clear target of finding this and succeeded.”.

As in study 1 and 2, participants rated product attractiveness. Afterwards, we administered the belief in a just world scale (Lipkus 2001; 1 = totally disagree; 7 = totally agree). After checking for outliers and quality score recall, the final sample size was 92 participants.

We observed a significant interaction between type of innovation (1 = intention) and belief in a just world on product attractiveness ( $F(1,88) = 3.89$ ,  $p = .05$ ). A floodlight analysis revealed that there was a significant positive effect of intention on product attractiveness for BJW values more than 5.43 ( $\beta = .58$ ,  $SE = .29$ ,  $p = .05$ ), but not for BJW values lower than 5.43.

In sum, these three studies show that consumers have more negative (positive) evaluations of products that are invented accidentally (intentionally). Further, this work provides support for one possible mechanism driving this effect.

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# Thriving in a Sinking System: When Does a Threatening World Promote Meaningful Behaviors

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## EXTENDED ABSTRACT

Previous research has demonstrated the palliative function of system justification, that is, people rationalize the status quo as a means to satisfy their psychological needs. As a result, people make suboptimal decisions (e.g. less pro-environmental actions). The current research suggests that the same motivation to rationalize the status quo has potential to induce changes that are meaningful to individuals and the society. Across three studies, we demonstrated that individuals who experienced a system threat are more likely to engage in a meaningful behavior construed on a high level than a low level, while individuals who did not experience such threat did not differ in behavioral intentions whether the behavior is construed on a high or low level. We further established that under system threat, a behavior construed on a high level affords a stronger sense of predictability than one construed on a low level, and is thus seen as a more viable means for individuals to cope with the threat.

System justification theory suggests that people tend to perceive current social, economic, and political arrangements as orderly, just, and legitimate (Jost and Banaji 1994; Jost, Banaji, and Nosek 2004). Such a tendency is psychologically appealing as it satisfies the existential need to reduce threat and distress, one of the most fundamental needs human beings possess (Hennes, Nam, Stern, and Jost 2012; Wakslak et al. 2007). However, such a tendency is more palliative than functional, as it does not fundamentally change the situations that individuals have the problem with, either by altering the environment or individuals' own behaviors. For example, Wakslak et al. (2007) found that people who have high motivation to justify the system had less moral outrage toward injustice and inequality, and importantly less support for social programs that help the disadvantaged (e.g. a job training program).

Seeing the world to be orderly and predictable is psychologically appealing (Jost and Hunyady 2002), as unpredictability is inherently unsettling (Hennes et al. 2012). We argue that a desired perception of the world being orderly and predictable even comes from individuals' view of their everyday behaviors. When a behavior leads to an expected outcome, we argue that people would feel that things around them are predictable and in order. Such a sense of predictability does not always arise, because people sometimes don't believe that certain behaviors (e.g. regular exercise) will necessarily lead to an expected outcome (e.g. weight loss). When performing a behavior has undetermined consequences, people would feel that things around them are very unpredictable or not in order. This notion that a causal relationship between a behavior and outcome provides sense of order is consistent with the literature. Kay, Jost, and Young (2005) let people use traits to characterize powerful and overweight people. They found that people who experience system threat are more likely to associate intelligence and independence with powerful people and to associate laziness with overweight people than those who experience no system threat. They argued that it is because intelligence and independence are causally related to power, and laziness is casually related to overweight. Though it is not specified by the authors, it is the causal link between the traits (means) and the outcome (ends) that provides an order, which meets the needs of people who experience a system threat. We argue that such a quest for predictability and order can be satisfied by a high level representation of an everyday behavior.

Construal level theory suggests that the same object or event can be represented in high or low levels of representation (Trope and Liberman 2003). A low-level representation is contextualized and concrete, capturing subordinate, specific, and secondary information, while a high-level representation is decontextualized and abstract, capturing superordinate, general, and primary information. More germane to our thesis, high level representations are more "integrative", whereas low-level representations are more "disparate" (Fujita et al. 2006), therefore we argue that high construal level affords a sense of predictability by heightening a causal relationship. Nussbaum, Trope, and Liberman (2003) suggested that traits better predict how people behave in the distant (vs. near) future, and they argued it is because people are expected to respond to specific contingencies of the situational context in the near future and thus traits play a discounted role in predicting the behavior in the near future. They found that people are expected to act more consistently across different situations in the distant (vs. near) future. The takeaway is that a high (vs. low) construal level (larger psychological distance) reduces attention on the process and routes but emphasizes the outcome, rendering the outcome more attainable and expected. It is because a high (vs. low) construal level strips out the detailed process of performing a behavior, the process that may involve obstacles, efforts, changes; such a neglect on process and a focus on the outcome produce a perception that the outcome is likely, expected, and attainable. For example, when thinking about a behavior (e.g. flossing) in the near future, individuals concern about specific situational factors (e.g. efforts, habits) that may prevent them from achieving the expected outcome (i.e., improved dental health), whereas when people think about the behavior in the distant future, they are less likely to think about the specific obstacles but the outcome that the behavior intends to produce. Therefore, the causal relationship between the behavior (e.g. flossing) and the outcome (e.g. improved dental health) is more pronounced in a high than low construal level.

Taken together, individuals are more likely to engage in behaviors construed in a high (vs. low) level when they experience system threat. It is because a high level construal encourages people to see the causal relationship between their behavior and the desirable outcome, and such a causal relationship quenches the thirst of order and predictability among people who experience system threat. In contrast, when people do not experience system threat, they do not look for order or predictability from the surroundings, and therefore the potential difference in inducing order and predictability between a behavior construed in a high level and one in a low level would not actualize. Therefore, when people are not under threat, whether a behavior is construed in a high or low level, individuals would not prefer one over the other.

## Study 1

One hundred and seventy-nine participants recruited from a national online sample (95 women,  $M_{age} = 35.25$ ) were randomly assigned to one of 2 construal level (high vs. low)  $\times$  2 threat (system threat vs. control) conditions. Participants first wrote down threatening vs. non-threatening thoughts about America. Adapted from (Jost et al. 2011), system threat was manipulated by having participants write down thoughts that were threatening vs. non-threatening about America. Specifically, participants in the system threat condition

read “please think about ways that things are organized or arranged politically, legally, socially or economically in the US. Which of these things would you strongly recommend other countries should NOT follow because they work particularly badly and are bad ways to run things for the country as a whole? You might think of laws, policies or institutions such as parliament, employment, education, family, social norms and roles, cultural traditions or religion. Please list a few things that you would recommend other countries should NOT follow and explain why”. In contrast, participants in the control condition read “Please think about ways that things are organized or arranged politically, legally, socially or economically in the US. Describe the ways things are run in the country in an objective manner. You might think of laws, policies or institutions such as parliament, employment, education, family, social norms and roles, cultural traditions or religion”. Then participants read a message that talked about flossing, where construal level was manipulated. Consistent with the literature (Lieberman and Trope 1998), construal level was manipulated by messages that induced people to think about how vs. why. Participants in the low construal level condition read a message that began with “American Dental Association recommends flossing daily. Here is how”. Participants in the high construal level condition read a message that began with “American Dental Association recommends flossing daily. Finally, participants responded to behavioral intention measures, “how willing are you to floss daily” (1 = Not at all willing, 7 = very willing), and “how inclined are you to floss daily”? (1 = Not at all inclined, 7 = very inclined;  $r = .88, p < .001$ ). We also collected several control measures, including how many times they brushed their teeth in the past seven days, whether they flossed every day, and whether they have a dental insurance, as well as demographics.

### Results

In a separate pretest, we sought to confirm that the system threat manipulation would decrease satisfaction with the U.S. system. Sixty-eight participants from a national online panel were exposed to one of the two messages used in the system threat manipulation before completing measures of satisfaction with the national social system. An 8-item measure on satisfaction with the national system was administered (e.g. “In general, American society operates as it should; America needs to be restructured; America is the best country in the world) on a 1-9 scale (1=strongly disagree, 9= strongly agree; Wakslak, Jost, and Bauer 2011). Satisfaction with the national system score was calculated for each participant by taking the mean of responses to the 8 items ( $\alpha = .94$ ). One-way ANOVA with system threat (threat vs. control) as the independent variable revealed that participants engaged in system justification more following system threat, as compared with the control condition ( $M_{\text{Threat}} = 4.94$  vs.  $M_{\text{Control}} = 4.03$ ), confirming the manipulation of system threat. To test the hypotheses, A 2 x 2 ANOVA on behavioral intention revealed a significant main effect of whether participants flossed every day ( $F(1, 172) = 101.25, p < .001$ ) and a marginally significant interaction effect of threat x construal level ( $F(1, 172) = 3.58, p = .06$ ). Planned comparison revealed that participants in the threat condition expressed greater intention to floss after reading a message about why floss than how to floss ( $M_{\text{Why}} = 5.40$  vs.  $M_{\text{How}} = 4.79; F(1, 172) = 4.09, p = .05$ ), while participants in the control condition expressed equal intention to floss regardless of the message they read ( $M_{\text{Why}} = 4.83$  vs.  $M_{\text{How}} = 5.02; F(1, 172) < 1$ ).

### Study 2

one hundred and twenty-five participants recruited from a national online sample (83 women,  $M_{\text{age}} = 35.76$ ) were randomly assigned to one of 2 construal level (high vs. low) x 2 threat (system

threat vs. control) conditions. System threat was manipulated in the same way as in study 1, and construal level was manipulated by messages titled “how to meditate” and “why meditate”. Dependent measures were administered (“how willing are you to meditate”, “how inclined are you to meditate”), followed by a process measure (i.e., predictability), “how likely does meditation provide you a structured mode of life?” (1 = Not at all likely, 7 = very likely), and several control measures, including how knowledgeable they are about meditation, whether they practice yoga, as well as demographic information.

### Results

A 2 x 2 ANOVA on behavioral intention revealed significant main effects of whether participants practiced yoga ( $F(1, 118) = 4.08, p = .05$ ) and their knowledge about meditation ( $F(1, 118) = 19.86, p < .001$ ), and a significant interaction effect of threat x construal level ( $F(1, 118) = 4.23, p = .04$ ). Planned comparison revealed that participants in the threat condition expressed greater intention to meditate after reading a message about why meditate than how to meditate ( $M_{\text{Why}} = 4.90$  vs.  $M_{\text{How}} = 4.15; F(1, 118) = 4.54, p = .04$ ), while participants in the control condition expressed equal intention to meditate regardless of the message they read ( $M_{\text{Why}} = 4.56$  vs.  $M_{\text{How}} = 4.84; F(1, 118) < 1$ ).

To test the mediating role of perceived causality, the same 2 x 2 ANOVA on the extent to which a behavior and an outcome are causally related revealed a significant main effect of participants’ knowledge about meditation ( $F(1, 118) = 21.65, p < .001$ ), and a significant interaction effect of threat x construal level ( $F(1, 118) = 9.52, p = .003$ ). Planned comparison revealed that participants in the threat condition perceived that mediation (i.e., means) provided more structured mode of life (i.e., end) after reading a message about why meditate than how to meditate ( $M_{\text{Why}} = 4.75$  vs.  $M_{\text{How}} = 3.70; F(1, 118) = 8.04, p = .01$ ), while participants in the control condition perceived that mediation provided equal structured mode of life regardless of the message they read ( $M_{\text{Why}} = 4.26$  vs.  $M_{\text{How}} = 4.83; F(1, 118) = 2.34, p = .13$ ). We followed Preacher and Hayes (2008) guidelines and used model 8 in PROCESS macro (Hayes 2012) to establish that perceived causality mediated the effect of system threat x construal level. A bootstrapping analysis confirmed that the perceived causality mediates the effect of construal level on behavioral intention among those under system threat (95% CI: .18, 1.10) but not those under no threat (95% CI: -.78, .08).

### Study 3

to further validate the mechanism, we look into individual differences in locus of control. Individuals who tend to believe that their behavior doesn’t matter much and that rewards in life are generally outside of their control are those who have an external locus of control (Rotter 1966). Those people tend not to see the “end” as a result of the “means” they perform, until they are being reminded that the “end” can be an outcome of a behavior when they are in a high (vs. low) construal level mind. In contrast, those who have an internal locus of control believe that their own actions determine the rewards that they obtain, and therefore should always be conscious of how performing a behavior leads to an outcome, that is, a means-end causal relationship is always accessible to them. Therefore, we hypothesize,

One hundred and twenty-two participants were recruited from a national online panel (83 women,  $M_{\text{age}} = 35.43$ ). All participants were assigned in the system threat condition, and then randomly assigned to one of two construal level conditions (high vs. low). Participants in the high construal level condition read a message with a title “think about reasons to make a difference – why recycle”, while

participants in the low construal level condition read a message with a title “think about ways to make a difference – how to recycle”. Dependent measures and control measures were administered after the manipulations, “how willing are you to recycle in your neighborhood” (1 = Not at all willing, 7 = very willing), and “how inclined are you to recycle in your neighborhood?” (1 = Not at all inclined, 7 = very inclined;  $r = .88, p < .001$ ). Perceived causality was measured by “how likely does recycling make a better society?” (1 = Not at all likely, 7 = very likely). Then, a 23-item locus of control scale (Rotter 1966) was administered, where participants chose one of two options in each item, for example, participants chose between “many of the unhappy things in people’s lives are partly due to bad luck”, and “people’s misfortunes result from the mistakes they make”. The higher the score, the more people believe that their behavior doesn’t matter much and that rewards in life are generally outside of their control (i.e., external locus of control); the lower the score, the more people believe that their own actions determine the rewards that they obtain (i.e., internal locus of control).

### Results

Following Aiken and West (1991), behavioral intention was regressed on locus of control (mean-centered) and construal level (dummy coded). A significant main effect of locus of control ( $\beta = .14, t(118) = 3.08, p = .003$ ) and interaction effect of locus of control x construal level ( $\beta = .14, t(118) = 2.36, p = .02$ ) emerged. Spotlight analysis suggested that participants with an external locus of control (one standard deviation above the mean) expressed greater intention to recycle after reading a message about why recycle than how to recycle ( $M_{\text{Why}} = 6.14$  vs.  $M_{\text{How}} = 5.24; t(118) = 2.36, p = .02$ ), while participants with an internal locus of control (one standard deviation below the mean) expressed equal intention to recycle regardless of the message they read ( $M_{\text{Why}} = 6.10$  vs.  $M_{\text{How}} = 6.49; |t| < 1$ ). The same regression on the perceived causality revealed a significant main effect of construal level ( $\beta = .53, t(118) = 2.28, p = .02$ ), locus of control ( $\beta = -.13, t(118) = 3.39, p = .001$ ), and a significant interaction effect of construal level x locus of control ( $\beta = .09, t(118) = 1.85, p = .07$ ). Spotlight analysis suggested that participants with an external locus of control believed that recycling (i.e., means) created a better society (i.e., end) after reading a message about why recycle than how to recycle ( $M_{\text{Why}} = 6.14$  vs.  $M_{\text{How}} = 5.18; t(118) = 2.92, p = .004$ ), while participants with an internal locus of control believed that recycling provided equal better society regardless of the message they read ( $M_{\text{Why}} = 6.46$  vs.  $M_{\text{How}} = 6.36; t < 1$ ). We tested that believed that the perceived causality mediates the effect of construal level x locus of control on behavioral intention. Specifically, among participants with an external locus of control, those who construed recycling in a high construal level had higher perceived causality and greater behavioral intentions than those who construed recycling in a low construal level; among participants with an internal locus of control, the perceived causality was similar regardless of level that recycling was construed. Again, we tested the mediating role of the perceived

causality and found that the perceived causality mediates the effect of construal level on behavioral intention among those with an external locus of control (95% CI: .11, 1.23) but not those with an internal locus of control (95% CI: -.25, .34).

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# Inspire Me to Donate: The Use of Mixed Emotions in Public Service Announcements

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## EXTENDED ABSTRACT

For decades researchers and marketers in charity organizations have tried to find out what persuades people to donate. Answers to this question would enable charity organizations to design more effective and persuasive appeals in their public service announcements (PSAs). One common practice used in PSAs is to emphasize the unfortunate situations facing the donation target, for example, flood victims losing their homes, to convey negative emotions such as sadness, fear and tension (Bagozzi and Moore 1994). These negative emotions are said to make people more empathetic towards the target's plight and to increase their tendency to donate (Bagozzi and Moore 1994; Fisher, Vandenbosch, and Antia 2008).

In contrast to this focus on the use of negative emotions in PSAs, there has been little research examining the effectiveness of using positive emotions in PSAs. Even less attention has been paid to the effects of using mixed emotions (e.g., both positive and negative). Although negative emotions are more common and easier to convey in PSAs soliciting donations, it is undeniable that positive emotions such as strength and determination can also be induced. Yet little research has examined the effectiveness of using positive or mixed emotions.

In this research we focus on PSAs that request donations for victims of unfortunate situations such as floods, earthquakes and endemic poverty. As there is bound to be negative emotions in such PSAs, our main objective is to examine the impact of using mixed emotions, both positive and negative, as a means of soliciting donations.

### Study 1

The purpose of study 1 was to test the proposed inspiration-helping hypothesis on PSA evaluation. Eighty-one undergraduate students (53.1% males) at a large public university in China participated in the study for partial course credit. The study employed a 2 x 1 between-subject design (emotion: negative vs. mixed). Based on focus group (n=20) discussions, emotion was manipulated by using a PSA appealing for aid to a Young Children Education Foundation. This ad showed the face of a young child with text descriptions. In the negative emotion condition, the PSA text described the sadness of the situation facing the child (e.g., disability, poverty, lack of education opportunity). In the mixed emotion condition, the text described both the sadness of the situation and the strength, perseverance and self-reliance shown by the child dealing with the situation. After viewing the PSA, the participants were asked to respond to questions measuring inspiration, empathy, and PSA evaluation.

### Results

The result of a factor analysis showed that the empathy scale had one convergent factor (factor loading from .72 to .89) with a Cronbach's alpha of .87. The inspiration scale also had only one convergent factor (factor loading from .85 to .92) with a Cronbach's alpha of .94. The results of varimax rotation indicated that empathy and inspiration are separate constructs. We then tested the mediation effect of empathy and inspiration on the impact of different emotions on PSA evaluation. We ran the mediation analysis following the procedure used by Baron and Kenny (1986) (see Table for mediation analysis results). We found that inspiration had a full mediation effect between emotion and attitude, but empathy did not. In par-

ticular, including inspiration ( $\beta=.30$ ,  $SE=.08$ ,  $p<.05$ ) as a covariate in the PSA regression, the effect of emotion ( $\beta=.19$ ,  $SE=.28$ ,  $p>.13$ ) became insignificant. However, including empathy ( $\beta=.11$ ,  $SE=.10$ ,  $p>.30$ ) as a covariate, the effect of emotion ( $\beta=.33$ ,  $SE=.25$ ,  $p<.005$ ) was still significant. Moreover, including both inspiration and empathy as covariates, inspiration was still significant ( $\beta=.29$ ,  $SE=.08$ ,  $p<.05$ ) but the effect of emotion ( $\beta=.18$ ,  $SE=.28$ ,  $p>.14$ ) and empathy ( $\beta=.04$ ,  $SE=.10$ ,  $p>.73$ ) became insignificant. These results support the inspiration-helping hypothesis that mixed emotion leads to a more positive attitude towards a PSA than negative emotion due to a higher level of inspiration in the former condition.

Interestingly, we found that empathy ( $\beta=.39$ ,  $SE=.15$ ,  $p<.001$ ) had a significant positive effect on inspiration, indicating that empathy could contribute to inspiration. Sobel test also found that inspiration mediated the effects of emotion ( $t=2.10$ ,  $SE=.17$ ,  $p<.05$ ) and empathy ( $t=1.94$ ,  $SE=.05$ ,  $p=.05$ ) on attitude. Therefore, empathy-helping hypothesis and inspiration-helping hypothesis may not be mutually exclusive but rather complementary propositions.

### Study 2

In study 1, we show that mixed emotions can lead to more positive PSA evaluations than negative emotions. In study 2, we examine whether mixed emotions can affect not only PSA evaluations but also people's actual donation behaviors. In addition, we examine whether the effects of mixed emotions vary in strength among different types of message recipients. For example, previous research has shown that using mixed emotions is more effective among people who are more receptive to the duality of emotions (Williams and Aaker 2002). In the context of this research, we expect that female (vs. male) message recipients who have a more interdependent (vs. independent) self-construal are more likely to respond positively to using mixed emotions in a PSA. This is because women (vs. men) are in general more other-focused and sensitive to the expression of different types of emotions (Dommer and Swaminathan 2013; Markus and Kitayama 1991; Piliavin and Charng 1990; Winterich, Mittal, and Ross 2009). Thus female (vs. male) message recipients may be more likely to feel the mixed emotions in a PSA. Also, other-focused, interdependent (vs. independent) selves are said to be more likely to experience and tolerate ambivalence in emotions than self-focused, independent selves (Markus and Kitayama 1991).

Eighty-three undergraduate students (44.6% males) at a large public university in China participated in the study for partial course credit. The study employed the same between-subjects design (emotion: negative vs. mixed) using the same stimuli as study 1, with the additional measure of self-construal. The participants were first asked to complete an unrelated study and paid cash as the compensation (10 RMB in 1 RMB notes). After a 90-minute class, another experimenter came in and provided each participant with one of the two PSA stimuli (mixed vs. negative emotion conditions). Each participant who wished to donate was given an envelope to put in any amount of money he or she felt comfortable with, and asked to drop the envelope in a box in an adjacent classroom one by one. Each envelope was pre-marked in order to match the participant's answers to a questionnaire after the donation. Participants who did not wish to donate could simply take a break outside the classroom. Communications between participants were not allowed during the

study. This procedure was used to minimize the peer influence on the participants' donation behavior. Finally, all participants were asked to go back to the original classroom to complete a questionnaire on manipulation checks, demographics, and self-construal (12 items from Gudykunst et al. 1996).

### Results

We performed the same mediation analyses as study 1 to test the empathy-helping and inspiration-helping hypotheses. We found that the inspiration index ( $\alpha = .91$ ) had a full mediation effect between emotion and donation likelihood, but had no direct mediation effect on the two-way interaction between emotion and self-construal, and on the three-way interaction between emotion, self-construal and gender. Specifically, only emotion ( $\beta = .67$ ,  $SE = .41$ ,  $p < .001$ ) had a significant main effect on inspiration. Including inspiration as a covariate in the logistic regression on donation likelihood, inspiration ( $\beta = .56$ ,  $SE = .23$ ,  $p < .05$ ) was significant but emotion ( $\beta = .45$ ,  $SE = 1.02$ ,  $p > .66$ ) became insignificant, while the two-way interaction of emotion and self-construal ( $\beta = 20.04$ ,  $SE = 13.86$ ,  $p > .15$ ), and the three-way interaction of emotion, gender, and self-construal ( $\beta = -29.88$ ,  $SE = 20.71$ ,  $p > .15$ ) remained insignificant. Sobel test indicated that inspiration mediated the effect of emotion ( $t = 2.21$ ,  $SE = .56$ ,  $p < .05$ ), but not the two-way ( $t = 1.31$ ,  $SE = 3.79$ ,  $p > .19$ ) and three-way ( $t = -1.28$ ,  $SE = 4.91$ ,  $p > .20$ ) interactions. We also found that empathy ( $\alpha = .83$ ) did not have the mediation effect between emotion and donation likelihood. Specifically, emotion did not have a main effect on empathy ( $\beta = .18$ ,  $SE = .33$ ,  $p > .21$ ), and after including empathy ( $\beta = .56$ ,  $SE = .33$ ,  $p < .10$ ) as a covariate, the effect of emotion ( $\beta = 1.49$ ,  $SE = .90$ ,  $p < .10$ ) on donation likelihood remained significant. Sobel test provided the same result for the mediation effect of empathy ( $t = 1.01$ ,  $SE = .23$ ,  $p > .31$ ).

Interestingly, same as study 1, we found that empathy ( $\beta = .40$ ,  $SE = .14$ ,  $p < .001$ ) had a significant positive effect on inspiration. Furthermore, including both inspiration and empathy ( $\beta = .25$ ,  $SE = .35$ ,  $p > .49$ ) as covariates in the logistic regression on donation likelihood, only inspiration was significant ( $\beta = .48$ ,  $SE = .26$ ,  $p = .06$ ). Sobel test indicated that inspiration mediated the effects of empathy ( $t = 1.68$ ,  $SE = .17$ ,  $p = .09$ ). These results suggest that empathy could positively contribute to inspiration, which subsequently influence donation likelihood. Acknowledgement: The authors acknowledge financial sup-

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# Have Your Cake and Make Her Eat It Too: Sabotaging Others While Maintaining Moral Self-Integrity

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## EXTENDED ABSTRACT

Imagine that friends Katie and Julie have decided to go on a diet together. Julie starts making rapid progress, but Katie has had trouble sticking to her diet and has not lost much weight. One afternoon, Katie sees Julie's favorite cake in the window of a bakery on the way over to Julie's house. Does she get Julie a slice of cake or not? On the one hand, Katie can't help but to compare herself to Julie, and would love to take her down a notch in her dieting success. On the other, she would feel like a bad friend, or worse, a bad person, if she were to sabotage Katie's diet. What does she do?

One way people fulfill their desires for self-enhancement is by seeing themselves as superior to others, and even sabotaging close others (Suls & Wheeler, 2000; Tesser, 1988). However, research from moral identity (e.g. Blasi, 2004; Aquino & Reed, 2002), moral self-regulation (Jordan, Mullen and Murnighan, 2011) and self and identity (e.g. Crocker, Luhtanen, Cooper & Bouvrette, 2003; Sherman & Cohen, 2006; Tafadori & Swann, 2001) suggests that people also want to feel like good, moral people. We are interested in how these motivations to self-enhance through downward social comparison may conflict with the motivation to maintain the moral self-concept. In the context of sabotaging others, these two motivations may come hand-in-hand; hindering a friend's performance is tempting, but comes with a moral cost as well.

As people especially likely to take solace in and seek out downward social comparison when self-esteem is threatened (Taylor & Lobel, 1989; Wills, 1981 for review), we propose that sabotage may only occur if people first experience self-threat, leading to increased motivation to outperform others. Given self-threat, we expect that people will only sabotage others to the extent that they can maintain their moral self-integrity (Mazar, Amir & Ariely, 2008).

In Study 1, participants were told that they had been outperformed on an exam by their friend (threat) or that they outperformed their friend (control). They were then told that they were studying with their friend for the final exam, and the friend went home for the night. Participants were either told that the friend went home to sleep (morally ambiguous) or eat (morally unambiguous). They were told that they then discovered information that might show up on the exam, and asked how likely they would be to call their friend. Those who were threatened were less likely to call, but *only* if they had a convenient moral excuse: claiming that they did not want to wake the friend, interaction  $t(188) = 1.95, p = .052$ .

In study 2, female participants were told that they were dieting with a (female) friend, and that the friend had lost more weight than they had (threat), they had lost more weight than the friend (control 1) or that they and their friend had lost equal weight (control 2). They were then told that they were taking a class with a friend, and discovered information that had a 1-100% chance (randomly generated) of appearing on the final exam, and asked how likely they would be to call their friend. Threatened participants were less likely than the control 1 and control 2 to call their friend, but only when the chance of harm was relatively low (<55.5% and <64.1%, respectively), interaction  $F(2,222) = 3.42, p = .034$ .

Studies 1 and 2 revealed self-deceptive means of sabotage, in which people justify their behavior to themselves as "not too immoral." In study 3, we hypothesized that people would engage in

self-aware sabotage when they were unjustly outperformed by their friend in order to restore "fair" social comparison (e.g. "because she didn't deserve it"). We manipulated perceived equity; (female) participants were told they were outperformed by a (female) friend on an exam, and that the friend either worked hard (fair) or did not work hard (unfair). They were then told that the friend was on a diet and succeeding at her goals, and that she asked the participant to pick her up some dinner on the way over to her house. Participants were presented a choice of seven entrée options that ranged from 450 calories to 1570 calories. Participants who felt that their friend unfairly outperformed them got their friend a higher calorie entree on average  $t(77) = -2.15, p = .034$ . Furthermore, this seemed to be driven by the "sneaky" choice of the oriental chicken salad that appears healthy but is actually 1390 calories; this suggests that even when people feel that their sabotage behavior is justified, they still hope to be viewed as moral.

While most self-evaluation research focuses on evaluation on one aspect of the self at a time (e.g. academic self), ours examines how people manage two conflicting self-evaluation motivations. We find that people can "have their cake and eat it too"—that is, sabotage their friends and still feel good about themselves. We also found that people engage in cross-domain sabotage; to our knowledge, it has not been previously shown that feeling threatened in one domain can lead to sabotaging in another.

In addition to theoretical contributions, these studies also have practical implications on joint goal pursuit. Through the advent of programs such as Weight Watchers' "Together is Better," people are increasingly working together to achieve goals such as losing weight. Furthermore, with the "gamefication" of goals, people can now compete with friends through mobile applications in their exercise, weight loss, financial saving, and career goals, to name a few. These applications may also be opening the door to subtle, self-deceptive forms of sabotage, such as keeping information from others, or underreporting one's own efforts to encourage others to work less. Future research should examine intervention techniques, such as focusing people on their moral value systems. This could be implemented by organizations that encourage joint goal pursuit to assure cooperative and motivating behaviors rather than subversive ones.

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# Trivializing Compensation and Muddy Linings: When Firm Expenditures to Acknowledge Backfire

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## EXTENDED ABSTRACT

Feeling appreciated is a fundamental component of satisfaction (Reis et al. 2000), which is linked to long-term relationship commitment in marketing channel relationships (Geyskens, Steenkamp, and Kumar 1999). Recognizing the importance of this connection, firms use a variety of strategies to show appreciation for their customers and employees, whether to express thanks for efforts that benefit the firm or to express apologies when the firm harms them.

One popular strategy to compensate customers and employees for effort or loss is to offer an acknowledgment with a small material benefit added. Real-life examples of this strategy abound. Yet virtually no academic research has explored the cases under which these costs are warranted, or determined if they can be counterproductive in communicating appreciation for an individual's expenditure or loss. Across six studies, our research seeks to fill this gap.

We propose the construct of "trivializing compensation," whereby an acknowledgment with a small material benefit attached can make recipients feel *less* appreciated than the identical acknowledgment alone. We suggest that this "trivialization effect" occurs because attaching a small material benefit to an acknowledgment prompts recipients to evaluate it by comparing it to a reference point based upon how much material benefit they expect to receive (Adaval and Wyer 2011; Anderson and Coughlan 2002; Epley and Gilovich 2010). A material benefit that does not meet expectations then feels dissatisfying (Oliver 1977; Weaver and Brickman 1974).

Importantly, although no material compensation is technically farther from the expected-compensation reference point, we suggest that an acknowledgment (with no material compensation attached) is less likely to trigger comparisons to an expected benefit for a variety of potential reasons. One potential reason is that an acknowledgment alone does not imply a particular valuation of one's time whereas adding material compensation does, triggering recipients to consider whether the compensation implies a (insultingly) low valuation of one's time.

Studies 1a, 1b, and 2 demonstrated that compensation that falls short of expectations leads to a less positive response than zero compensation. In study 1a, participants who imagined being loyal and supportive customers of a store and receiving a thank-you email with a 5% discount coupon attached (a 5% discount was pre-tested to fall short of expectations) felt significantly less appreciated than participants who imagined receiving a thank-you email alone. Study 1b replicated this finding in an employment context; participants who imagined going above-and-beyond to help co-workers and receiving a thank-you note with a \$20 gift card attached (a \$20 gift card was pre-tested to fall short of expectations) felt less appreciated than if they imagined receiving the identical thank-you note without any gift card attached. Finally, study 2 replicated study 1b's finding with a non-monetary material benefit of a box of chocolates, indicating that both monetary and non-monetary material compensation can feel trivializing.

In study 3, we further tested the role of expectations in causing trivialization by manipulating the relationship of a material benefit amount to expectations, such that amounts fell short, met, and exceeded expectations. We found that the trivialization effect occurred when compensation amounts fell short of expectations, but not when they met or exceeded expectations.

In study 4, we found that the trivialization effect occurs in separate evaluation mode but reverses in joint evaluation mode (Hsee 1996). When participants were in a joint evaluation mode and were given the option of either zero or trivial compensation, they believed they would feel more appreciated if they received trivial (vs. no) compensation. We suggest that this reversal of the trivialization effect occurs in joint evaluation because recipients compare trivial compensation to zero compensation rather than to expected compensation. Importantly, this finding may explain managerial error: firm managers are often in a joint evaluation mode (Weaver, Garcia, and Schwarz 2012) and may neglect to recognize that for the recipient of a small material benefit, the option of receiving no material benefit is not generally a salient reference point.

Finally, study 5 demonstrated that when a small material amount feels trivializing, the silver lining effect (Thaler 1985) derived from prospect theory (Kahneman and Tversky 1979) reverses. The silver lining effect states that people prefer to segregate small material gains from larger material losses (e.g., preferring \$10 off a \$1000 bill—a segregated outcome—to a \$990 bill—an integrated outcome). However, we demonstrate that when a small material gain feels trivializing (i.e., a \$10 discount is smaller-than-expected), people are more satisfied with an integrated rather than segregated outcome because smaller-than-expected gains provide a trivializing "muddy lining" rather than a silver lining.

Thus, six studies demonstrate that smaller-than-expected material benefits are experienced as "trivializing compensation"—a new, useful construct for both managerial practice and theory. This effect holds in separate evaluation but is reversed in joint evaluation, which may account for the prevalence of the use of "trivializing compensation." Finally, connecting to prior theory (Thaler 1985), trivializing compensation may lead to a muddy, rather than silver, lining effect.

Our work offers an important theoretical contribution by identifying factors that can lead a positive monetary amount—typically coded as a gain—to be coded as a loss. Our work also raises several important considerations for managers. First, managers should not underestimate the value of a simple acknowledgment. Second, managers should conduct research to understand individuals' compensation expectations for effort expenditures or in response to losses; only compensation that exceeds expectations should be used, to avoid offering "trivializing compensation." Third, if a firm desires to offer small compensation amounts, it should consider crafting communications that prompt recipients to adopt a joint evaluation mode (e.g., through lotteries that offer a small probability of receiving no material compensation and a large probability of receiving a small material compensation amount).

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# Consumer Compliance in Face-to-Face Interactions: The Role of Sensitivity and Expressiveness

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## EXTENDED ABSTRACT

Face-to-face interactions are one of the most pervasive and important types of interpersonal interaction (Kendon, Harris, and Key 1975). Such exchanges are also central to many marketing interactions, such as customer service, sales, promotions, and negotiations. During face-to-face interaction, customers have the opportunity to obtain a relatively high degree of personal attention, and also to receive quick and direct responses to their concerns.

Despite the importance of face-to-face interactions in consumer choice, there is a lack of research on which factors of face-to-face interactions affect consumer compliance, and how. This paper examines the effect of consumers' sensitivity to face and facial expressiveness on consumer compliance in requests. We propose that consumers expect facial feedback from their interactive partners in response to their decisions and behavior in face-to-face interactions. In an effort to avoid negative feedback, people comply with requests. We identify and test consumer sensitivity to face as well as the facial expressiveness of a partner's face as drivers of the effect.

Shiv and Huber (2000) suggest that when consumers anticipate emotions, vivid attributes attract more attentional resources and increase the weight of such information in preference construction. Given the vividness of facial expressions, consumer sensitivity to the face could moderate the effect of face-to-face interactions on consumer choices. In this paper, we use sensitivity to face to refer to the detection and reactions to facial features and movements. Sensitivity to face can be increased by stimulation or raise consumer's attention to subtle changes of the face (Aron 2006). For instance, Solomon, Prkachin, and Farewell (1997) show that exposure to a brief orientation of facial movement increases sensitivity to emotions communicated by facial expression. We hypothesize that

*Hypothesis 1: The effect of face-to-face interactions on compliance is stronger when consumers are more sensitive to the interactive partner's face and weaker when they are less sensitive.*

Because anticipated facial feedback is proposed to underline the effect of face-to-face interactions on compliance, manipulating the facial expressiveness of a partner's face will moderate this effect. The feedback from the partner's face should be expressive (vivid), timely (immediate), and consistent (suitable) for a consumer to interpret the facial feedback as diagnostic (Hogarth et al. 1991; Salen and Zimmerman 2004). We hypothesize that:

*Hypothesis 2: The effect of face-to-face interactions on compliance is stronger when the interactive partner's face is more expressive and weaker when the face is less expressive.*

*Hypothesis 3: The effect of face-to-face interactions on compliance is stronger when the interactive partner's facial feedback is timely and weaker when the feedback is delayed.*

*Hypothesis 4: The effect of face-to-face interactions on compliance is stronger when the interactive partner's facial feedback is consistent with anticipated expressions and weaker when the feedback is inconsistent with anticipated expressions.*

Four experiments were conducted to test our theory and hypotheses, including one field experiment and three lab experiment.

Experiment 1 had a 2 (sensitivity: sensitivity to face vs. sensitivity to hand)  $\times$  2 (facial expressiveness: expressive vs. inexpressive) between-subjects design. In support of hypotheses 1 and 2, the results showed a significant two-way interaction between sensitivity and facial expressiveness. Participants who practiced a facial massage on themselves were more willing to donate when the research assistant was expressive than inexpressive. Willingness to donate of the participants who practiced a hand massage on themselves was independent of facial expressiveness.

Experiment 2 was a field study conducted in a hair salon with real consumers. It had a 2 (promotion type: face-to-face vs. written request) by 2 (sensitivity: sensitivity to face vs. sensitivity to hair) between-subject design. Supporting hypothesis 1, the results showed a significant simple effect of promotion type and a significant simple effect of sensitivity, qualified by a significant interaction between promotion type and sensitivity. Customers who had just received a facial treatment were more likely to purchase the membership card under the face-to-face promotion than under the written request. This difference between face-to-face promotion and written request conditions decreased when customers received a haircut.

Experiment 3 had 2 (facial expressiveness: expressive expression vs. blank expression) by 2 (sensitivity: sensitivity to face vs. sensitivity to production) between-subject design. The result showed a significant simple effect of sensitivity and a significant simple effect of facial, qualified by a significant interaction between facial expressiveness and sensitivity. When sensitized to the narrator's face, participants were more likely to choose the difficult task after watching an expressive expression video than after watching a blank expression video. When sensitized to the video production, participants' choices did not differ significantly whether they watched an expressive or a blank expression video.

Experiment 4 had six between-subject conditions differing in facial expressiveness: Expressive, Blank, Same, Delayed, Opposite, Written Request. The results showed that the expressive expression group had a significantly higher rate of compliance with the donation-request than the remaining groups. Expressiveness, timeliness, and consistency of facial expressions moderated the effect of face-to-face interactions on compliance.

This paper provides a new understanding of the effects of sensitivity-to-face and facial expressiveness on consumer choices during face-to-face interactions. In contrast to previous research, we examine the feedback mechanism that such interactions create, and the role of sensitivity to face and facial expressiveness. By providing an account of the role of anticipated feedback, this research provides a way to extend "face effects" to faceless transactions. Moreover, we identify and test the effect of three dimensions of facial expressiveness on consumer choice, thereby adding to the marketing literature, compliance literature, and communication literature.

This paper provides great implications for marketing managers, particularly those in the service industries and departments. Voice training has a long history in customer service and telemarketing. Companies help to modulate the voices of their staff in pacing, emphasis, etc., to improve the effect they have on their customers. In learning the role of sensitivity-to-face and facial expressiveness in compliance, managers could provide effective training for their service and sales staff. Training for facial expressions to become more demonstrative, timely, and consistent could help increase the likelihood of customer compliance.

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# Power Distance and Consumer Evaluation of Vertical Brand Extension

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## EXTENDED ABSTRACT

Vertical extension - introducing a new product in the same category at different price and prestige levels - is a very common practice adopted by marketers to attract different segments of consumers (Keller and Aaker 1992). In practice, around 65% of new product-launches involve vertical brand extension, whereas only 17% of new product-launches are horizontal extensions (Dall'Omo Riley, Pina, and Bravo 2013). Despite its importance, existing research in branding literature has mainly focused on horizontal extension while research on vertical extension is limited. Moreover, the handful of research done on vertical extension has primarily focused on the impacts of brand and extension characteristics - such as brand quality, brand concept and extension distance (e.g., Kirmani, Sood, and Bridges 1999; Lei, de Ruyter and Wetzels 2008; Randall, Ulrich, and Reibstein 1998). To our knowledge, no research has examined the impact of cultural-orientation on consumer evaluation of vertical extension. Filling this gap in the literature, this research shows that differential power distance beliefs across cultures would affect consumers' acceptance of vertical extensions.

By introducing a new product at a higher or lower price and prestige level, vertical extension is uniquely different from horizontal extension in that it evokes a status consideration. Thus, to understand how consumers view vertical extension, it is important to know how they feel about the brand's potential status change due to changed price points. In this article, we propose that power distance (PD) - the extent to which people expect and accept power disparity in an organization or in a society (Hofstede 1984, 2001) - would exert significant impacts on how they view vertical extension. Prior research shows that consumers with high PD value status and have a strong desire for status enhancement, whereas low PD consumers emphasize equality more than status hierarchy, and view status as a less important consideration when making consumption choices (Kim and Zhang 2014). Thus, we expect that, compared with low PD consumers, high PD consumers would be more positive towards upward extensions as it fits their status enhancement mindset. In contrast, they would view downward extensions more negatively as the perceived status denigration runs counter to their desire for status enhancement. Three studies were conducted to test our proposition.

Study 1 (N = 114) was conducted online using Mturk. A 2 (vertical extension: upward vs. control)  $\times$  2 (PD: high vs. low) between-subjects design was adopted. Brand extension was manipulated and power distance was measured. Subjects were randomly assigned to either an upward extension condition or a control condition. The Seiko brand was selected for this study based on a pretest. Participants were shown a description of a new Seiko watch. In the upward extension condition, participants were shown a watch priced significantly higher than the average price of its products. While in the control condition, participants were shown a watch that was priced similarly to the average price of Seiko's products. Next, participants proceeded to rate their evaluation of the extension product. Participants' power distance was measured using an 8-item scale revised for previous research (Brockner et al. 2001; Hofstede 1984). Analyses revealed a significant interaction between vertical extension and power distance on extension evaluation ( $\beta = .76, t = 2.36, p = .02$ ). As expected, high PD consumers evaluate the upward extension more favourably than low PD consumers ( $M_{high} = 5.42, M_{low} = 3.91; P <$

.01), but there was no significant difference in the control condition ( $M_{high} = 4.70, M_{low} = 4.82, p > .1$ ).

Study 2 (N = 95) used the same procedure as that in study 1, with three differences: 1) we expanded our inquiry by examining both upward and downward extensions; 2) a fictitious hotel brand was adopted to address possible confounding effects of using a real brand in study 1 (e.g., prior brand knowledge); 3) we tested the mediation process. Study 2 adopted a 2 (brand extension: upward vs. downward)  $\times$  2 (PD: high vs. low) between-subjects design. Information about a fictitious 4-star hotel was shown. In the upward (downward) extension condition, participants were told that the hotel is introducing a new 6- (2-) star hotel. As expected, we found a significant interaction between vertical extension and PD ( $\beta = .51, t = 2.46, p = .02$ ). Replicating the findings of study 1, high PD consumers rated the upward extension more favourably ( $M_{high} = 6.04, M_{low} = 5.36; p < .01$ ). Moreover, we found that high PD consumers evaluated the downward extension marginally less favorably ( $M_{high} = 4.44, M_{low} = 4.89; p = .09$ ). Mediation analysis showed that the impact of power distance on brand extension evaluation was mediated by the extent to which consumers believe upward (downward) extension will result in brand enhancement (impairment) (mediated effect = .48, SE = .14, 95% CI = .24 to .79).

In studies 1 and 2, power distance was measured. In study 3 (N = 93), we examined whether the effect of PD on vertical extension evaluation would replicate when PD was manipulated. Study 3 adopted a 2 (brand extension: upward vs. downward)  $\times$  2 (power distance: high vs. low) between-subjects design. First, PD was primed by asking participants to write an essay to support or argue against a statement of inequality (Zhang, Winterich, and Mitta 2010). Next, information about a fictitious car brand was shown. Participants were either told that a more or less expensive new car is introduced. Results revealed a significant interaction between brand extension and PD on extension evaluation ( $\beta = 1.57, t = 2.56, p = .01$ ). As expected, compared with low PD consumers, high PD consumers evaluated the upward extension more favorably ( $M_{high} = 5.49, M_{low} = 4.65; P = .07$ ) and the downward extension less favorably ( $M_{high} = 4.29, M_{low} = 5.03; P = .08$ ).

The current research contributes in several ways. First, our study expands existing research on vertical brand extension, by providing an initial empirical investigation of the impact of power distance on extension evaluations. In doing so, we connect the two streams of research - on power distance and vertical brand extension - which have till now developed fairly independently. Our research therefore provides a new perspective of understanding how different consumers evaluate vertical brand extension. Second, we also contribute to the culture literature by adding to the increasing stream of research on PD. Previous research has mainly focused on the individualism-collectivism dimension while very limited attention was paid to the hierarchical dimension (Oysterman 2006; Shavitt et al. 2006). Managerially, our findings have direct marketing implications for marketers who are launching vertical brand extensions in multicultural markets.

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# The Better of Two ‘Goods’: Choice Given a Trade-off Between Pro-social and Pro-environmental Performance

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## EXTENDED ABSTRACT

Issues ranging from climate change to the fair treatment of workers have fueled the public’s interest in the broad concept of sustainability and have motivated a wide variety of initiatives within industry (McKinsey 2011). Over time, the term sustainability has evolved to encompass many different types of activities. According to a 2005 report from the United Nations, sustainability can be characterized as having “three pillars” related to economic, social and environmental concerns (United Nations 2005), akin to the “triple bottom line” approach of measuring firm performance (Elkington 1994). However, despite the popularity of the term, interpretations of exactly what it means vary amongst consumers (Simpson and Radford 2012). Likewise, academic researchers have operationalized sustainability in a variety of ways, with the most dominant types being environmental (e.g., recycling, pollution) and social (fair trade, supporting communities) (Cotte and Trudel 2009). However, a common trait of most studies is that sustainability is studied along a single dimension (i.e., social or environmental), with little attention to the possible differences between the two forms of sustainability. Our central thesis is that consumer responses to sustainability depend on how sustainability is portrayed. Using a mixed method approach, our research suggests that consumers perceive the environmental and social dimensions of sustainability as psychologically distinct in several important ways. For example, consumers perceive the environmental (social) dimension as more psychologically abstract (concrete). Further, we provide some evidence demonstrating how these insights can be used to better understand sustainability related consumer behaviors.

Given the relative lack of research specifically examining how different forms of sustainability may differ, we conducted an exploratory study to better understand consumer preferences for different forms of sustainability and the reasons underlying these preferences. Participants in a market research survey ( $n = 422$ ) were asked to choose between two hypothetical chocolate bars that were both promoted as being “sustainable”. Whereas one chocolate bar was described as being “environmentally responsible (e.g., minimizing pollution, efficient energy usage)”, the other was described as “socially responsible (e.g., using fair labor practices, supporting local communities)”. Further, participants were told that these chocolate bars were otherwise identical (i.e., taste and cost would be the same). After indicating their chocolate bar choice, participants were asked to respond to an open-ended prompt explaining why they chose the product they did.

The environmentally responsible option was only marginally more likely to be chosen than the socially responsible option (54.5% vs. 45.5%, respectively;  $\chi^2(1) = 3.42, p < .07$ ), indicating a relatively equal distribution of preference across the two sustainable options. The open-ended responses were analyzed using an exploratory approach (Strauss and Corbin 1998), with responses split into social and environmental choices and then open coded to identify recurring themes within each category. Following Spiggle’s (1994) framework, emerging themes were continually compared and contrasted to outline the properties of key categories and constructs. Three key themes emerged that distinguished the two forms of sustainability: (1) Emotional versus Rational, (2) Short-term versus Long-term, and (3) Micro versus Macro. Socially responsible sustainability efforts

were regarded as more emotional, short-term, and micro in scope. Environmental forms of sustainability were regarded as more rational, long-term, and macro in scope.

Examining commonalities across the themes, psychological distance emerged as a potentially useful construct to characterize the differences observed. As a whole, it appears that the social dimension of sustainability may be perceived nearer in terms of psychological distance, whereas the environmental dimension of sustainability may be perceived as more psychologically distant. Theoretical implications are more evident with considering the link between psychological distance and mental construal. Construal Level Theory (Trope and Liberman 2010) proposes that psychological distance is linked to the level of mental construal, with greater distance associated with more abstract, or higher-level thinking. Conversely, shorter psychological distance is characterized by more concrete, or specific-level thinking. Based on evidence showing that consumers respond more favorably to marketing communications that match their construal level (Cheema and Patrick 2008; Jin and He 2012; Lee, Keller, and Sternthal 2010; Martin, Gnoth, and Strong 2009), we anticipated that abstract construers will prefer products that highlight more psychologically distant forms of sustainability (i.e., environmental responsibility), while concrete construers will prefer products that highlight forms of sustainability that are closer in psychological distance (i.e., social responsibility).

The objective of study 2 was to examine the possibility that differences in consumers’ mindsets with respect to construal level could predict product choice given differences in the type of sustainability. Fifty-eight undergraduate students were shown the same product choice scenario as in study 1, with the addition of a third option to choose neither product. After making a choice, participants completed items from the Behavior Identification Form (BIF) as adapted by Liberman and Trope (1998). Of the fifty-four participants who did not opt out of the choice, there was no significant difference between the number choosing the environmental ( $n = 25$ ) and social ( $n = 29$ ) options ( $\chi^2(1) = .30, NS$ ). As expected, however, choice did depend upon participants’ chronic construal level, with choice likelihood of an environmentally (socially) responsible product increasing as construal becomes higher level/more abstract (lower level/more concrete) ( $\chi^2(1) = 4.09, p < .05$ ).

This research demonstrates that the most frequently addressed dimensions of sustainability—social and environmental—differ in theoretically meaningful ways. Overall, we found that these dimensions differ with respect to perceived psychological distance and that this difference can be used to predict sustainability related consumer behaviors. More specifically, we found that the social dimension is perceived as more psychologically proximal (concrete), with a more immediate and direct impact on people locally. Conversely, the environmental dimension was characterized as being more psychologically distant (abstract), with more of a long-term impact on the planet as a whole. Further, we demonstrated that an individual difference, chronic construal level, can be useful in predicting product choice in this context, with higher (lower) construal predicting the choice of environmentally (socially) responsible products.

\* This project was conceived at the Third Conference on Transformative Consumer Research, June 24-26, 2011, Baylor University.



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# The Impact of the Maximizing Mindset on Decision Time

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## EXTENDED ABSTRACT

How long does it take to make a decision? Some choices are minor (Coke or Pepsi) and others are important (whom to marry), and many decision makers assume that it is better to spend more time weighing the options of important than minor decisions, because more time translates into better decisions. However, research of the last two decades has shown that the time spent on a decision is not linearly related to decision quality, such that rapid decisions informed by implicit associations can bring about outcomes just as good as, and sometimes better than, those born of more deliberative decisions (Dijksterhuis 2004; Galdi, Arcuri, and Gawronski 2008; Wilson and Schooler 1991).

The present research focuses on an antecedent to decision time—maximizing—that centers on the mindset of the decision maker at the time the decision is rendered. Maximizing is here defined as a transient state involving both a goal to achieve the best decision outcome along with a heightened tendency to draw comparisons among alternatives and attributes (Schwartz et al. 2002). Across several lines of research, maximizing has been shown to increase decision time, an effect documented via correlations involving individual differences in maximizing (Chowdhury, Ratneshwar, and Mohanty 2009; Iyengar, Wells, and Schwartz 2006; Schwartz et al. 2002), decision strategies comparing maximizing and satisficing (Payne, Bettman, and Luce 1996; Simon 1956; Wright 1974), and experimental manipulations of the maximizing mindset (Levav, Reinholtz, and Lin 2012; Ma and Roese 2014). But is this always the case? There is at least one theoretical reason to think not. A key assumption underlying the above research is that the more comparisons that are made, the longer the decision time. However, a further assumption is that, all else being equal, the time to make each discrete comparison (i.e., comparison time) is constant across decisions and contexts. This latter assumption is untenable, given that a range of research has shown systematic variation in comparison time. Might the maximizing mindset speed up the comparison process itself? If so, then maximizing could potentially reduce decision time because the comparisons underlying the decision would be completed more rapidly.

Much research shows that procedures as well as knowledge may be activated repeatedly, which then has the effect of facilitating subsequent, procedures and tasks that are similar in process or content (Förster and Liberman 2007; Higgins 1989; Luchins 1942; Schooler 2002). The maximizing mindset embodies a tendency to make comparisons, and as more comparisons are made, subsequent speed to make comparisons should be facilitated. That is to say, the maximizing mindset may reduce decision time because it may reduce the time to make each comparison that underlies a choice. A key assumption here is that this effect will occur when all else is equal, particularly when the overall number of comparisons remains constant. Past research, however, has generally shown that maximizing is associated with an increase in decision time and in the number of comparisons that are made. We argue that the key limiting condition, or moderator, is choice complexity. That is, past research has focused on relatively complex choices, which involve a large number of possible comparisons, indeed more than an individual can plausibly complete within a given time period. But when the choice is relatively simple, and involves a smaller set of comparisons, then the time to make each comparison, rather than the overall number of

comparisons, will be the driving factor for decision time. As a result, we propose that choice complexity moderates the effect of maximizing on decision time, such that for simple choices, maximizing reduces decision time because it speeds comparisons (while leaving number of comparisons unaffected), whereas for complex choices, maximizing increases decision time because it increases the number of comparisons (to an extent that overwhelms the advantage gained by rapid comparisons).

We tested this proposition in four empirical studies. Experiments 1 and 2 focused only on simple choices and showed that the maximizing mindset (compared to control) reduced decision time. Specifically, using eye-tracking technology, Experiment 2 showed that maximizing (relative to control) reduced decision time (11.6 s vs. 15.9 s;  $F(1, 95)=7.75, p<0.01, d=.57$ ) and led to faster comparison time (i.e., faster eye movement from fixation to fixation; 299 ms vs. 385 ms;  $F(1, 97)=9.28, p<0.005, d=.62$ ). Finally, maximizing (relative to control) was less strongly related to number of comparisons (39.0 vs. 42.8;  $F(1, 95)=1.09, p=0.30, d=.21$ ). A mediation analysis showed that comparison time fully mediated the impact of maximizing on decision time.

Experiments 3 and 4 investigated the moderating role of choice complexity in the impact of maximizing on decision time. In a sequential choice setting, Experiment 3 showed that participants in the maximizing mindset (relative to control) condition had a briefer decision time for the simple choice (39.9 s vs. 47.4 s;  $F(1, 445)=4.42, p<0.05, d=.20$ ) but had a longer decision time for the complex choice (164 s vs. 142 s;  $F(1, 445)=13.1, p<0.001, d=.34$ ). Further, those in the maximizing (vs. control) condition searched more sets before making the final decision (7.55 vs. 5.98;  $F(1, 445)=6.69, p<0.01, d=.25$ ); an indication that in the overall (complex) choice task, maximizing increased the number of comparisons made. Experiment 4 replicated this finding by using a simultaneous choice setting. This experiment also showed that the manipulated maximizing mindset and individuals' maximizing tendency produced convergent results that choice complexity moderated the impact of maximizing on decision time.

This research contributes to our basic understanding of the dynamics of decision making, advances research on maximizing, provides some methodological innovations to consumer behavior research centering on eye-tracking and meta-analysis, and draws connections to consumer choice in online shopping.

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# Duped, Scammed and Suckered: The Development of the Sugrophobia Scale

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## EXTENDED ABSTRACT

To date, little academic attention has been placed on duping despite its serious financial and emotional consequences. Vohs, Baumeister and Chin (2007) introduced the term “sugrophobia” to describe a consumer’s aversive emotional response resulting from one’s own choice to engage in an interpersonal exchange, typically economic in nature, that leads to the perception of having been taken advantage of. The term’s root derives from the Latin *sugro*, which means *to suck*; thus the term may literally be translated as a person’s fear of being suckered. Sugrophobia is a self-protective mechanism that motivates consumers to avoid the aversive self-conscious emotions (e.g., self-blame, embarrassment) associated with being duped.

The present research creates a psychometrically sound measure of trait sugrophobia. Although sugrophobic motives may arise in a variety of situations where there is the possibility of being “suckered”, we assume that some people simply go through life constantly on guard against the possibility of being duped while others rarely worry about it. It is for this reason that Vohs et al. (2007) suggested that creating a valid and reliable measure of individual differences in sugrophobia should be possible. Such a scale would be of considerable use to researchers in a number of different realms, including prosocial behavior, decision-making, behavioral economics and social dilemmas.

Marketplace transactions are paradoxical in that they are both antagonistic and mutually beneficial. For example, a new car buyer benefits with a source of transportation, while the seller benefits from the money. However, negotiating the price is an antagonistic exercise because both parties seek to maximize self-interests. A fundamental problem in an exchange is that it is difficult to objectively determine how much of X should be traded for Y. Yet, due to increased role specialization in modern markets, consumers must rely on sellers’ products and services to survive. These issues give rise to the possibility that one party may profit at the other’s expense. Hence, some level of sugrophobia is normal and adaptive for consumers. However, there are also negative consequences associated with the trait. Beyond the heavy cognitive resources required to maintain a constant state of vigilance against being scammed, high sugrophobes are also apt to signal their distrust to potential trading partners who are otherwise acting fairly and this may lead to negative effects. Finally, high sugrophobes may miss out on some opportunities that are genuinely good deals because of their persistent vigilance to avoid being scammed (Cialdini 2001).

Underlying a consumer’s perception that they “have been had” or unfairly manipulated by a marketing agent is a complex cognitive appraisal process centered around the notion of equity (Campbell 1995). Along these lines, Vohs et al. (2007) identified four conditions necessary for duping to occur. First, the victim must believe at the outset that a standard of fairness was operating. Second, the outcome must be perceived as being unfair in a direction that disadvantages the victim. Third, the victim must believe that the trading partner intended to dupe, which means the norm of trust was deliberately violated. Fourth, the victim must believe that she or he made choices along the way that contributed to the outcome and duping could have been avoided had different decisions been made.

There are both cognitive and emotional consequences associated with being duped. One such cognitive consequence is counterfac-

tual thinking. However, emotional consequences are likely to predominate. These might include self-blame and anger. Particularly likely are self-conscious emotions (e.g., guilt, shame, pride, regret). Rather than eliciting specific behaviors, these emotions are more apt to affect cognitive processing by focusing on how such duping and its associated pain might be avoided in the future.

A pilot study is reported describing the development of 44 items to measure trait sugrophobia. We also report the results of an exploratory factor analysis of 206 Amazon Mechanical Turk workers. The results yielded three distinct factors (see Table 1). The first factor included items representing apprehension in marketplace exchanges. The second factor represents vigilance in terms of being able to spot a potential duping situation early on. The third factor includes items describing anticipated emotions related to potential remorse for having been the victim of duping. Factor correlations ranged from -.39 to .16.

Also reported are the results of two studies. Study 1 (N = 197 MTurk workers) was conducted for purposes of item purification and to test for convergent validity. In addition to these same purposes, study 2 (N = 179 undergraduate students) was conducted to provide evidence of construct validity. The results of confirmatory analyses led to a nine-item scale representing three dimensions (apprehension, vigilance, and remorse), each consisting of three items (see Table 2). In both samples, the tests yielded non-significant chi-square values, thus indicating an excellent fit to the data. Subsequent analyses also indicated evidence of discriminant validity. In all cases but one, the dimensions were distinct from one another.

Study 2 also reported the results of tests of nomological validity (see Table 3). All three dimensions were positively related to Rotter’s ITS exploitation subscale and Melbourne’s vigilance in decision-making subscale. Thus, a distrust of others and a tendency toward rational decision-making positively predicted marketplace apprehension, vigilance against duping and anticipated remorse over duping. The results also revealed that greater vigilance against duping was inversely related to impulsive buying. Also found was that increased apprehension about marketing agents and heightened anticipated remorse over possible duping was associated with a less favorable attitude toward marketing.

In sum, the results of this research yielded a Sugrophobia Scale comprised of nine items represented by three latent dimensions: vigilance, apprehension and remorse. Evidence was provided indicating that the scale demonstrates convergent validity, discriminant validity and construct validity. It is our hope that the Sugrophobia Scale will fill an important gap in the consumer behavior literature and will be of value both to academics and practitioners.

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# The Cool Scent of Power: Effects of Ambient Scent on Preferences and Choice Behavior

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## EXTENDED ABSTRACT

Scent marketing or emitting ambient scents in the shopping environment is considered by industry managers to be an area with wide and unexplored opportunities and much commercial promise. Despite practitioners' evolving interest and a rapid investment increase in ambient scent technologies, consumer research on scent has been very limited (Morrin 2010). Extant research still leaves many important questions unanswered; for instance, how different categories of ambient scents affect actual purchase behavior.

In this research, we contribute to furthering such understanding by providing an in-depth exploration of how semantically related scent categories affect product choice and purchase behavior in the store. We demonstrate that scents that differ on perceived temperature systematically affect consumer behavior through the process of producing a spatial bias in social density perception. Social density is defined here as the joint perceptual evaluation of the number of people present, the physical proximity between them, and the overall spaciousness of the environment.

Extant research has established that scents can be categorized based on the semantic meaning that they carry and that they can activate and increase accessibility of semantic concepts (Krishna, Elder, and Caldara 2010). One scent categorization that is established and used in both theory and practice is based on the temperature dimension where scents are categorized as warm or cool based on the strong temperature associations that they evoke (e.g., warm scents are vanilla and cinnamon while cool scents are peppermint and eucalyptus; Krishna et al. 2010). In addition, psychology research has established the existence of a very strong bi-directional correlation between temperature and spatial proximity both as fundamental features of the physical environment and as psychological concepts in people's minds. In the present paper, we extend these findings by proposing that semantically primed temperature through warm and cool ambient scents will bias perceptions of overall social density. More specifically, we propose that a warm (vs. cool) ambient scent will lead to perceptions of greater social density.

Research on social density suggests that when people perceive social density to be very high they tend to experience less control over their social environment. In addition, recent research on power in consumer behavior indicates that when people experience less power (i.e., control) they automatically adopt a power-compensatory behavior in an attempt to regain power (Rucker, Galinsky, and Dubois 2012). For example, such behavior is exhibited through greater value placed on luxury or high-status products that can serve to restore power (Rucker et al. 2012). Integrating the findings from these research streams, herein we propose that a warm vs. cool scent will lead to perceptions of greater social density and as a result people will experience less power and adopt power-compensatory behavior exhibited through greater preference and choice of high-status products and luxury brands.

In study 1 ( $n = 38$ ), we show that a warm (vs. cool) ambient scent activates associations with temperature and leads to perceptions of higher social density. In a warm (vs. cool) ambient scent people perceived the room to be fuller and the space to be more limited, and these spatial perceptions were mediated by the temperature associations evoked by the scents.

In study 3 ( $n = 66$ ), we once again replicate the scent effect on social density perceptions but we also demonstrate this bias mediates the effect of scent on power-compensatory consumption patterns. The results demonstrate that people in the warm (vs. cool) scent condition reported higher evaluations of ads describing the products in terms of their prestige (vs. performance) qualities, and perceptions of social density mediated these effects.

In studies 3 and 4 (field studies), we provide real-life data supporting the effect of warm versus cool scents on actual purchases of luxury brands and high-end products. The first field study (study 3;  $n = 154$ ) was conducted in an optics store during a 22-day period. Data were collected on sales of prescription frames and sunglasses from a wide variety of brands ranging from low-end to high-end. The results from this field study show that in a warm- (vs. cool-) scented store shoppers purchased significantly more products from luxury brands (e.g., Gucci, Versace, Prada).

Study 5 was a field study conducted in a retail store over a period of 5 weeks. Sales records were collected on 1127 transactions for a total of 1989 items sold in the store during the study period. The results from the sales records analysis demonstrate that shoppers in the warm- vs. cool- and no-scent condition purchased significantly more products from the high-end category. In addition, a survey questionnaire from a sample of 247 consumers showed that consumers in the warm- vs. cool- and no-scent condition perceived the store as more socially dense, and as a result purchased more upscale items which they also reported would make them feel more respected (as evident in a significant serial mediation).

The findings from this research carry important theoretical contributions to sensory research. This research is the first to demonstrate that sensory stimulation in the olfactory sense (i.e., through ambient scent) can produce biases on perceptions in the visual sense (i.e., on spatial perception of social density) thus contributing to research on multisensory, scent and spatial perception. In addition, we contribute to scent research firstly by identifying a new process for the scent effects, and secondly by presenting real-world evidence of how scents affect actual purchase behavior. The present findings also have important managerial implications and can provide practitioners with concrete insights on how different categories of scents work.

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# Striving for Superiority: Face Ratio, Anthropomorphism and Product Preference

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## EXTENDED ABSTRACT

Anthropomorphism, or attributing human traits to non-human entities, is increasingly being studied in marketing. Research suggests that people often think of products in humanlike terms, ascribing to them human traits, and interacting with them as they would interact with other people (Aggarwal and McGill, 2007; 2012). In this research we examine the interesting possibility that people react to product faces, in particular faces of high status products, in much the same way as they react to human faces; and base their evaluation of these products based on their impression of the specific product-face. In particular, this research proposes that consumers' preferences for anthropomorphic products may be influenced by the respective face width-to-height ratios ( $fWHR$ : bizygomatic width divided by upper-face height).

Extant literature demonstrates that perceivers use social stimuli as indicators of status in others (Zebrowitz and Montepare, 1989; Keating and Doyle, 2002) and faces with high  $fWHR$  are perceived as being more dominant, are given higher-status in the social hierarchy (Mazur et al., 1984), but are also liked less (Stirrat and Perrett, 2010). Based on these findings, we propose and demonstrate that high  $fWHR$  of products resembling human faces will lead to the product being perceived as being high on dominance. However, unlike the inter-personal domain, higher level of dominance (or toughness) of the product will lead to greater (and not less) consumer preferences and willingness to pay (WTP) for it. Thus, individuals will show greater preference for wider product faces but not for human faces and the perceived dominance from each set of faces will mediate these effects. We explain this seemingly opposite effect to the product's ability to be used as a signaling device: consumers use the high dominant product as a means to enhance their own status. Thus, we find that the effect is moderated by the type of product – the products that are seen as status products show this effect while products that are incapable of being used as a signaling device show the opposite effect.

For the first study, we look at the relationship between price and automobile  $fWHR$  of 297 models from 25 automobile manufacturers. Our data include pictures, price information, and product specifications. Consistent with our predictions, the results show that  $WHR$  significantly predicts automobile price ( $p < .001$ ). In particular, we found that the  $WHR$  is a significant predictor of prices for Sedan ( $\beta = 71.95$ ,  $p < .001$ ), for Coupe ( $\beta = 321.32$ ,  $p < .001$ ), and for Convertible ( $\beta = 248.94$ ,  $p < .001$ ).

Since Study 1 gives only correlational evidence, Study 2 is designed to replicate this effect in a laboratory setting. For Study 2, we created a set of experimental stimuli with four human faces and four automobile face stimuli, each with three levels of  $WHR$  (ratio). In order to control any covariance between ratio and spaciousness (e.g., automobiles with high ratio being more spacious), width was held constant across all ratios. We found that participants ( $N = 485$ ) perceive both human and automobile faces with high  $fWHR$  as being more dominant (human faces:  $p < .001$ ; automobile faces:  $p < .04$ ). Further, as predicted, participants dislike human faces with a high ratio ( $p < .001$ ), while they like automobile faces with a high ratio ( $p < .01$ ). Consistent with our theorization, these effects are mediated by perceptions of dominance (Human face Sobel's  $z = -3.1$ ,  $p < .001$ ; Automobile face Sobel's  $z = -2.45$ ,  $p < .02$ ).

Next, Study 3 is designed to test if this effect will be amplified when participants are motivated to impress others (i.e., impression goal). Three automobiles were manipulated into two levels of ratio by proportionally increasing and decreasing the original ratio. The impression goal was manipulated by presenting a scenario where participants were instructed to imagine renting a car for an important business trip. As in Study 2, perceived dominance and WTP for renting the car (\$/day) were measured. As predicted, the goal manipulation increases sensitivity towards the dominance looks of the car front, meaning, participants with impression goal perceived the wider faced car being more dominant ( $p < .05$ ) and were willing to pay more for renting the wider faced car ( $p < .04$ ). Furthermore, the goal predicts the amount paid for the car rental and perceived dominance of the car face mediates the effect ( $p < .001$ ).

As the final study, Study 4 tested generalizability of this effect. In particular, we wanted to see if product's ability to signal status to others moderates the effect of ratio on WTP. Using products with and without the ability to signal status (house vs. mop), we tested if the found effects are dependent on the products' ability to signal status. As in the previous studies images of house and mop were manipulated by proportionally increasing and decreasing the original ratio. After seeing each image, participants provided their immediate impressions of the stimuli in terms of perceived dominance, degree of liking, and WTP. Results show a significant interaction between product types and ratio ( $p < .01$ ). Specifically, compared to a narrow faced house, participants rated a wider faced house being more dominant ( $p < .02$ ) and were willing to pay more for it ( $p < .003$ ). However, there was no effect of ratio on perceived dominance, liking or WTP for mop. A mediation analysis using 5,000 bootstrap samples confirmed that perceived dominance mediates the effect of ratio on WTP for the house (95% CI: .08 and 1.39).

In sum, our research provides the first demonstration of influence of  $fWHR$  on product preferences and actual market prices, while simultaneously providing the underlying conceptual basis for why we observe this effect. This research suggests that product faces may be perceived the same way as human faces such that the  $WHR$  influences their perceived dominance traits. Further, because products that are used as signaling tools for status, they are also liked more if they have a high  $WHR$  unlike human faces that are liked less if they have high  $WHR$ . We find consistent results across four studies using secondary data as well as experiments in the lab, using factors that strengthen the effect (impression goal) and factors that weaken the effect (non-status products). There are significant future theoretical and managerial implications of this research.

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# Coffee, Tea, and Caffeinated Cognition

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## EXTENDED ABSTRACT

People drink coffee and tea every day, placing them just behind water as the most popular beverages in the world. However, our understanding of them, to date, has been limited to the physiological effects they have on the people who consume them. We adopt a psychological treatment to consider how coffee and tea – as a function of their differing levels of caffeine – configure consumer cognition.

Coffee has on average 150 milligrams of caffeine per cup, which often produces a “lift” that arouses the drinker. Meanwhile, tea has on average just 50 milligrams of caffeine per cup, and the effects usually have a later onset. This differing level of caffeine, in turn, can be seen in many societal and cultural associations of coffee and tea whereby people associate coffee with urgency and tea with relaxation.

These associations indicate that coffee prompts a focus on what is immediate and in the present, while tea encourages a view of things as less imminent and more in the future. This difference in temporal focus, in turn, should elicit differences in cognition. Construal level theory posits differences between thinking about the present and the future, broadly classified into either a concrete or an abstract construal (Trope & Liberman, 2010). Accordingly, coffee should draw people to process information in narrow, discrete terms (i.e., a concrete construal), while tea should draw them to process information in broad, superordinate terms (i.e., an abstract construal).

If coffee breeds a sense of urgency while tea prompts relaxation, coffee might cause people’s thoughts to gravitate toward the present moment, whereas tea would lead their thoughts to drift farther into the future. In Study 1, participants listed three activities that they planned to do but for which they had not yet determined an exact time. In an ostensibly unrelated task, they next were asked to generate slogans for a new beverage company that produced either coffee beans or tea leaves (via random assignment). Afterward, participants saw the same activities they had listed earlier and reported when they planned to engage in each. As predicted, participants generating slogans for coffee beans planned the activities sooner than those generating slogans for tea leaves. These findings indicate that coffee prompts people to focus on the present, while tea transcends to the future.

As a marker of construal level, thinking abstractly improves creativity by facilitating the generation of alternative, diverse, or unique ideas for the problem at hand (Friedman & Förster, 2008). Building on this relationship between construal and creativity, we predicted that coffee should cause people to be less creative than tea. We also tested the hypothesis that it is the caffeine that drives the associations between coffee and concreteness and between tea and abstraction. In Study 2, all participants first saw a banner ad before the main experiment. We created four versions of the ad (coffee-caffeine, coffee-decaf, tea-caffeine, tea-decaf), resulting in a 2 (coffee vs. tea) × 2 (caffeinated vs. decaffeinated) between-participants design. The ads showed either pictures of coffee beans or tea leaves, along with a text-based description of the caffeine content and the type of beverage. Afterwards, participants listed as many ways of using a brick as possible. Caffeinated beverages led to lower overall level of creativity than decaffeinated beverages; this main effect was qualified by a significant interaction. Among participants in the caffeine conditions, those exposed to the coffee ad scored lower on creativity than those exposed to the tea ad. Among those in the decaffeinated conditions,

participants exposed to the coffee ad scored similarly on creativity as those exposed to the tea ad. This pattern of moderation suggests that it is the caffeine content that underlies how people think in response to coffee and tea.

Would our hypothesis also hold when people actually *drink* coffee or tea? If so, our results would have practical relevance since many people drink coffee or tea daily. In Study 3, we assessed the influence of drinking coffee or tea on construal-dependent product evaluation. The study included an ostensible taste test for a new brand of coffee or tea and provided a small sample of one of the beverages (via random assignment) to each participant. While sampling the beverage, participants imagined a situation in which they bought a radio to listen to programs. For half of the participants (via random assignment), the radio had positive central features (e.g., excellent sound) but negative peripheral features (e.g., small clock display). For the other half, the radio had positive peripheral features (e.g., large clock display) but negative central features (e.g., poor sound). Participants indicated how satisfied they would be with the radio. People thinking concretely give greater evaluative weight to peripheral features, whereas those thinking abstractly prefer products with positive central features over those with positive peripheral features (Trope & Liberman, 2000). We predicted that, by giving greater weight to peripheral features, participants drinking coffee should make less of an evaluative distinction between the two radios, whereas those drinking tea should show a stronger preference for the radio with positive central features. Participants were more satisfied with the radio possessing positive central features; this main effect was qualified by a significant interaction. Among participants drinking coffee, they were similarly satisfied with the radio that had positive central features and one that had positive peripheral features. Participants drinking tea were more satisfied with the radio that had positive central features than with one that had positive peripheral features. This suggests that actually drinking these beverages also shapes how people evaluate product-related information.

Taken together, this research suggests that coffee and tea configure the temporal focus with which people appraise events, and this difference in timing – via shifts in construal – impacts a host of judgments and decisions. The connection between caffeine and cognition opens the door to consideration of other beverages, and a related stimulant-depressant dissociation tied to temporal focus and construal likely generalizes beyond just drinks. Thus, it remains important to understand not just the physical consequences of foods but also how they impact everyday judgement and decision-making.

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# Making Choices en Route: How Orientation Through Space Changes Subjective Closeness

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## EXTENDED ABSTRACT

Mounting research on the psychology of spatial distance has articulated the manifold ways in which feeling closer or farther from things changes the manner in which we represent and act upon those very things (Trope and Liberman 2010). Spatial distance has the power to shape judgments, yet the study of spatial distance to date has adopted primarily a static or binary approach, conceptualizing objects as stationary, either close or far in space (Henderson and Wakslak 2010). In the current research, we go a step further by considering the dynamic and changeable orientation of people who are moving toward or away from objects in their environment. In so doing, we suggest that feelings of closeness are shaped not only by spatial distance but also by people's orientation in space – that is, their moving *toward* or *away from* places, people, and things.

**Study 1.** 202 volunteers were recruited at the Bay Street subway station in Toronto, Canada. People were recruited to participate while standing at either the westbound platform or the eastbound platform. All participants were asked to rate the subjective distance of another subway station that was on the same line that they were traveling – such such the station was either coming up (e.g., the next stop) or was just past (e.g., the previous stop). Specifically, participants were randomly assigned to a condition in which they rated the subjective distance of the Spadina station (2 stops to the west), the St. George station (1 stop to the west), the Bloor-Yonge station (1 stop to the east), or the Sherbourne station (2 stops to the east).

**Results.** Among the stations to the west of Bay Street, westbound participants rated the stations as closer than eastbound participants; this effect obtained for each of the westbound stops – one stop to the west (St. George,  $p < .001$ ,  $\eta_p^2 = .28$ ) and two stops to the west (Spadina,  $p = .001$ ,  $\eta_p^2 = .20$ ). The opposite held true among stations to the east of Bay Street (i.e., we observed greater subjective closeness among eastbound participants than westbound participants) and again for each of the eastbound stops – one stop to the east (Bloor-Yonge,  $p = .053$ ,  $\eta_p^2 = .08$ ) and two stops to the east (Sherbourne,  $p < .001$ ,  $\eta_p^2 = .24$ ).

**Study 2a.** As what is true for one dimension of psychological distance tends to be true for other dimensions, Study 2a considers whether places toward which people are moving closer (versus farther) are associated with events judged to have occurred more recently (i.e., closer in time). 100 volunteers were recruited at the intersection of Danforth Avenue and Woodbine Avenue in Toronto, Canada. This location was selected because it is between two equidistant Shoppers Drug Mart locations (a large drugstore chain in Canada), with one located to the west and one located to the east on Danforth Avenue. People walking east along Danforth Avenue were asked to think about either the Shoppers at Danforth and Main Street or at Danforth and Coxwell Avenue. Participants estimated how long ago they believed it had been since a patron of that store found an item that they wanted on sale (in minutes).

**Results.** Finding an item on sale was estimated to have happened more recently at the store which participants were oriented toward ( $M = 7.65$  min,  $SD = 9.98$ ) than at the store from which participants were oriented away ( $M = 14.83$  min,  $SD = 17.19$ ).

**Study 2b.** We sought to rule out a purely motivational account for the orientation effect by next examining a negative – rather than a positive – event. 86 volunteers were recruited at the intersection of Robson Street and Bute Street in Vancouver, Canada. This location was selected because it is between two equidistant Starbucks Coffee locations, with one located to the northwest and one located to the southeast on Robson Street. People walking along Robson Street were asked to think about either the Starbucks at Robson and Jervis Street or at Robson and Thurlow Street. Participants estimated how long ago they believed it had been since a patron of that store had his or her drink order prepared incorrectly (in minutes).

**Results.** Having a drink order prepared incorrectly was estimated to have happened more recently at the store which participants were oriented toward ( $M = 14.36$  min,  $SD = 11.99$ ) than at the store from which participants were oriented away ( $M = 25.43$  min,  $SD = 25.78$ ).

**Study 3.** The probability of an event can vary from being very close—completely or nearly certain—to very far insofar as there is only a remote chance that it will come to pass. Accordingly, when a location feels physically closer, an event at that location should feel more likely to occur. To test this relationship, we asked 50 participants to estimate the likelihood that a lottery would be won as a function of whether people were oriented toward or away from the location at which the lottery drawing takes place. People were recruited to participate while standing at either a southbound subway platform (toward the location of the lottery drawing) or the northbound platform (away from the location of the lottery drawing).

**Results.** The likelihood that someone would win the next lottery drawing was estimated as higher among participants oriented toward the location of the drawing ( $M = 4.00$ ,  $SD = 1.73$ ) than among participants oriented away from the location of the drawing ( $M = 2.80$ ,  $SD = 1.71$ ),  $F(1, 48) = 6.09$ ,  $p = .017$ ,  $\eta_p^2 = .11$ .

Our studies add to a growing literature investigating the dynamics by which people, places, and time move in psychological space. Our findings illuminate not only how people navigate spaces and perceive distances, but also the cognitive and behavioral consequences that arise from psychologically shrinking or expanding the physical space between oneself and the world at large.

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# If it's Useful and You Know it, Do You Eat? Preschoolers Refrain from Instrumental Food

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## EXTENDED ABSTRACT

If you told a 3-year old that she should try a certain food because it will make her smart, would she conclude that it must not taste very good? If you told her that a certain dish will make her strong, would she conclude that it is less tasty? In this research, we ask what children, as young as three years old, learn from persuasive messages about food, and how these messages affect their consumption and food enjoyment. We propose young children infer from such messages that if food is good for one goal, it cannot be a good means to achieve another goal. We argue that when food is presented as making children strong or as instrumental to a non-health goal such as knowing how to read or count, children conclude the food is not as tasty, and therefore consume less of it, compared to when the food is presented with no accompanying message or as tasty.

We test our predictions among children 3-5.5 years old who are at the beginning of learning about food-related persuasion (Desrochers and Holt 2007). As such, it is important to understand how such messages affect their consumption behavior. We use different food items (crackers and carrots) and different messages (health- and academic-related, such as associating eating carrots with knowing how to count). By testing young children and using academic, non-health goal-messages, we are able to go beyond the learned-associations account that would suggest that children learn through experience that healthy-framed food is less tasty, and as a result consume less of it. By showing that no prior experience or learning is necessary for children to infer that if food serves an external goal it is less tasty and therefore they eat less, we rule out the learned-associations account and rule-in the online-inference account.

Specifically, by using these novel food-goal associations we extend past research that showed that children like less healthy-framed food (Miller et al 2011; Robinson et al 2007) and food that is presented as a contingency to receive rewards (e.g., saying "finish your vegetables and get dessert" decreases liking of the vegetables; Birch et al 1982; see Lepper et al. 1973 for the general principle of over-justification). These past findings can be explained by learned associations: children learn that healthy food is usually less tasty and that they are rewarded for eating this type of food. We extend also past research on causal-discounting (Kelly 1972) and outcome-discounting or means-goal dilution (Zhang et al. 2007), as we measure actual consumption, which allows us to go beyond perceived instrumental-ity that was measured in past research.

We conducted five studies at a daycare. An experimenter read preschoolers a story in individual sessions. The story featured a girl who had a snack (crackers or carrots). Depending on the experimental condition, the story either did or did not state the benefits of the snack. Our key dependent variable was preschoolers' actual consumption of that snack after listening to the story.

Study 1 (N=66, 4.5-5.5 years old) presented crackers as making one strong (a health goal), as yummy, or with no message. Consistent with our predictions, children in the "health" condition ate fewer crackers compared to those in the "yummy" and "control" conditions that did not differ from each other. Those in the "healthy" condition were also less likely to choose these crackers to take home for future consumption. Study 2 replicates this effect using younger children (N=49, 3-4 years old) and additionally finds that children in the "healthy" condition rated the crackers as less tasty compared to children in the "control" condition (we did not include here the

"yummy" condition, since there was no difference between the control and yummy conditions in Study 1).

Our first two studies established that children judge food that is presented as instrumental to a health goal as less tasty and consume less of it compared to yummy and neutral frames. We argue that this is due to an online-inference process, such that children conclude that if the food is presented as instrumental to achieving one goal it cannot be instrumental to achieving another goal (i.e., good taste). As reviewed above, an alternative account would be that children already consider healthy food less tasty, because they learned this through experience and often are convinced to consume it. To rule out this account, in studies 3-5 we used goals that children do not spontaneously associate with the food—knowing how to read or count. If making food instrumental to achieving these new goals also reduces consumption, it will support our online-inference account: Since children do not have preexisting associations between the food and the new goals, the learned-associations account could not explain such a result.

Study 3 (N=57, 4-5 years old) presented carrots as helping knowing how to read, as yummy, or with no instrumental message. We find that children indicated they would eat fewer carrots in the "read" condition compared to the "yummy" and "control" conditions that did not differ from each other, thus replicating study 1's results using a novel, non-health, goal and another food item (carrots). Study 4 (N=46, 3.5-4.5 years old) generalizes this effect to another non-health goal, knowing to count, and finds that children ate less carrots when these were presented as instrumental to knowing how to count compared to a control condition. Finally, study 5 replicates this effect by showing that the activity the girl in the story engaged in after eating the snack (going to play in studies 1-4 and going to school/bed in study 5) does not interact with the effect of the instrumental message (carrots help you count).

Using a highly important context – food consumption by preschoolers – with practical, medical, and policy implications, we shed light on information processing among young children. Ultimately, we find that serving food without any message about the goal the food serves –making them strong, helping them read or count– increases actual consumption of neutral (crackers) and healthy (carrots) food items.

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# Can We Turn Off Defensiveness?: Agent vs. Consumer Responses to Persuasion Attempts

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## EXTENDED ABSTRACT

Past research suggests that individuals have different aspects of identity that can become activated by various elements of the decision context (e.g., Forehand & Deshpandé 2001; White and Argo 2009; White and Dahl 2007). While most of this past research has examined the salience of an aspect of consumer identity based on their belonging to groups based on ethnicity or gender (Reed II 2004), the current research identifies the importance of an often overlooked identity—that of the agent versus the consumer identity—in determining consumer responses to persuasive attempts. For an individual who has both a consumer and an agent identity, we argue that encounters in the marketplace such as shopping in a retail store are likely to make the agent identity salient. Furthermore, we argue that the activation of agent identity makes targets more motivated to understand the persuasion context accurately, leading them to be more sensitive to important nuances in the persuasion context. As such, agents are predicted to be more attuned to contextual cues in the environment that imply that the source of a persuasion attempt likely has ulterior motives. In contrast, we anticipate that when one's consumer identity is active, they will take on defensive stance when processing persuasive messages (DePaulo and DePaulo 1989). This defensive processing style, in turn, leads consumers to pay less attention to the nuances present in the persuasion context and makes them less responsive to persuasive attempts, regardless of whether there is evidence that the source has ulterior motives (Main, Dahl and Darke 2007).

### Study 1

This was a 2 (ulterior motive accessibility)  $\times$  2 (role) between-subjects design ( $N = 84$ , 40% female). A sampling table was set up and was staffed by a male confederate. Half of the participants were told by the confederate that he worked as a consultant for the company that produced the chocolate (high ulterior motive accessibility) and the other half were told that he worked as a research assistant at the university (low ulterior motive accessibility). Once participants were done sampling, they completed a short survey consistent with the cover story. The results demonstrate that those with their agent identity active were perceived to be friendlier and spent more time interacting with the persuasion agent when ulterior motives were low as compared to high. In contrast, when the consumer identity was active, there were no differences as a function of whether ulterior motives were accessible or not.

### Study 2

This was a 2 (ulterior motive accessibility)  $\times$  4 (role) between-subjects design ( $N=161$ , 48% female). Participants self-identified whether or not they had sales experience. Among those participants with sales experience, one third were randomly assigned to be primed with their working role by asking them to list five things that they usually did while working as a sales associate (agent identity activated). An additional third of agents were primed with a consumer role by asking them to list five things that they usually did while shopping as a consumer (consumer identity activated). The remaining third of dual role participants were not primed (no identity activated). A scenario was used where participants were shopping for sunglasses. The accessibility of ulterior motive manipulation occurred through the

timing of the persuasion attempt (Campbell and Kirmani 2000; Main et al. 2007). The high (low) accessibility of ulterior motives condition had the salesperson making flattering statement before (after) purchasing sunglasses.

Results demonstrate that the differing response of agents as compared to consumers is due in part to the activation of their work identity as agents whose work identity was activated responded in a similar manner as those whose identity was not activated. Further when an agent's consumer identity was activated, as opposed to their work identity, this resulted in similar responses as consumers with no experience as an agent.

### Study 3

This was a 2 (ulterior motive accessibility)  $\times$  2 (role) between-subjects design ( $N = 113$ , 41% female). As in Study 1 and 2, participants self-identified whether they had prior sales experience. Agents had an average of 2.0 years of experience. The ulterior motive accessibility was manipulated through an advertising promotion adapted from Folse, Niedrich, and Grau (2010) with a hypothetical brand that uses a cause related marketing campaign. The results of Study 3 replicate the findings previously observed through a different manipulation of ulterior motive accessibility. More importantly, results of the mediated moderation confirm the underlying mechanism of the differing defensive responses based on which identity is activated (agents versus consumers).

### Study 4

One question that remains, however, is whether there is a way to make consumers less defensive and more accurate in their assessments of the persuasion context. In this study, we attempt to make consumer responses vary according to the different levels of ulterior motives by getting them to take the perspective of the sales agent. Perspective taking involves the active consideration of alternative points of view (Galinsky and Moskowitz 2000; Laurent and Myers 2011). This was a 2 (ulterior motive accessibility)  $\times$  2 (perspective taking) between-subjects design ( $N = 115$ ; 41% female) with consumers only. This study demonstrates one effective means of making consumers sensitive to varying levels of ulterior motives—by inducing perspective taking. Second, this study demonstrates the mechanism for this moderation effect. That is, when ulterior motive accessibility is low, perspective taking decreases defensive thoughts and increases empathy, which leads to higher trust, greater satisfaction and future interaction intentions.

## General Discussion

This research makes a number of contributions to the literature. First, the current work provides a more multifaceted view of how one's role as an agent versus consumer in the consumption context influences responses to persuasion attempts. Second, we demonstrate that the agent identity is naturally salient in retail settings. Third, we build on the persuasion knowledge literature and demonstrate how identity affects processing motivations. Fourth, we demonstrate that one can prime agents with their consumer identity thereby leading to defensive processing. Fifth, we demonstrate that perspective taking leads consumers to be less defensive in their response to a persuasion attempt.

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# I Like to Move it: Introducing Regulatory Fit From Body Movement

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## EXTENDED ABSTRACT

Some people simply like to move. Yet, e-commerce has taken a great deal of body movement out of the purchase experience. In recognition of this, brick and mortar retailers increasingly re-build body movement into shopping: Retailers like Home Depot, Recreational Equipment Inc. and Target engage customers with body movement using in-store workshops, climbing walls or events such as Super Saturday. It remains virtually untested however if this is actually valuable to customers.

Value in movement might seem unsurprising, as movement can be enjoyable (i.e. in-store climbing wall) or facilitate products evaluation (i.e. trying new shoes). We propose that value enhancement from movement is more general, and that movement for some customers will not enhance value as much as stasis will. We focus on the fit between movement and consumer's predominant regulatory mode orientation (PRM)—locomotion versus assessment—to explain why some consumers appreciate physical movement while others don't.

Regulatory mode theory (Higgins, Kruglanski, & Pierro, 2003; Kruglanski et al., 2000) proposes the two independent functions of self-regulation known as locomotion and assessment. Locomotion is the aspect of self-regulation concerned with initiation and maintenance of progress from state to state while Assessment is concerned with critically comparison and evaluation (Kruglanski et al., 2000).

Environments that fit motivational orientations (i.e. locomotion and assessment) intensify experiences of value (Higgins, Idson, Freitas, Spiegel, & Molden, 2003). This implies that consumers who are predominant locomotors will value a product more when the way in which they purchase this product involves movement from one state to the next. For assessors though, critical evaluation to make the right choice is crucial.

The current study focuses on creating value-from-fit through presence or absence of body movement. Body movement can be defined as a change in the position of all or part of the body. We expect increased value for experiences that involve body movement (rather than stasis) when consumers have predominant locomotion orientations. Bodily movement, however, also demands cognitive resources (Lindenberger, Marsiske, & Baltes, 2000) that could otherwise be used for evaluation. This creates conflict with assessment. We hypothesize that stasis produces value enhancing fit for consumers with predominant assessment orientations.

*Hypothesis: Purchase experiences that involve body movement will increase the valuation of products for predominant locomotors while purchase experiences that involve body stasis will increase the valuation of products for predominant assessors.*

Study 1 tested whether monotonous movement increases value perceptions for locomotors, while stasis fits assessors. Subjects (N=36) were assigned to the Movement condition (going up and down a stepping stool 40 times) or the stasis condition (sitting still at a computer while looking at an image of the stepping stool). Walking time in the movement condition was equal to sitting time in the static condition. Value was measured by asking participants to indicate the value of the stepping stool (7-point scale from "< US \$20" to "US

\$120 and higher"). We used the established locomotion and assessment scales (Kruglanski et al., 2000). Results confirmed the predicted 2-way interaction between PRM and stasis vs. movement ( $\beta = .77$ ;  $p < .05$ ). As predicted for predominant locomotors the movement condition led to higher perceived value for the stepping stool than the static condition while the opposite was true for predominant assessors.

Study 1 demonstrates locomotion-fit effects with body movements that involve product usage, and therefore provide relevant information for product evaluation. It could be argued that this effect only occurs when the movement is relevant. Study 2 tested this possibility by introducing movement that is relevant to the purchase process but not product evaluation. Subjects (N=128) choose chocolates either in the Movement condition chocolates while walking around a table (like a buffet) while in the Stasis condition sitting at a table (like in a café). As the dependent variable, participants made an offer for the chocolates using their participation money (Avnet & Higgins, 2003). Locomotion and assessment were measured as in study 1. Results confirmed the predicted 2-way interaction between PRM and stasis vs. movement ( $\beta = .79$ ;  $p < .05$ ). As predicted for predominant locomotors we found a non-significant trend in the predicted direction while for predominant assessors the static condition led to higher offers for the chocolates.

## Discussion

Consumers' body movements (compared to stasis) influence product valuations depending on PRM orientation. Movement (vs. stasis) increases value for locomotors and decreases value for assessors.

What psychological mechanisms may underlie this effect? One possibility builds on a recent finding that locomotors (vs. assessors) enjoy multitasking (Pierro, Giacomantonio, Pica, Kruglanski, & Higgins, 2012). It could be argued that purchase experiences that involve movement require multitasking, as consumers need to evaluate and move at the same time. This would then create a fit effect for predominant locomotors. A follow up study (for space reasons not in this write up) however showed, neither preference for multitasking (Hecht & Allen, 2005; Pierro et al., 2012) nor the interaction effect of multitasking preferences with body movement reached significance while the movement X PRM interaction remained significant.

The practical relevance of this paper is underlined by studies showing that PRM orientations vary among countries (Higgins, Pierro, & Kruglanski, 2008), with Spain and Italy, for example, having high locomotion predominance, and Japan and South Korea having high assessment predominance. It would be interesting to replicate our results using online shopping in a predominant assessment country, versus brick and mortar stores where customers are encouraged to engage physically with products.

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# Not All That Glitters is Golden: The Impact of Procedural-Fairness Perceptions on Consumer Satisfaction with Favorable Outcomes

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## EXTENDED ABSTRACT

The idea of meeting consumer needs and wants profitably is central to the function of marketing. Indeed, marketers strive to offer desired benefits such as discounts, price guarantees, and favorable refund policies to their consumers with the expectation that delivering consumer benefits will yield enhanced evaluations for the brand and strengthen consumer-brand relationships. In this research, we propose that consumer reactions to such beneficial marketing outcomes may not be uniformly favorable when consumers perceive that the procedure used to arrive at the benefit as unfair.

A rich body of research demonstrates that in social exchanges, people's reactions to the other party are shaped predominantly by their perceptions of fairness of the exchange (Brockner and Wiesenfeld 1996). Existing literature on fairness in marketing has shown that this tenet of fairness is relevant to consumer-brand interactions as well. Extant literature has dealt almost exclusively with unfavorable outcomes (e.g., price increases; Bolton and Alba 2006) and shown that consumers consider fairness when they receive these negative outcomes. Whether the converse could also hold true: that consumers could have negative perceptions of positive outcomes due to perceptions of associated unfairness, is unclear.

If indeed consumers consider the unfairness of positive marketing outcomes, they should be able to distinguish between fairness and favorability. To examine what might account for this proposed asymmetric relationship between favorability and fairness, we turned to the organizational justice literature which provides a framework by parsing overall fairness assessments into outcome and procedural-fairness perceptions. Outcome-fairness relates to the equity of outcomes (Brockner et al. 2003). Procedural-fairness, on the other hand, refers to the fairness of the process by which the outcome is obtained (Brockner et al. 2003) and can determine whether an entire system, such as an institution or a company, is perceived as just and fair (Brockner and Wiesenfeld 1996). Procedural-fairness perceptions depend on several factors such as the inconsistency in implementation of policies and the perception that the outcome was carried out only in the exchange partners' self-interest (Leventhal, Karuza, and Fry 1980). These features of procedural-fairness have portent in consumer-brand interactions. In the present research, we predict that considerations of procedural-fairness can impact consumers' reaction to favorable marketing actions such that even when consumers recognize the favorability of outcomes, they penalize brands when the process used to arrive at the outcome is deemed unfair.

In study 1, we use one determinant of procedural-fairness—acting in one's self-interest—and demonstrate that (1) consumers can distinguish between outcome and procedural-fairness and (2) salience of procedural-fairness attenuates the positive effect of receiving a favorable outcome. Participants ( $n = 102$ ) read that a fictitious movie rental e-retailer had recently eliminated late fees. In the procedurally unfair (vs. fair) condition, participants learned that a close competitor had recently dropped (vs. retained) its late fees. Half of the respondents rated fairness immediately after reading the scenario and before (vs. after) reporting brand evaluations in the salient (vs. non-salient) condition.

In support of the expectation that outcome and procedural-fairness are distinct constructs, we found that when the procedure

was unfair, procedural-fairness perceptions were significantly lower when fairness was salient ( $p < .01$ ) but outcome fairness perceptions were not affected by variations in salience. Further, as expected, in the procedurally-fair condition, brand evaluations were enhanced regardless of salience ( $p < .001$ ). In the procedurally-unfair condition, however, brand evaluations were diluted (vs. enhanced) when fairness was salient (vs. not-salient; all  $p < .05$ ). We also found that perceptions of procedural-fairness (but not outcome-fairness) mediated the effect of fairness and salience on changes in brand evaluation. Thus, while respondents were not agnostic to the favored outcome, only considerations of procedural-fairness impacted their reactions when fairness was salient. Please see table 1 for means.

In study 2, we added to these findings by examining the influence of the consumer-brand relationship on the effects of procedural-fairness. Study 2 was a 2 (brand relationship: communal/exchange)  $\times$  2 (procedural-fairness: fair/unfair)  $\times$  2 (procedural-fairness salience: high/low) between-subjects design. Respondents ( $n = 181$ ) first read about a fictional shoe retailer and about the nature of their relationship – communal or exchange - with the brand. Respondents then learned that although they were aware of the retailer's strict 90-day return policy, they needed to return a pair of shoes after this return-time had lapsed. While all participants learned that they received the refund, those in the procedurally-fair condition learned that they receive the refund because they had a store card and a new policy allowed them to make returns after 90 days. Those in the procedurally-unfair condition received a full refund because a store employee arbitrarily used a special employee code to grant them a refund.

As predicted, for communal participants, when fairness was salient, perceptions of procedural-fairness were higher in the fair (vs. unfair) condition ( $p < .001$ ), but not when fairness was not salient ( $F < 1$ ). For communal respondents, when fairness was salient, brand evaluations improved for the fair refund ( $p < .05$ ), and declined for the unfair refund ( $p < .01$ ). No effects were observed when fairness was not salient ( $F$ 's  $< 1$ ). In contrast, for exchange participants, regardless of salience and fairness, evaluations increased after learning about the refund ( $p < .001$ ). Respondents' perceptions of trust of the brand mediated their brand evaluations. See table 2 for means.

This research establishes the importance of procedural-fairness in predicting consumer response to marketing activities. Theoretically, our work opens up a new area within fairness research—the importance of fairness even when outcomes are favorable—and suggests that consumers are sensitive to procedures. We also demonstrate that the type of relationship that consumers share with a brand determines the extent to which procedural-fairness concerns are likely to impact consumer response to favorable outcomes. Practically, our research helps explain why beneficial (and often costly) marketing actions may not have the expected long-term lift and may even have a negative impact if competitors, other consumers, or the media highlight procedural-unfairness. Marketers can significantly improve their return on marketing investment by focusing on both outcome and process.



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# The Effects of Construal Level Over Time

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## EXTENDED ABSTRACT

Construal level theory suggests that entities can be represented at increasing levels of abstraction, from extremely detailed and contextualized (i.e., concrete) to extremely detail-free and decontextualized (i.e., abstract; Liberman and Trope 2008). Interestingly, one can use construal level theory to derive opposing predictions in a number of domains. For example, in the domain of perceived fit, construal level theory can be used to predict that abstraction can lead to both higher and lower perceptions of fit. On one hand, abstract thinkers are more likely to stereotype versus concrete thinkers, leading to lower perceptions of fit between a person and a job (McCrea, Weiber, and Myers 2012). However, recent research by Xu, Jiang, and Dhar (2013) suggests the opposite, such that abstract thinking leads to greater perceptions of similarity between items in an assortment (Xu et al. 2013). These findings suggest that increased abstraction leads to higher perceptions of fit between two entities.

Construal level theory also makes opposing predictions in the domain of intertemporal choice (i.e., choice between a small immediate reward and a larger delayed reward). In this setting, the reward represents a higher level concern (the “why” of the situation), while the time spent waiting represents a lower level concern (i.e., the “how” of the situation). Researchers (Fujita et al. 2006;) have found that, because abstract thinkers attend to higher level concerns while concrete thinkers attend to lower level concerns, abstract thinkers exhibit less present bias. However, the opposite prediction could also be made. That is, if the higher level concern of receiving a reward is represented in an even more abstract manner (e.g., “Why wait for a larger reward? To be happier”), this may lead to impatience (Seeman, Nidich, and Banta 1972). Conversely, if one were to represent the lower order concern of time at an even more concrete level (e.g., “How will I wait for a larger reward?”), the details of how that time will be passed become more apparent, diverting attention from the wait itself, leading to greater patience (Zauberman et al. 2009).

Construal level is not just a static state of mind, but also a process (Trope et al. 2007). This process is illustrated in the stimuli used to prime construal levels. For instance, in the classic “why” versus “how” manipulation (Liberman et al. 2007), individuals categorize the focal entity at increasingly superordinate (subordinate) levels by subtracting (adding) details. This manipulation primes participants to repeatedly add or subtract details. We argue that if this adding/subtracting tendency is aimed at a target, the number of details added/subtracted depends on the amount of time provided. Consequently, the amount of time spent thinking about a target abstractly or concretely may moderate the effects of construal level. That is, additional time should reverse the “stereotyping” effect in the domain of fit, as further decreasing (increasing) the number of details associated with a target should increase (decrease) perceptions of fit. Similarly, additional time should reverse the finding that abstract thinking leads to less present bias, as representing the higher (lower) level concern of reward (wait time) at an even higher (lower) level should lead to less (more) patience.

In study 1, we investigate the effects of construal level over time in the domain of goals. It has been shown that given an active goal, individuals tend to block the activation of competing goals (Shah, Friedman, and Kruglanski 2002). That is, given an active goal, a secondary activity will not be pursued unless it is perceived to be congruent with the active goal. In this study, the focal goal is attain-

ing a good GPA while the secondary activity is playing music. This study employed a 2 (construal level: abstract vs. concrete) x 2 (delay: short vs. long) between-subjects design. Participants were asked to contemplate their academic goals in an abstract (i.e., “why?”) versus concrete (i.e., “how?”) manner for a short (15 seconds) or a long (30 seconds) time. For abstract (concrete) thinkers, perceptions of fit between the music program as well as attitudes toward the music program were higher (lower) in the long (short) delay condition. Additionally, in the short (long) delay condition, abstract (concrete) thinkers perceived less fit and had less positive attitudes.

In study 2, we replicated the results from study 1 in the domain of branding using a different construal manipulation. This study employed a 2 (construal level: abstract vs. concrete) x 2 (delay: short vs. long) between-subjects design. Construal level was primed by generating either superordinate or subordinate category labels for ten words (Fujita et al. 2006). Afterwards, participants considered a moderately incongruent brand extension (Nike deodorant) for either a short (immediately) or long (15 seconds) period of time. For abstract (concrete) thinkers, perceptions of extension fit as well as attitudes toward the extension were higher (lower) in the long (short) delay condition. Additionally, in the short (long) delay condition, abstract (concrete) thinkers perceived less fit and had less positive attitudes.

In study 3, we examine our proposed effects in the domain of present bias using a 2 (construal level: abstract vs. concrete) x 3 (delay: short vs. long vs. very long) design. Construal was manipulated as in study 2. Next, participants were asked to contemplate assigning a value to a restaurant gift certificate at different points in time for a short (immediately), long (15 seconds), or very long (60 seconds) time, and then indicated willingness to pay to receive the gift certificate immediately and in 6 months. WTP to receive the gift certificate in 6 months was subtracted from WTP to receive the certificate immediately, which served as a measure of present bias. As predicted, abstract (concrete) thinkers exhibited less present bias in the short (long) delay condition, but there was no difference between the two in the very long condition.

To summarize, we examine the effects of construal level over time in the domains of perceived fit and present bias, and find that time moderates the effects of construal level. We contribute to the literatures on construal level, fit perceptions, and present bias.

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# When Complexity is Symmetric: The Interplay of Two Core Determinants of Visual Aesthetics

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## EXTENDED ABSTRACT

Good product design can be a key factor in attracting consumers in today's world (e.g., Apple, Braun, IKEA), and it has been suggested that processing fluency is the key process explaining aesthetic preference (Reber, Schwarz, and Winkielman 2004).

Several design properties have been identified as important determinants of aesthetic preference (e.g., symmetry, contrast, prototypicality), and it has been suggested that this is because these objective stimulus features increase processing fluency (Reber et al. 2004). The robustness of fluency effects on consumer preferences has been demonstrated in a wide range of studies (e.g., Lee 2001; Lee and Labroo 2004). From this point of view, visual complexity should contribute negatively to processing fluency and thus have a negative impact on aesthetic liking, as more complex information is more demanding for cognitive system processing. Yet, empirical results show otherwise. Landwehr, Labroo, and Herrmann (2011) for instance showed a positive effect of complexity such that prototypical but complex car designs are most successful in terms of sales. The critical question therefore is: Is processing fluency a sufficient mechanism to understand the effects of objective stimulus characteristics on aesthetic liking?

Positive effects of fluency have been shown in consumer research for a wide range of contexts (e.g., Herrmann et al. 2013; Novemsky et al. 2007). Fluency theory states that higher fluency is inherently positive and experienced as gut-level positive affect (Winkielman and Cacioppo 2001). Following this account, fluency increases aesthetic liking because the positive affect is attributed to the eliciting stimulus unless its informational value is called into question (Schwarz 2004).

There are several objective stimulus features that are related to experienced fluency (Reber et al. 2004). The current research focuses on two of these features—symmetry and complexity—to allow an examination of more complicated relationships because only a few recent studies started to consider interactions between fluency-related stimulus variables (e.g., Landwehr et al. 2011). The research question hence was how visual symmetry and visual complexity mutually influence fluency and liking. We used pictures of abstract art to answer this question.

The stimulus set ( $n = 620$ ) was digitally created, generative digital art, all from one single artist. Objective design complexity was measured with the size of the ZIP compressed image file as this measure correlates positively with subjective complexity (e.g., Forsythe et al. 2011). We calculated objective design symmetry with a new approach based on the correlation of pixel grayscale values. The idea is that a picture is vertically symmetric (i.e., mirrored on vertical axis) if each corresponding pixel left and right of the axis line are the same (perfect symmetry) or close to each other regarding its pixel value. In the present research, we focused only on vertical symmetry as the most common type of symmetry. Per picture ratings for aesthetic liking and subjective fluency experience were obtained separately from overall 2509 participants (47.8% female) using Amazon's MTurk platform.

We ran an OLS regression predicting aesthetic liking from objective complexity, objective symmetry, and the interaction of these two factors. Symmetry and complexity were positively related to lik-

ing and there was no interaction effect, indicating that both objective measures contribute independently to aesthetic liking (see table 1).

We then conducted a moderated mediation analysis (MacKinnon 2008) to investigate whether fluency mediates the effects of complexity and/or symmetry on aesthetic liking, while allowing the two independent variables to act as moderators at any point within the mediating process. To this end, we first estimated an additional OLS-model where we regressed subjective fluency on objective symmetry, objective complexity, and their interaction. The results of this second model show that symmetry contributes positively to fluency. Complexity, however, decreases subjective fluency. Again, there is no significant interaction between the two measures. Third, we estimated a model where we regressed aesthetic liking on objective symmetry and objective complexity and include fluency as a mediator, as well as all possible interaction effects. Results of this third and final model show that objective complexity has a positive direct effect on aesthetic liking. Objective symmetry is now only marginally significant compared to the results of the first model. Fluency strongly increases liking. Yet, the interaction between fluency and symmetry is significant, showing that symmetry moderates the positive effect of fluency. This pattern of results proved to be robust in several supplementary analyses where the non-significant interactions are sequentially omitted, and where ideal point parameterization of the objective design measures was tested.

In predicting subjective ratings of aesthetic liking by objective measures of symmetry and complexity and taking fluency as a mediator into account, this research examined how symmetry and complexity mutually influence processing fluency and aesthetic liking. Results showed that aesthetic liking is not solely based on fluency but rather influenced directly by complexity. Symmetry moderates the positive effect of fluency such that a subjective feeling of fluency is taken more into account for more symmetric pictures. An explanation for the observed interactive effect is the diagnostic role symmetry plays in human beauty (Rhodes 2006) such that a possible discounting process of fluency is prevented. Findings further show a suppressor effect of fluency on the relationship between complexity and aesthetic liking. Taken together, our results suggest that complexity triggers a cognitive process that positively impacts aesthetic liking, as argued by Labroo and Kim (2009), and this process takes place independently of the affective impact of fluency. This is well in line with dual process theories of information processing (e.g., Kahneman 2003; Strack and Deutsch 2004).

Overall, our findings make emphasis to include different design factors in consumer research conjointly. In order to understand how aesthetic preferences are formed in consumers, it is not sufficient to consider objective characteristics separately. We showed for objective symmetry and objective complexity positive results on aesthetic liking: complexity through a direct (cognitive) effect, symmetry through moderated mediation in enhancing the effect of ease of fluency. The found suppressor effect of fluency on complexity may explain why previous research was partially inconclusive.

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# Evaluations of Iconic versus Genuine Experiences Depend on Attitude Functions

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## EXTENDED ABSTRACT

The controversial topics of the appreciation for the non-genuine experiences (Firat, Dholakia, and Venkatesh 1995; Hall 2007; Beverland, Lindgreen, and Vink 2008; Munoz, Wood, and Solomon 2006) and more specifically, replica experiences imitating the original experiences like visiting a re-made Egyptian tomb are being more widespread worldwide but relatively little research have been performed on the side of consumer behaviorists. Defined in line with Grayson and Martinec (2004), we conceptualize non-genuine replica experiences as iconic experiences rather than counterfeit, fake, or inauthentic experiences; meaning that the replicas physically resemble the original or the genuine but lack indexical authenticity features.

Even fewer studies have investigated why consumers engage in the iconic experiences, even when the original option is available for them to experience. In this research, we employ an attitude functions perspective (Katz 1960) and through three experiments, we argue that individuals' attitude toward engaging in iconic experiences is more favorable than their attitude toward engaging in genuine experiences when the utilitarian functions of attitudes are salient. While consumption decisions stemming from value-expressive function attitudes are based on central values, beliefs and self-identity, the iconic experiences might be designed in order to serve a degree of expected utility while minimizing the costs or punishments. The utilitarian objectives of experiences vary from adrenaline rush to relaxation (Clarke 2006). Cannon and Yaprak (2001) mentioned that for a certain type of cosmopolitan tourists or consumers, it is possible to move from the search for authenticity to the search for comfort, compromising their central values. In addition, the suppliers of iconic experiences such as re-made historical caves, emphasize the multiple rewards of their experiences such as projections, information stands and enhanced lighting as well as decreased punishments such as shorter waiting times and more availability to visit as opposed to genuine caves or tombs that need to limit number of visitors and lighting arrangements (The Houston Museum of Natural Science official website- [www.hmns.org](http://www.hmns.org)).

Study 1 had a 2x2 between-subjects experimental design with the type of experience (genuine vs. iconic) and the manipulated attitude function towards sightseeing (utilitarian vs. value-expressive), holding attitude favorability towards the experience as the dependent variable. We used the real-life example of the Tutankhamun tomb and its replica and showed that individuals' attitudes toward engaging in iconic experiences would be more favorable than their attitudes toward engaging in genuine experiences when the utilitarian functions of these experiences are salient ( $M_{\text{iconic}} = 6.60, SD = .47$  vs.  $M_{\text{genuine}} = 5.26, SD = 1.40; F(1, 77) = 17.60, p < .001$ ) while there was no significant difference when the value-expressive functions were salient. Study 2 replicated the finding in a different iconic context (Lascaux caves in France and its replica in the similar location) and we also confirmed that the self-authenticity of the person as a trait is not a significant factor in explaining our findings.

We designed study 3 in order to capitalize upon our main finding and to test appropriate method of persuasion in the context of advertising or communicating the iconic experience. Even though "the matching hypothesis" (Petty and Wegener 1998) predicts increased persuasion and message scrutiny when the functional appeal of the

advertising message (image versus quality) matches the attitudinal function of the recipient (social-adjustive versus value-expressive); recently, LaBoeuf and Simmons (2010) have shown that products that give rise to utilitarian attitudes at the category level may give rise to brand attitudes that are less utilitarian and more symbolic and found support for the hypothesis that brands have to differentiate themselves from the category as much as possible in order to be favorably evaluated through an advertisement. Therefore, attitude functions associated with brands significantly differ from attitude functions associated with the product category. In real life, iconic experience brands (e.g., Thames Town tours, Emoya Shanty Village) need to distinguish themselves from the category-level attitudes (i.e., general attitudes toward tour agencies). Study 3 showed that when an advertisement emphasizes the value-expressive functions of iconic experiences, individuals' evaluations of the advertisement will be more favorable than when an advertisement emphasizes the utilitarian functions of the iconic experiences. ( $M_{\text{value-expressive}} = 4.56, SD = 1.80$  versus  $M_{\text{utilitarian}} = 3.56, SD = 1.37, F(1, 100) = 4.98, p < .04$ ) while there was no significant difference for genuine experience advertisements.

Hence, by demonstrating that individuals would have more favorable evaluations of iconic versus genuine experiences when utilitarian attitude functions are salient, this research opens a new gate to the study of iconic experiences.

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# Brand Traumas: Why Writing About Negative Brand Experiences Boosts Evaluations More Than Writing About Positive Experiences?

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## EXTENDED ABSTRACT

Consumers can develop relationships with brands that are strikingly similar to relationships with human beings (Schmitt 2012). As with humans, relationships with brand evolve over time – alternating periods of relative harmony, mutual support and satisfaction with periods of dissent, instability, and dissatisfaction. Here we focus on the concrete evolutionary moments of a brand relationship: the turning points, i.e. situations in which the relationships go through *traumas* caused in particular by frustration with the partner (a.k.a. the brand) and the consumer needs to readapt its behavior in the relationship, so as to re-establish equilibrium, harmony, and mutual satisfaction. Previous literature studied crisis (Aaker, Fournier and Brasel 2004), ruptures (Fajer and Schouten 1995) but turning points have been almost completely ignored (an exception being Russel and Schau 2013). Contrary to Russel and Schau (2013), the focus here is not on accommodation of brand loss but on the processes necessary to accommodate shocks and relational changes so that the relationship can endure (rather than be lost or terminated).

Our conceptual lever for addressing brand traumas is the expressive writing paradigm (Pennebaker and Beal 1986). Pennebaker's (1997) expressive writing constitutes a powerful therapeutic tool used in clinical psychology to help individuals overcoming trauma or tragic events. Writing about emotional experiences appears to have physiologically evident benefits (Boozin 1997). The paradigm is based on the assumption that disclosure (i.e. contemplating, and writing about) of the traumatic event is associated with improvements in physical and psychological well-being (Lepore 1997; Pennebaker 1989). In particular, emotional expression, written or verbal, facilitates cognitive processing of stressful experience since it forces individuals to confront the source of stress and their responses (Klein and Boals 2001). Fundamentally, disclosure reduces inhibition, reduced inhibition reduces stress, reduced stress leads to improved health outcomes (Boozin 1997). Conversely, not disclosing the trauma occasions causes inhibition, and inhibition could increase stress, augmented stress leads to health problems.

Given the ubiquity of opportunities for disclosure in online forums, social networks, and other relationship-building communication platforms, we thought that Pennebaker's paradigm does indeed provide a propitious and promising theoretical backdrop for investigating how consumers cope with the inevitable turning points they experience with their brands. The fundamental expectation is that writing *expressively* (i.e. emotionally and without inhibition) about the traumatic event should have a positive impact on the overall evaluation of the brand. The paper shows this effect presenting two experimental studies with a between subjects design. In the first study, the efficiency of the expressive writing paradigm is tested by instructing participants to emotionally relay their negative experiences with brands (compared to a condition where participants are not writing about these experiences). Indeed, in a scenario in which people are dissatisfied with their brands, so they are facing a negative experience with their relational partner, individuals rate the brand higher after having shared their thoughts expressively, compared to individuals that do not write about their experience. In study 2, findings from study 1 are replicated and extended in that also positive experiences with their brand are compared with traumatic experiences. In addition, the efficacy of expressive writing is compared also

against the condition of a more factual writing (here, participants were instructed to relay their negative experiences in a more detached, less emotional way). When consumers experience a positive as well as a negative turning point in their relationship with brand, writing expressively (rather than factually) boosts their overall evaluation of the brand.

Altogether, the studies show that the expressive writing paradigm, widely accepted in clinical psychology, can offer a propitious and theoretically highly consequential contribution for consumers dealing with turning points in their relationships with brands. This is especially true for consumers experiencing negative turning points. Indeed, as for tragic events in psychotherapy, a negative experience with a product or a brand can harm individuals emotionally. Thus, offering a way to deal with such negative emotions and escape from the uncomfortable situation is important for consumers especially when they are willing to invest in their relationship with the brand. Future research would do well to focus on controlling the obtained results for the amount spent for the product by the consumer, gender, frequency of occurrence and temporal distance of the relationship turning points. In addition, in order to have a clear picture of the process underlying the phenomenon, it is worth investigating whether personality traits might have an impact in shaping how individuals react to brand relationship turning points and including in the study a before measure of individuals' attitude toward the brand, so to assess exactly the improvement caused by the expressive writing paradigm.

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# The Individual Dynamics of Online Reviews

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## EXTENDED ABSTRACT

Online reviews have become ubiquitous to consumer decision making. While a lot of research has been devoted to understanding and measuring the impact of online reviews on purchase decisions (e.g. Chevalier and Mayzlin 2006), much less has been devoted to understanding the psychology of the reviewers themselves, and what factors might influence the reviews that they write. In this research, we use insights from the field of psychophysics to better understand the psychology of online reviews, and test these ideas on a unique data set of real online product reviews.

Psychophysics research has shown that, while people are fairly accurate at judging stimuli of different intensities, judgments often depend on the context in which they are made. Judgments often show contrast effects (e.g. Brown 1953; Helson and Kozaki 1968), assimilation effects (e.g. Baird, Green, and Luce 1980; Vuorinen 1973), or a mix of these two, depending on some third moderating factor (e.g. Holland and Lockhead 1968; Jesteadt, Luce, and Green 1977; Sherif, Taub, and Hovland 1958). Most relevant to the current work, various studies have shown that judgments assimilate towards the prior judgment made, but are contrasted away from the intensity of the prior stimulus judged (e.g. Jesteadt et al. 1977; Matthews and Stewart 2009; Ward 1979). This suggests that for online reviews there might be independent effects for the quality of the prior product reviewed and the prior rating assigned to that product. That is, a product may be negatively influenced by the quality of the prior product reviewed, but positively influenced by the star rating assigned to that product.

We test for these contextual effects in online reviews by using a unique data set scraped from the Apple Apps market. The data set is comprised of 11,792,353 reviews written by 6,550,167 unique reviewers for 57,475 apps. Each app in the data set has two independent sets of ratings: 1) a star rating which consists of the marketplace average of anonymously submitted numeric ratings (we use this average as a proxy for app quality) and 2) a series of reviews which consist of a text evaluation of the app, as well as of a star rating. These reviews are tied to a unique Apple ID. Therefore, a specific user's review history can be tracked and analyzed.

We examine the individual level dynamics of online reviews by testing a model first proposed by Jesteadt et al. (1977), which examines the separable effects of the prior rating from the intensity of the prior stimulus. Specifically, we test a regression model where each consumer's star rating for an app is a function of the quality of that app (the average anonymous rating for that app), the star rating that this consumer assigned to the previous app s/he reviewed, and the quality of the previous app s/he reviewed. For example, if a consumer reviews the PacMan app one day, and the Angry Birds app the next day, the model examines how this consumer's star rating of Angry Birds depends on the quality of Angry Birds (its average anonymous rating), the star rating this consumer personally assigned to Pac Man and the quality of Pac Mac (its average anonymous rating). Prior literature in psychophysics suggests that this consumer's rating of Angry Birds (after controlling for quality) should assimilate towards the prior personal rating and contrast away from the marketplace quality of Pac Man.

The results observed are consistent with this prediction. Consumers' ratings for an app are positively related to the rating of the prior app reviewed ( $\beta = .05$ ,  $p < .001$ ), while negatively related to the quality of the app previously reviewed ( $\beta = -.06$ ,  $p < .001$ ). These

findings suggest that well-documented phenomena in psychophysics occur in this much more naturalistic data set. Moreover, in a typical psychophysics study participants rate hundreds of stimuli in rapid succession and thus it is not too surprising that subsequent judgments influence each other. Online reviews, however, are often submitted days or even weeks apart, making it surprising that these ratings influence each other. Subsequent regression analyses showed that these effects are not limited to the immediately preceding review, but that these effects do fade over time, as one would expect from any kind of contextual effect.

In our final analysis, we examine whether these effects are consistent with pure scaling effects – they reflect a change in how the 5-star rating system is used, and nothing else – or whether there is evidence for representational change – a change in the actual beliefs about the app being reviewed (e.g. Lynch, Chakravarti, and Mitra 1991; Stevens 1958). We examine this by testing the regression model specified above, but for the positivity of the text evaluation of the apps instead of the star rating. Consistent with these effects being representational, how positive the text evaluation for an app is, was positively correlated with the positivity of the text evaluation of the prior app reviewed ( $\beta = .03$ ,  $p < .001$ ), while negatively related to the quality of the app previously reviewed ( $\beta = -.03$ ,  $p < .001$ ). The fact that the text review itself is also affected by context suggests that the effects are not pure response scaling effects, but rather they affect the overall evaluation of the app and, at least temporarily, change people's beliefs about the app being reviewed.

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# When Food Advertising Triggers Salivation: The Role of Positive Affectivity on Appetitive Craving and Eating Intentions

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## EXTENDED ABSTRACT

Exposure to the sight or smell of foods often activates a non-conscious increase in salivation in anticipation of the pleasure of eating (Jansen et al., 2010). Since salivation is a non-conscious and involuntary physiological response, it provides a more accurate estimate of hedonic 'wanting' than paper and pencil self-reports which may be influenced by self-presentation concerns of respondents (Berridge et al. 2010; Krishna et al. 2014). Our results indicate: (1) that salivary response varies across individuals because of differences in personality traits associated with affect intensity (Larsen et al., 1996); (2) the influence of affect intensity (AI) on salivation, appetitive craving and purchase intention is moderated by two consumption-relevant variables: a) the vividness of the advertising appeal, and b) whether people are dieters or non-dieters.

*Contribution.* This study explores for the first time the possibility that people high in positive affectivity, a sub-factor of the affect intensity personality construct (Larsen and Diener 1987), will respond to vivid food cues in advertising appeals with more salivation than their low PA counterparts. We test whether dieting status (restrained vs. unrestrained eaters) moderates the relationship between positive affectivity and responses to vivid food cues. Dependent measures are: a) salivation responses, b) appetitive craving, and c) behavioral intentions (number of desired slices to eat).

When people are exposed to a pleasure laden stimulus, high AI people engage in fantasy elaboration by imagining and visualizing consumption experiences. We contribute to the literature by testing the role of *Positive Affectivity* (PA) as a more efficient measure of the impact of affect intensity on craving, salivation and behavioral intentions. Bagozzi (1994) noted that when personality constructs are multidimensional like the AIM (Larsen and Diener 1987), the use of specific sub-dimensions of the scale may be more interpretable than the use of the total scale which is longer and more cumbersome. Positive affectivity assesses the degree to which individuals experience intense positive feelings (e.g. "When I feel happy, it is a strong type of exuberance"). This is more appropriate for identifying people who are focused on anticipating or seeking pleasurable experiences.

*Positive Affectivity and Food Craving.* Food cravings are cue-elicited expectations that are stimulated by the anticipation of the oro-sensory pleasures (e.g. sweetness, texture) to be enjoyed from food consumption (Cepeda-Benito et al. 2000). High AI people with strong positive affectivity scores are more likely to seek out pleasurable experiences such as the anticipation of food enjoyment and this sensory process encourages appetitive craving (Belk et al. 2003; Pelchat et al. 2004).

*Positive Affectivity and salivation.* Positive affectivity respondents seem more likely to experience food craving which in turn may stimulate salivation (Nederkoom & Jansen, 2002). Exposure to the sight or smell of food can stimulate higher levels of craving and salivation responses. Thus, if high PA people experience more cravings in response to vivid food stimuli, then they should also be likely to show an increase in their salivation response.

*Positive Affectivity, Dieting Status, and Salivation.* Dieters are restrained eaters who suppress the physiological urges to eat in order to avoid weight gain (Fedoroff, Polivy and Herman 2003). Chronic dieters tend to have heightened salivary responsiveness to food stimuli (Brunstrom et al. 2004). Furthermore, this physiological response

to food is often strongly correlated with the extent to which restrained eaters are emotionally connected to food (Scott et al. 2008). Since affect intensity represents the strength of the emotional response to daily situations in life, restrained eaters (dieters) with high positive affectivity will salivate more when exposed to vivid food cues. Because restrained dieters tend to use cognitive suppression to control food intake (Nederkoom and Jansen 2002), we predict that high PA dieters may actually report milder eating intentions after exposure to the more vivid advertising appeal.

## Method

*Design and Procedure.* We examined the joint effects of dieting status (dieting or not), positive affectivity, and vivid versus pallid food cues in predicting appetitive craving, salivation and behavioral intentions. The vivid version featured a full color image of a pizza slice, with delicious red and green pepper toppings, and a generous coating of golden mozzarella cheese oozing off the slice. The pallid version featured a black and white picture of the same pizza. In order to ensure that participants would be sufficiently responsive to the food ads, they were asked to refrain from eating or drinking at least two hours before coming to the lab.

All participants were first shown a control image (a local paper store) via a survey website. This was to assess individual differences in salivation without a food stimulus. Dental rolls were first weighed dry with a high-precision food scale (0.01 g gradations). They were then placed in participants' mouths for 2 minutes while viewing the image to assess salivation responses to it. Dental rolls were then weighed a second time. The salivation response was calculated as the difference between the pre and post-image dental roll weight. Appetitive craving was measured with three items ( $\alpha=.86$ ): "I have a strong desire to eat a Sorzano pizza"; "The advertisements made my mouth water for Sorzano pizza"; "The advertisements made me have strong cravings for a Sorzano pizza" (1=*Strongly Disagree*; 7=*Strongly Agree*). Eating-related behavioral intentions were assessed by asking: "How many slices would you want to eat if you could have a large Sorzano pizza right now?"

## Discussion

The data showed a significant 3-way interaction effect for Dieting/Not Dieting X Vividness of the Ad X PA (positive affectivity). For Dieters, the salivation response to vivid advertising cues is strongest for those scoring high in Positive Affectivity. For Non-Dieters who were exposed to pallid food images, levels of positive affectivity were not related to the number of desired slices. Yet, when Non-Dieters were exposed to vivid food images, those high in PA wanted to eat more pizza slices. In contrast, although dieters salivate more in response to vivid food cues, especially if they are high in PA, they self-report being unaffected by these cues. This points to the value of using physiological assessments like salivation to gain more accurate data in situations where respondents are likely to protect their true feelings. Nevertheless, this is the first study to demonstrate a direct link between individual differences in personality traits and salivation responses.

Future research is needed to clarify the conditions under which high PA restrained eaters suppress their appetitive urges in light of recent neuroscience research indicating that when sensory pleasure

for food is stimulated by exposure to food stimuli, this process can activate within the human brain a very powerful “go” system that can lead to excessive eating bouts that may be difficult to ‘turn off’ (Berridge et al. 2010). The unanswered question is: If exposure to appetizing food can trigger increased salivation which may lead to overeating, how can marketing and public policy strategists determine the profile of these consumers in terms of their personality traits and demographic characteristics?

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# A Change Will Do You Good: Beneficial Effects of Task Difficulty Switching (TDS) on Recall

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## EXTENDED ABSTRACT

Change, it is often said, can do you good. Whether it is the inspiration that comes to an artist after a change of scenery, the emotions evoked from the changing dynamics of a powerful song, or the thrills that come with the changing twists and turns of a rollercoaster, breaking from a monotonous mold certainly has its benefits in a variety of contexts.

In spite of the benefits change often brings in a variety of contexts, media strategy often encourages consistency between marketing executions and the media in which they are placed. A comedic advertisement, for example, is likely best placed during a funny sitcom while a serious or dramatic advertisement seems to fit when placed during a dramatic show. While it may not seem wise to vary the tone of an advertisement and its medium, it seems possible that subtler features of an ad or its medium could integrate change to obtain potentially positive outcomes, such as greater recall of message content.

In the current paper, we propose and demonstrate a novel advertising strategy – a process we label Task Difficulty Switching (TDS) – that relies on subtle changes in the cognitive complexity of advertisement content and the context in which those ads are placed to improve consumer recall of advertising information.

In study 1, we focus on the foundational hypothesis for the present research: that TDS (vs. non-TDS) will increase the amount of information recalled from advertisements. We simultaneously examine the differential consequences of task switching and TDS. The design for study 1 was a 2 (Task difficulty: easy or difficult) x 2 (Advertisement: easy or difficult) between subjects design. The first task in the alternating sequence was either a difficult or easy math question taken from a standardized test. An easy or difficult advertisement followed the math question. We used print advertisements and manipulated difficulty by varying the typeface used in the ad (Song and Schwarz 2008). All other information (i.e., layout, visual images) was held constant. Participants ( $N=100$ ) proceeded through three sets of alternating math questions and advertisements. After a five-minute distractor task, participants rated their attitudes toward the advertisements and listed any information they recalled from the advertisements. An ANOVA conducted with attitudes toward the advertisements revealed no significant main effects or interactions. However, an ANOVA with recall as the dependent variable revealed the hypothesized two-way interaction between the factors ( $F(1, 96) = 8.18, p < .005$ ). As hypothesized, participants in the TDS conditions recalled significantly more information than those in the non-TDS conditions ( $M_{TDS} = 4.96, M_{Non-TDS} = 3.41$ ), an increase of nearly 45%.

Study 2 was designed to replicate our prior findings in an externally valid context. Thus, instead of oscillating between math questions and advertisements, participants ( $N = 129$ ) oscillated between written articles and advertisements. The articles were manipulated to be easy or difficult by changing figure-ground contrast. The advertisements used in study 2 were the same as those used in study 1. The remaining procedure and measures were identical as those in study 1. A 2 x 2 ANOVA conducted with recall as the dependent variable and article and advertisement difficulty as the independent variables revealed no significant main effects of advertisement or article; however, the hypothesized interaction between the two factors was significant ( $F(1, 125) = 6.22, p < .05$ ). As in study 1, when

participants read the easy articles, recall was higher for the difficult advertisement than the easy advertisement ( $M_{Easy} = 4.97, M_{Hard} = 6.31$ ) by nearly 27%. In contrast, when participants read the difficult articles, recall was higher for the easy advertisement than the difficult advertisement ( $M_{Easy} = 5.68, M_{Hard} = 4.72$ ), a difference of 20%.

The purpose of study 3 was to replicate the previous findings and to obtain support for our hypothesized process, specifically that attentional resources mediate the impact of TDS on recall. Forty-nine undergraduates viewed the three advertisements from the prior studies varying in their cognitive complexity depending on condition. We captured recall of the advertisement as before and also captured how much attention was paid to the target advertisement (the last advertisement viewed). This was collected through three measures (the amount of attention, time, and focus devoted to the advertisements). A 2 x 2 ANOVA revealed no main effects but did reveal the predicted interaction ( $F(1, 125) = 6.22, p < .05$ ). When participants read the easy articles, recall was higher for the difficult advertisement than the easy advertisement ( $M_{Easy} = 4.97, M_{Hard} = 6.31$ ) by nearly 27%. In contrast, when participants read the difficult articles, recall was higher for the easy advertisement than the difficult advertisement ( $M_{Easy} = 5.68, M_{Hard} = 4.72$ ), a difference of 20%. The impact of TDS on recall was significant, as was the impact of TDS on attention. Most importantly, a mediation analysis revealed a significant indirect effect of TDS on recall through attention (Hayes 2012), demonstrating support for our proposed underlying process.

The purpose of study 4 was to replicate the prior studies regarding the effects of cognitive flexibility with a more simplified manipulation than oscillating difficulty within a series of tasks: cognitive load. We employed a 2 (cognitive load: high or low) x 2 (advertisements: easy or difficult) between subjects design. We conducted a 2 x 2 ANOVA with cognitive load and advertisement difficulty as the independent variables and total recall as the dependent variable. As in the prior studies, neither of the main effects are significant; however, we do again get the hypothesized interaction ( $F(1, 119) = 4.95, p < .05$ ). An analysis of the means (see Figure 4) shows that participants in the TDS conditions recalled significantly more information than those in the non-TDS conditions ( $M_{TDS} = 4.84, M_{Non-TDS} = 3.87$ ). In fact, participants in the TDS conditions recalled nearly 25% more information.

Together four studies demonstrate support for the proposed TDS phenomenon: simply switching the cognitive complexity of the same task can enhance recall.

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# Saying Yes to the Dress but No to the Glow: When Consumers Resist Arrogant Brands

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## EXTENDED ABSTRACT

One approach that marketers use to enhance brand image is the communication of *arrogance*—an exaggerated sense of superiority, which is often accomplished by disparaging others (Brown 2012; Johnson et al. 2010). Examples of this practice include Mercedes's slogan "The best or nothing", as well as brands with "arrogant" names such as Arrogant Cat. The aspiration to cultivate an arrogant brand image might be motivated by the positive connotations of arrogance, such as high status (e.g., Shariff and Tracy 2009). Arrogance, however, also has negative connotations, such as aggression and narcissism (e.g., Tracy and Robins 2007). Thus, we propose that in some cases brand arrogance may backfire, leading consumers to "say no to the glow": to resist pursuing an arrogant brand, even when they perceive that brand as of high quality.

We investigate the reasons for, and consequences of, such resistance of arrogant brands. Specifically, we identify diminished self-concept as a factor that may encourage consumers to resist arrogant brands. We suggest that an arrogant brand, which conveys superiority, threatens consumers' self-concept. Consequently, vulnerable consumers, who a priori experience feelings of low self-esteem, weakness, and powerlessness, are likely to react against the arrogant brand (i.e., resist it), because the arrogance might magnify their negative feelings. We further suggest that arrogant brand resistance has an important and counterintuitive impact on consumers' well-being: by "saying no" to arrogant brands, consumers may repair their self-concept, because such an act can be seen as an expression of self-determination and free will (e.g., Ryan et al. 1991). Five studies provide support for our hypotheses.

In study 1, we induced participants ( $n=60$ ) to have either diminished or undiminished self-concept, and then asked them to evaluate an arrogant clothing brand and choose between that brand and a competing neutral-image brand (we provided no information about the latter brand's image). Results demonstrate the dual nature of arrogant brands: Participants assigned high value (i.e., quality and status) to the arrogant brand ( $M=5.44$ ; significantly higher than the scale's midpoint,  $t(59)=10.49$ ,  $p<.001$ ) but did not like it ( $M=3.57$ ; significantly lower than the scale's midpoint;  $t(59)=1.79$ ,  $p=.08$ ). The results also confirmed that participants with diminished (vs. undiminished) self-concept were less likely to choose the arrogant brand (37% vs. 64%,  $\chi^2(1)=4.20$ ,  $p<.05$ ).

Study 2 confirms that the effect observed in study 1 can be attributed to brand arrogance rather than to other brand features. We induced participants ( $n=96$ ) to have either diminished or undiminished self-concept, and then asked them to choose between a fictitious smartphone brand, which we manipulated to be either arrogant or non-arrogant, and an alternative neutral-image brand. As expected, we found an interaction effect on brand choice ( $\chi^2(1)=2.85$ ,  $p=.09$ ): Participants with diminished self-concept were less likely to choose the focal brand when it was arrogant (37.5%) than when it was not arrogant (84.4%,  $\chi^2(1)=9.58$ ,  $p<.01$ ). In contrast, arrogance level did not affect choices of participants with undiminished self-concept ( $p>.4$ ).

If consumers resist arrogant brands in order to repair their self-concept, then those whose self-concept has been previously restored by other means should be less likely to resist arrogant brands. To test this hypothesis, in study 3, we first induced all participants ( $n=45$ ) to have diminished self-concept, and then manipulated the degree to

which they restored their self-concept through changing their relative height perceptions (Duguid and Goncalo 2012). Participants then chose between a fictitious arrogant watch brand and a competing neutral-image brand. As predicted, tallness perceptions (i.e., restored self-concept) suppressed participants' resistance to the arrogant brand; participants who felt relatively tall chose the arrogant option at a higher rate than participants who felt relatively short (73% vs. 39%;  $\chi^2(1)=5.14$ ,  $p<.05$ ).

Study 4 investigated whether arrogant-brand resistance assists consumers in reestablishing their self-concept. We randomly assigned participants ( $n=151$ ) to one of two conditions. These conditions determined the order in which each participant completed the following two tasks: reporting one's self-esteem (Heatherton and Polivy 1991), and making a selection between a fictitious arrogant sunglasses brand and a competing neutral-image brand. As expected, among participants who resisted the arrogant brand, self-esteem reported after making the choice was significantly higher than self-esteem reported before making the choice (5.90 vs. 5.08,  $t(54)=3.01$ ,  $p<.01$ ). In contrast, among participants who chose the arrogant brand, there was not a significant difference ( $p>.9$ ).

Finally, in study 5 we focused on a real brand, and investigated whether reactions that express self-determination and free will but that do not relate to actual brand selection—specifically, having the option to state whether one likes or dislikes that brand—can repair self-concept. We randomly assigned participants ( $n=76$ ) to one of two conditions: in one condition participants had the option to express their opinions about an arrogant brand; and in the other condition participants did not have that option. Participants watched a video that described the positioning of a known fashion brand, which had been criticized for being arrogant. After watching, half of the participants were asked to mark whether they "like" or "dislike" the brand, and the other half were not. Then, to measure self-concept, we asked participants to mark the rung on a ladder that best matched their self-perception at that moment (1 to 7). As expected, participants who could express their opinion positioned themselves higher on the ladder than did those who could not express their opinion (5.59 vs. 5.00,  $t(74)=2.57$ ,  $p<.05$ ).

In sum, our findings provide strong support for our conceptualization and the assumptions on which it is based.

From a practical perspective, our findings may suggest that marketers should exercise caution when considering the adoption of an arrogant image for their brands. Our findings may also have important implications for consumers, by making them more aware of the influences that a brand's image and communications may exert on their feelings, decisions and behavior. By suggesting that the act of "saying no" to an arrogant brand helps consumers feel better about themselves, our research can potentially contribute to consumers' wellbeing.

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# Instrumentality and Emotional Attachment: A Study of Nomadic Consumers' Relationships With Their Possessions

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## EXTENDED ABSTRACT

The importance of material possessions in shaping individual identity projects and meanings of self has been described as “a consumer research staple for over 25 years” (Bardhi, Eckhardt, and Arnould 2012, 510). Material possessions have been considered as objects capable of extending the self (Belk 1988). A rich body of consumer behavior literature exists in which possessions serve as a mechanism to bolster one’s self-view (Gao, Wheeler, and Shiv 2009) and as a vehicle for identity creation (Thomsen and Sorensen 2006). This literature highlights the importance of possessions in people’s lives and the deep meaning that individuals derive from them. This is also reflected in an associated stream of literature dealing with the importance of possessions in the process of migration (Joy and Dholakia 1991; Mehta and Belk 1991).

However, in contrast to migration which principally involves a single long-term movement, Bardhi et al. (2012) have cited the lack of research in consumer behavior specific to consumption activities shaped by nomadic movement. Salzman (2002) has characterized nomadism as referring to “moving from place to place” (245). Bardhi et al. (2012) have offered a different perspective for consumers they characterize as elite nomads in terms of their attachment to material possessions. For consumers with high paying jobs and “frequent short-term international mobility” (510), Bardhi et al. (2012) find that such consumers form temporary associations with possessions that are situational in nature. Utility and immateriality are the driving forces in these associations. The view point on offer is that nomadic consumers are reluctant to form attachments to their material possessions.

In this paper, we investigate this apparent gap. Using a naturalistic mode of inquiry, we look at two associated research questions in this regard.

1. How do nomadic consumers classify material possessions?
2. How do nomadic consumers form relationships with material possessions?

We selected the sample of participants for the study from the community of married doctoral students at a business management institute in Ahmedabad, India. To ensure variation across the different categories that emerged during the study, the participants were approached personally by the first author. Based on the tenet of interpretive sufficiency, a total of 18 couples were finally chosen and interviewed for the study.

The primary data collection devices were depth interviews of the participants, observation and still photographs taken of the participants’ possessions. 281 single spaced pages of transcribed interviews were generated from the data collection process. Approximately 350 verbatim extracts were chosen from interview transcripts and coded into emerging categories. In line with the idea of constant comparison (Glaser and Strauss 1967), the collection of data and its analysis was done as a simultaneous activity.

Based on the evidence from the study, we conceptualize nomadism as a state of mind. The expectation of future movement is a significant factor in defining nomadic behavior of consumers. We find that contemporary nomads have a complex relationship with their material possessions. In contrast to the findings of Bardhi et al. (2012), we find a stable classification of material possessions in nomadic consumers’ minds. The classification combines elements of deep emotional at-

tachment and instrumentality. The relationship that a nomadic consumer has with a particular possession is dictated by its classification.

We find that consumers tend to classify material possessions into 4 different categories, namely (1) cardinal, (2) expendable, (3) boxed valuables, and (4) boxed buffer. In our conceptualization, possessions considered to be cardinal and expendable have been grouped under a broader category of ‘possessions in custody’. This represents the possessions that consumers live with. They are located in the participants’ current homes and represent the possessions that participants’ interact with on a continuous basis. Boxed valuables and boxed buffer have been included in the broader category of ‘stashed possessions’. These are located outside the participants’ immediate homes and participants enjoy limited accessibility to them. However, their importance in the participants’ psyche is high. Further, we find that there is an element of porosity between the two broader categories. Favorite possessions span across cardinal possessions and boxed valuables.

In summary, through this study, we offer the following theoretical contributions – (1) A deeper theoretical understanding of consumers’ relationships with their material possessions in the context of nomadism, a hitherto under-researched area of consumer behavior literature (2) A linking study that brings together two disparate streams of literature – consumer relationships with material possessions as deeply emotional and nomadic consumer relationships with material possessions as purely situational and detached (3) Inclusion of the nomadic state of mind and expectation of future movement as important theoretical themes in understanding nomadic behavior of consumers better.

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# Less is Core: Consumer Debt Repayment and the Budget Constraint Paradox

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## EXTENDED ABSTRACT

How does financial constraint affect debt repayment behavior? Do tighter budgets lead to greater difficulty in paying off debt, or do they increase self-monitoring and self-regulatory effort? Well-known personal finance experts such as Suze Orman and Dave Ramsey instruct debtors to cut up their credit cards, but does restricting resources actually improve the likelihood of debt repayment? When consumers who have credit card debt budget their income, they face a tradeoff between the immediate reward of spending versus the delayed reward of paying off debt. Continuing to borrow allows consumers to prioritize immediate rewards over delayed rewards. We propose that cutting up credit cards or closing credit card accounts leads to improved focus on the goal of debt repayment and that this effect is greater for consumers under higher levels of financial constraint (or with less unbudgeted “discretionary” income).

Our research was conducted with the cooperation of a non-profit consumer credit counseling service (CCCS) based in California. More than 2 million Americans receive financial counseling from a non-profit credit counseling organization each year, with 700,000 currently enrolled in a debt management program (DMP) (Cunningham 2013). Despite the widespread use of DMPs, research on their effectiveness is scarce. A debt management program is typically a five-year program, during which program members make monthly debt payments to the CCCS, which then pays off the creditors. Members receive credit counseling and several sessions of financial education upon beginning the program and then normally have little contact with the counselors other than making payments. While all DMP members lose access to credit, they enter the program with varying levels of debt, income, and expenses and thus have varied levels of discretionary income left over after their mortgage payment, bills and other necessities are covered. Participants are admitted to the program only if they are judged to require more help than just budgeting current resources better and additionally, if they and their counselors believe they have sufficient resources to make payments in a DMP.

With cooperation from the CCCS, we conducted a survey with a subset of their DMP clients. One hundred respondents received an email with a questionnaire link once each week for 12 weeks. Questions each week included items about temptations encountered, responses to temptation, and if they met their financial goals for the week. In addition to the questionnaire, we obtained client-level data on initial budgets and program outcomes. In particular, we have access to data from all 10,755 clients who enrolled in the DMP between 2000 and 2013. For each of these clients, we know the date of enrollment, their initial debt balance, and the date and reason for program exit, if observed. Successfully completing the DMP consists of continuing to make monthly payments until all debts are eliminated. Of the 10,755 observations, 20.5% (2,213) of the clients successfully completed the program, taking an average of 42.8 months. It should be noted that some clients leave and choose to make debt payments on their own, whereby any eventual success or failure to eliminate their debt is not observed in our data.

In addition to the data on program performance, we also have data on the monthly budgets that clients constructed with their credit counselors during their intake session, as well as demographic infor-

mation. After controlling for debt balance, household income, and expenses, we can compare how the level of discretionary income available to the DMP member—which represents the extent to which they are under financial constraint after losing access to credit—affects their persistence in the program.

Using a unique longitudinal dataset consisting of a sample of clients of a non-profit debt management program (DMP), we find that 1) tighter budgets are predictive of meeting short-term financial goals ( $\beta = .017$ ,  $p < .05$ ) and 2) tighter budgets lead to an increased likelihood of successfully completing the multi-year DMP and meeting the long-term goal of repaying debt ( $\beta = -5.19e-05$ ,  $p < .01$ ). These findings suggest that, paradoxically, consumers with less “discretionary” money are more likely to repay their debts.

In addition to the timely contribution to the understanding of debt repayment behavior, this research makes several theoretical contributions. First, although studies have demonstrated that financial constraints are associated with increased self-control (Werthenbroch, Soman, and Nunes 2001) as well as increased money management practices (Karlsson 2004), this research is the first to show that imposed financial constraints can increase debt repayment behavior. Second, previous research has focused mainly on improving the budgeting practices of “normal” consumers by increasing the accessibility of the consumption-avoidance goal (Krishnamurthy and Prokopec 2010) or creating partitions between accounts (Cheema and Soman 2008). In focusing on indebted consumers, we extend experimental research showing that payment mechanisms and credit limits can affect spending control (Soman 2001; Soman and Cheema 2002) by demonstrating that this effect is greater when budgets are tighter. Third, extant studies on goal precommitments have primarily focused on self-imposed precommitments, such as setting aside money for a vacation (Kivetz and Simonson 2002). We contribute to this literature by exploring a precommitment that is externally imposed. Although participants choose to enroll in a DMP, they often do so because of calls from creditors and difficulty paying monthly bills. Fourth, credit scoring models generally assume that consumers with greater capacity (i.e., repaying ability) represent a lower lending risk (Thomas 2000). We show, however, that consumers who are in enough financial difficulty to seek help from a DMP and who appear to have greater capacity to repay their debts can actually be riskier debtors with a higher likelihood of default. Finally, we examine financial constraint in the context of a compliance-dependent service (CDS) (Dellande, Gilly, and Graham 2004), as our data are from clients enrolled in a long-term debt repayment program. This is the first study to examine an extrinsic source of motivation (Nyer and Dellande, 2010) in completing a CDS.

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# Emotional Pasts and Rational Futures: Perceiving Change Over Time and Implications for Here-and-Now Thinking

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## EXTENDED ABSTRACT

People regularly ascribe mental capacities to friends, pets, and spirits despite the fact that mental states beyond one's own immediate experience cannot be seen or felt in any tangible sense. Others' intentions, thoughts, and feelings are necessarily *perceived*, and people's penchant for perceiving other minds is one of nature's finest and most frequently utilized gifts (Epley, Akalis, Waytz, & Cacioppo, 2008; Gray, Young, & Waytz, 2012). Less well understood, however, is how people perceive *their own* mental states beyond the here and now, namely, in the past and future. To the extent that mental representations of past and future selves bear resemblance to other people (Pronin & Ross, 2006), processes underlying mental inference across space (e.g., from *me to you*) might extend across time and tense (e.g., *me 10 years ago to me now to me in 10 years*).

Building on a two-dimensional model of mind perception (Gray, Gray, & Wegner, 2007) that distinguishes between "experience" (e.g., emotional capacity, body sensitivity) versus "agency" (e.g., cognition, rationality), six experiments reveal that people indeed ascribe mental capacities to past and future selves but redistribute these capacities over time, demonstrating a robust temporal asymmetry in perceiving one's own mental states. How much emotional experience and rational agency people see in themselves depends on whether they are looking back to the past or ahead to the future.

## Perceiving Other Minds

"Mind perception" might generally be defined as the psychological process of attributing, inferring, and interpreting others' internal states that otherwise cannot be observed or accessed directly with one's own senses, such as others' thoughts, feelings, intentions, goals, desires, and consciousness (Baron-Cohen, 1994; Morewedge, Preston, & Wegner, 2007). Despite difficulty in establishing proof that such states objectively exist, people's tendency to perceive minds in the world is nonetheless well-documented across psychology, consumer research, and cognitive sciences (Galinsky & Moskowitz, 2000; Gray et al., 2007; Hassin, Aarts, & Ferguson, 2005; see Epley & Waytz, 2009).

Recent empirical work suggests people perceive other minds not along a single dimension but along two: what might best be labeled as a dimension of agency and a dimension of experience (Gray et al., 2007). *Agency* is associated with rational thought and refers to people's tendency to ascribe cognitive skills to others, such as their abilities to exert self-control, make plans, and act morally. *Experience* is linked with emotionality and refers to people's tendency to ascribe affective sensitivities to others, like capacities to feel pain and joy. Some targets are attributed high agency and low experience (e.g., gods), others high experience and low agency (e.g., pets), and still others high agency and high experience (e.g., adult humans) or low scores on both dimensions (e.g., cadavers).

## Minds in Time

Until this point, mind perception has been discussed in terms of people's tendency to attribute rationality and emotionality to *other* people, objects, and entities. However, because the assumed process is generally rooted in how people come to understand the world beyond the immediate senses, it seems reasonable to examine how people might perceive *their own* minds over time. Indeed, present moments are strikingly brief. As Kahneman and Riis (2005) poignantly

note, "The experiencing self that lives each of these moments barely has time to exist" (p. 285). Thus, like the internal states of others, our own lives before and after that vanishing window of experience lack any tangible qualities and thus are necessarily perceived and inferred (Robinson & Clore, 2002).

How might people perceive the minds of their past and future selves? There are a number of possible reasons to predict an asymmetric split between "past = emotional" and "future = rational." First, people tend to believe that life moves towards something, that they learn and grow wiser over the course of their lives (Heckhausen & Krueger, 1993; Markus & Ruvalo, 1989; McAdams, 2006; Sedikides & Hepper, 2009; Wilson & Ross, 2001). In line with this view, people may desire to view their time as progressing along a positive and rational route, even at the cost of judgment accuracy (Aspinwall, 2006; Burger, 1985; Seligman et al., 2012). If one's future seems brighter than the past—and given the pervasive belief that rationality is superior to emotionality (e.g., see Haidt, 2001)—people may perceive changes in rationality and emotionality accordingly.

Second, this asymmetry may also be rooted in basic accessibility, namely the focalistic tendency for people to attend to select bits of whatever information comes to mind (see Robinson & Clore, 2002; Schwarz, Kahneman, & Xu, 2009). To this point, we simply know more about the *pasts* than other points (Albert, 2000; Horwich, 1987), and so it is easier to remember than forecast events that are affectively-mixed (Newby-Clark & Ross, 2003), idiosyncratic (Kane, 2009), detailed (D'Argembeau & Van der Linden, 2004), and constrained by reality (Van Boven, Kane, & McGraw, 2009); after all, an actual variety of past experiences is easily accessible. In contrast, our tomorrows have yet to occur, and people tend to paint personal futures that are decontextualized (Wilson & Gilbert, 2003), prototypic (Kane, Van Boven, & McGraw, 2012), controllable (Johnson & Sherman, 1990), and immune to outside influences (Kahneman & Lovallo, 1993). Thus, if people simply *can* recall the inevitable times when plans went awry and they were caught by emotional forces—but *fail* to predict the impact of these "hot" emotional states in the future—the hypothesized asymmetry in mind perception should be observed.

## The Present Research

Six studies tested a "temporal redistribution" hypothesis in the mind perception of self: the possibility that past selves are ascribed strong emotional experience but weak rational agency, whereas people's ascriptions of emotions and rationality are reversed when they think about equidistant points in the future (see Table). Experiments 1a-1c sought to establish these patterns by explicitly assessing how people perceive their past and future selves across a wide range of measures and parameters. In turn, Experiment 2 tested whether these results generalize to any type of past/future thinking (e.g., imagining how a friend might change over time), or if they are specific to the self. The final studies went beyond direct ratings to explore downstream consequences of this asymmetry for how people actually think (Experiment 3) and behave (Experiment 4) in the present.

Collectively, these studies highlight theoretical as well as practical insights into a number of psychological domains. Theoretically, they represent the first exploration of how the interpersonal agency/experience framework might extend to intrapersonal processes, mapping out the mind perception of past and future selves. In doing

so, they not only integrate many findings on intertemporal thinking (e.g., error versus accuracy in retrospection and propection; identity over time; goal pursuit), but also suggest novel implications for how people's concepts of past and future selves influence their emotional and cognitive experiences in real time—particularly for consumption-related processes. Inducing people to feel connected to the past, for example, may lead them to prefer emotional products and better enjoy emotional experiences. In contrast, feeling connected to the future may facilitate agency-related choices and goals (e.g., exerting self-control).

### Experiment 1: The Mind Perception of Self

In Experiment 1, participants rated the person they used to be or the person they might become. A wide variety of methods were used across 3 independent studies, in order to best test for converging patterns in how people perceive past and future states.

**Experiment 1a, open-ended.** In a free-writing session, 38 participants were asked to write about what traits, characteristics, and tendencies come to mind when they think about their “past self” and “future self.” We then stripped away all demographic and temporal details, and gave the essays to 52 new participants who served as “raters”. Raters indicated how emotional and rational the person seems, from 1-7. Emotional was defined as: “This person has a big capacity for pleasure/pain, and has strong feelings”. Rational was defined as: “This person has a big capacity for thought/planning, and has strong self-control”. As predicted, descriptions of past selves seemed like they depicted much more emotional people ( $M = 5.05$ ,  $SD = 1.67$ ) than descriptions of future selves ( $M = 4.12$ ,  $SD = 1.64$ ),  $t(414) = 5.73$ ,  $p < .001$ ,  $d = .56$ . In contrast, descriptions of future selves seemed like they depicted much more rational people ( $M = 5.30$ ,  $SD = 1.42$ ) than descriptions of past selves ( $M = 3.29$ ,  $SD = 1.56$ ),  $t(414) = -13.74$ ,  $p < .001$ ,  $d = 1.35$ .

**Experiment 1b, distant selves:** Eighty participants were randomly assigned to think about themselves “10 years ago” or “10 years from now”. They rated their other selves on 6 experience domains (e.g., capacities to feel joy) and 6 agency domains (e.g., capacities for self-control). Items were taken from Gray et al. (2012) and were rated from 1 (*less than now*) to 5 (*more than now*). Next, participants rated how far their past/future felt, how difficult it was to generate past/future images, and how much they liked their past/future, from 1-7. These items helped control for differences beyond agency and experience. We found the expected interaction between condition and agency/experience,  $F(1, 78) = 55.40$ ,  $p < .001$ ,  $\eta^2 = .42$ : past selves were attributed more experience ( $M = 3.29$ ,  $SD = .46$ ) than future selves ( $M = 2.92$ ,  $SD = .35$ ),  $p < .001$ , whereas future selves were attributed more agency ( $M = 3.69$ ,  $SD = .41$ ) than past selves ( $M = 2.68$ ,  $SD = .92$ ),  $p < .001$ . Moreover, all effects remain when entering the covariate items ( $ps < .05$ ).

**Experiment 1c, proximate selves:** Eighty participants were randomly assigned to think about themselves “1 year ago” or “1 year from now”. Procedures were similar to Study 1b, except we implemented different dependent measures. First, participants read 6 experience scenarios and 6 agency scenarios and estimated how intensely their other self would react (e.g., “You get stung by a bee and feel pain. How much pain would your past self have felt?”) from 1-7. Second, they assessed their other selves on 10 global measures of the dimensions (e.g., “In general, how emotional [rational] was your past self?”), also from 1-7. All results supported the hypothesis. For scenario items, participants perceived past selves as exhibiting much more experience ( $M = 4.96$ ,  $SD = .91$ ) than future selves ( $M = 4.44$ ,  $SD = .96$ ),  $t(76) = 2.39$ ,  $p = .019$ ,  $d = .56$ , but future selves as exhibiting much more agency ( $M = 5.43$ ,  $SD = .84$ ) than past selves ( $M = 4.83$ ,  $SD = .89$ ),  $t(76) = -3.08$ ,  $p = .003$ ,  $d = .69$ . The same re-

sults were observed for global ratings: past selves were seen as much more emotional ( $M = 4.81$ ,  $SD = 1.00$ ) than future selves ( $M = 4.21$ ,  $SD = .91$ ),  $t(76) = 2.73$ ,  $p = .008$ ,  $d = .63$ , whereas future selves were seen as much more rational ( $M = 5.58$ ,  $SD = .86$ ) than past selves ( $M = 4.78$ ,  $SD = .90$ ),  $t(76) = -3.96$ ,  $p < .001$ ,  $d = .91$ .

### Experiment 2: Past and Future Friends

The first three studies established the general effect. The next study examined whether these patterns reflect a more general past/future difference, or if they are indeed specific to the self. If the asymmetry is driven by some phenomenological difference between thinking about the past versus future, people should rate others in the same way. For example, people should also rate a *friend's* future as agentic and past as emotional. Conversely, if the patterns reflect beliefs about one's own development over time (e.g., motivated perceptions of progress), the patterns should only be observed for the self.

To test this idea, two hundred and two participants compared “[themselves] one year ago” to “[themselves] one year from now”, or to type the initials of a good friend and compare “[this friend] one year ago” to “[this friend] one year from now”. Then, they rated the target's change in “emotionality” and “rationality” across the given period. The terms were defined similarly to Experiment 1a. Participants chose whether the target's emotions and rationality will *increase*, *decrease*, or *stay the same*. Results supported the hypothesis (see Figure). In terms of emotionality, we found the predicted effect of target,  $\beta = 1.32$ ,  $p < .001$ , Wald = 16.22. Most people thought *their own* emotions will decrease (45.1%)—far more than the percentage of people who thought their emotionality will increase (27.5%) or stay the same (27.5%),  $\beta = -.50$ ,  $p = .038$ , Wald = 4.29 for each. In contrast, most people thought *their friend's* emotionality will stay the same (60.0%)—far more than the percentage of people who thought their friend's emotionality will decrease (18.0%:  $\beta = -1.20$ ,  $p < .001$ , Wald = 20.07) or increase (22.0%:  $\beta = -1.00$ ,  $p < .001$ , Wald = 16.20). Accordingly, the opposite patterns emerged for rationality,  $\beta = 1.15$ ,  $p < .001$ , Wald = 15.28. Most people thought *their own* rationality will increase (59.8%)—far more than the percentage of people who thought their rationality will decrease (9.8%:  $\beta = -1.81$ ,  $p < .001$ , Wald = 28.09) or stay the same (30.4%:  $\beta = -.068$ ,  $p = .002$ , Wald = 9.42). In contrast, most people thought *their friend's* rationality will stay the same (54.0%)—far more than the percentage of people who thought their friend's rationality will increase (32.0%:  $\beta = -0.52$ ,  $p = .019$ , Wald = 5.50) or decrease (14.0%:  $B = -1.35$ ,  $p < .001$ , Wald = 20.26). Hence, the asymmetry occurs only when thinking about the self, and cannot merely reflect some incidental difference between past and future thinking.

### Experiment 3: Explaining Away Bad Behavior

The final two studies explored downstream consequences. If past selves have more experience and future selves have more agency, people may be more likely to “explain away” bad behaviors from the past than similar ones from the future if they perceive past selves as possessing weak agency in bringing them about. Experiment 3 tested this possibility. Sixty-eight people imagined a bad behavior that they either had committed during the previous year, or that they could commit during the upcoming year. They rated their agreement with the following 6 statements on a sliding scale from 0 (*disagree completely*) to 100 (*agree completely*), comprising a “Responsibility Index”: how much this behavior is *excusable* and *understandable*, and how *bad*, *guilty*, *regretful*, and *shameful* it makes them feel. They also rated how detailed the generated behavior was (from 1-7) to control for differences beyond responsibility. Finally, they rated past

and future mental capacities in a similar way to Experiment 1, serving as our mediator.

As predicted, participants claimed less responsibility for past bad behavior ( $M = 63.28$ ,  $SD = 15.89$ ) than future bad behavior ( $M = 73.01$ ,  $SD = 19.24$ ),  $t(66) = -2.28$ ,  $p = .026$ ,  $d = .55$ . This effect remained when covarying detail ( $p < .05$ ). Moreover, the effect of the past/future variable on perceived mind ( $\beta = .44$ ,  $p < .001$ ) fully mediated the effect of how much responsibility people claimed for their bad behavior (reduced from  $\beta = .27$ ,  $p = .026$ , to  $\beta = .16$ ,  $p = .23$ , 95% bootstrap CI = .41 to 10.42). The effect of perceived mind on responsibility remained ( $\beta = .26$ ,  $p = .048$ ), controlling for condition. Hence, differences in claiming responsibility are driven by the assumed mental capacities linked with the type of “self” who is thought to commit them, in line with our hypothesis.

#### Experiment 4: Implications for Real-Time Choice

The final study went beyond judgments to explore how the asymmetry can impact consumer choice in the present. Inducing people to feel close to the past may lead them to prefer feeling-related content, whereas feeling close to the futures may facilitate thinking-related preferences. Experiment 4 tested this idea. In doing so, it sought to use temporal redistribution as a novel framework for understanding differences in actual choice.

One hundred and ninety participants completed a study about role playing. They were randomly assigned to *past*, *future*, and *present* conditions. Past participants thought about type of person they were one year ago, and future participants thought about the type of person they may be in one year. They were asked to “role play” as this past or future self and perform subsequent tasks as this other self (an established method used in prior work on time, e.g. O’Brien, 2014; Pronin & Ross, 2006). For the role-playing task, participants were shown a list of “feeling-related” movies and “thinking-related” movies, adapted from Williams and LeBoeuf (2013), and they chose which type of movie they would prefer seeing. A “present” control condition simply answered this question as their normal current selves. Afterwards, past and future participants rated how difficult it was to role play and how far away their other self feels, from 1-7. These items helped control for differences caused by the manipulation beyond agency and experience.

In terms of the “present” group, participants generally preferred “feeling” movies to “thinking” movies (68.85%). However, as predicted, connecting to one’s future self diminished this preference (46.88%), whereas connecting to one’s past self enhanced it (83.08%),  $\beta = -.86$ ,  $p < .001$ , Wald = 17.66. Put another way, connecting to one’s future self led participants to choose “thinking” movies more often than they typically would, whereas connecting to one’s past self led to a stronger preference for “feeling” movies. These effects remained when entering the covariate items ( $p < .001$ ).

### General Discussion

People spend many moments mentally travelling through time, journeying beyond immediate experience to retrace what once was and to entertain what might be (Gilbert & Wilson, 2007; Trope & Liberman, 2003; Tulving, 2002). Six experiments revealed that the type of person awaiting our arrival depends on which direction we have embarked. When thinking about the pasts, people see someone who is more emotional and less rational than today. But when thinking about an equidistant future, people see someone who has stronger rationality and weaker emotionality. This temporal asymmetry appears to reflect a redistribution of mental capacities for “experience” versus “agency”. Participants spontaneously described their past selves in emotional terms and future selves in rational terms

(Experiment 1a). Further, they explicitly ascribed experiential qualities to past selves but agentic qualities to future selves—when thinking about both distant (Experiment 1b) and proximate (Experiment 1c) selves. These associations were specific to imagining one’s own change over time (Experiment 2) and led to a number of judgmental (Experiment 3) and behavioral (Experiment 4) consequences in the present.

### Insights and Implications

The perceived distinction between emotional pasts and rational futures provides an overarching integrative structure from which to understand why people make overly optimistic plans (Buehler, Griffin, & Ross, 2002; Kahneman & Tversky, 1979), hyperbolically discount future rewards (Frederick et al., 2003), predict that they will have unrealistically positive life outcomes (Weinstein, 1980), imagine behaving more morally than they actually do (Epley & Dunning, 2000), and a host of related forecasting errors (for reviews see Johnson & Sherman, 1990; Ross & Buehler, 2004; Wilson & Gilbert, 2003). If future selves are highly agentic and not very emotionally reactive, these “errors” in predicting future feelings, thoughts, and behaviors may only be wrong to the extent that we think the person doing the feeling, thinking, and behaving possesses a different type of mind than the one we have today; there is an “error” in who we think we will *be*, not necessarily how we think that person might respond. Someone who is independent and hard-to-sway might very well meet deadlines, finish plans, react less intensely to small rewards, and wait for \$500 in 12 months in lieu of \$450 in 11 months—precisely the type of person who we imagine in prospect, but not necessarily who we are today.

On a more specific note, these findings help explain the phenomenon of “future anhedonia,” in which people predict that identical hedonic states will be less satisfying in the future than in the present (Kassam, Gilbert, Boston, & Wilson, 2008). This insight also accounts for why people struggle to empathize with their future selves (Hershfield, 2011); it may be difficult to feel empathy for someone who we think has relatively weak emotional capacities. Furthermore, it may account for why people can accurately recall past reactions and yet *still* wildly mispredict their reactions in the future (Novemsky & Ratner, 2003; Wilson, Meyers, & Gilbert, 2001)—like comparing apples and oranges, past selves are perceived as strong experiencers who may not seem like an appropriate proxy to judge future agents. Similarly, Experiment 3 suggests that people are inclined to explain away bad behaviors in terms of a past capacity for affective reactivity, which not only has obvious interpersonal costs (e.g., justifying transgressions) but may blind them to past decisions they prefer to not repeat. For example, a struggling dieter could fail an exercise plan because of a poor trainer, but attribute the failure to their past emotional mind and return to the same unhelpful advice. Indeed, perceiving tomorrow as rational should backfire once people reach the future and find themselves no better off than today.

More generally, these results help enrich the literature on construal level theory of temporal distance (Liberman et al., 2007; Trope & Liberman, 2003), which posits that the same event is represented in different ways depending on if it feels close or far from now. Our findings clearly show that tense matters; a year into the past is not the same as a year into the future, even if their level of abstraction is comparable (see also Burns, Caruso, & Bartels, 2011; Caruso, Gilbert, & Wilson, 2008; Van Boven & Ashworth 2007).

Perhaps most interestingly, Experiment 4 suggests that goal-directed choices and behavior may be facilitated by employing a fit

between one's goal and one's current temporal orientation. Experiential goals (e.g., to more fully enjoy an upcoming vacation, meal, date, party, or leisurely activity) might be facilitated by encouraging a sense of connection between one's present and past ("How would my past self have reacted?"). Agentic goals (e.g., to fight pain, stick with a plan, resist temptation, act morally) might be facilitated by encouraging a sense of connection between one's present and future ("How might my future self react?"). Given the prevalence of self-regulatory failures and impediments to goal pursuit (e.g., see Baumeister, Heatherton, & Tice, 1994; Fishbach & Ferguson, 2007), examining the connection between how people perceive their pasts and futures in relation to the present may afford novel and surprisingly simple solutions.

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# Why We Decide Not To Decide: Decision Avoidance As A Means Of Cognitive Closure

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## EXTENDED ABSTRACT

Decision avoidance is a choice strategy whereby decision-makers fail to make a decision, postpone a decision, or make a decision that does not involve action or change (Beattie et al. 1994; Luce 1998; see Anderson 2003). Importantly, however, decision avoidance is still a choice strategy despite this tendency to *decide by not deciding*. For instance, relying on the default option (Baron and Ritov 1994; Johnson and Goldstein 2003), engaging in inaction inertia (Tykocinski, Pittman, and Tuttle 1995), and electing to defer the choice (Dhar 1996, 1997) all reflect this broader choice strategy of avoidance.

Though considerable research has focused on the unique aspects of each choice strategy, our interest, is on their commonalities—specifically, the manner in which these strategies provide decision-makers an opportunity to resolve a decision by, essentially, avoiding it. Thus, the purpose of the present research is to offer a shared mechanism for individuals' desire to avoid decisions across these seemingly disparate phenomena—specifically, the desire to resolve or achieve closure with a decision (Kruglanski and Webster 1996). In brief, we contend that individuals are more prone to avoid decisions when highly motivated to achieve closure with a decision.

Experiment 1 tested our primary hypothesis that individuals high rather than low in need for cognitive closure show greater decision avoidance. To index decision avoidance, we focused on individuals' reliance on the *default option* (i.e., omission bias). The default option is defined as the choice individuals' receive unless otherwise specified (Baron and Ritov 2009; Johnson and Goldstein 2003, 2004). Upon completing an opinion survey, participants were given the opportunity to choose their own candy or accept the default choice. Analysis revealed a main effect of closure ( $\beta = -1.31$ , Wald's  $X^2 = 6.57$ ,  $p = .010$ ). Consistent with expectations, participants' likelihood to rely on the default option increased with their need for closure. The findings of experiment 1, then, offer initial evidence that desiring closure promotes greater decision avoidance in the form of greater reliance on a default option.

The purpose of experiment 2 was to test the possibility that individuals may engage in decision avoidance to achieve closure, even at the expense of more optimal options. Here we relied on an alternative index of decision avoidance—specifically, *inaction inertia*. Inaction inertia is a decision bias whereby individuals who initially reject an option are more likely to reject a subsequent, similar option (Tykocinski et al. 1995). Participants were asked to consider purchasing a smartphone at a 12% discount. Prior to this decision, however, participants were informed they had previously rejected a similar deal offering either a 14% discount (*attenuation* condition) or a 10% discount (*enhancement* condition). In the *control* condition, participants were not informed of any prior deals. Analysis revealed a significant experimental condition  $\times$  need for closure interaction ( $\beta = -.626$ , Wald's  $X^2 = 4.44$ ,  $p = .035$ ). For those high in need for closure (+1 SD), there was a significant effect of experimental condition ( $\beta = -.89$ , Wald's  $X^2 = 5.13$ ,  $p = .023$ ); consistent with expectations, participants were significantly more likely to reject the second offer relative to the *control* condition in both the *attenuation* ( $\beta = -1.73$ , Wald's  $X^2 = 4.52$ ,  $p = .034$ ) and *enhancement* ( $\beta = -1.01$ , Wald's  $X^2 =$

5.85,  $p = .016$ ) conditions, which did not differ. For those low in need for closure (-1 SD), there was no effect of experimental condition on choices. Thus, the findings of experiment 2 offer further evidence that those high (vs. low) in need for closure are more prone to decision avoidance. Most importantly, this heightened inaction inertia occurred even when the subsequent offer improved upon the initial offer.

Importantly, the need for cognitive closure is characterized as a desire for a decision that reduces the extent to which individuals are *bothered* by a decision (Kruglanski and Chun 2008). We thus sought to provide evidence that individuals seeking closure actively avoid decisions as a means of reducing their bothersome nature. Experiment 3 tested this hypothesis using another documented decision avoidance strategy—choice deferral (Dhar and Nowlis 1999). Choice deferral can be defined as the extent to which individuals desire to make a choice now or at a later point in time. Here, participants were presented with a favorable advertisement for a new brand of organic produce, *Nacion Natural*. After viewing the advertisement, participants were exposed to a series of unfavorable reviews—varying the valence of the information. To manipulate the bothersome nature of the decision, participants were presented with a time delay between viewing the advertisement and reading the reviews (Kruglanski and Webster 1996). Participants also indicate how bothered they were by the decision. Analysis revealed a significant choice  $\times$  delay  $\times$  need for closure interaction ( $Z = 1.98$ ,  $p = .048$ ). For those high in need for closure, follow-up analysis revealed a significant choice  $\times$  delay interaction ( $Z = -1.98$ ,  $p = .048$ ), such that those high in need for closure were more likely to defer the choice following the 15 second (vs. no) delay. For those low in need for closure, the choice  $\times$  delay interaction was not significant. Analysis of the bothersome index revealed a significant delay  $\times$  need for closure interaction ( $F(1,80) = 7.20$ ,  $p = .009$ ) in a pattern consistent with the choice deferral data, and a formal test of mediation revealed a significant mediating pathway through the bothersome index (95% CI: -2.09, -.10). These findings suggest the reliance of those seeking closure on decision avoidance is restricted to contexts that are perceived to be bothersome.

These findings offer a novel framework to clarify our understanding of decision avoidance. Specifically, we propose decision avoidance is a collection of choice strategies motivated by the need for cognitive closure. This need, driven by the bothersome nature of the decision, offers not only a novel mechanism to account for decision avoidance effects but also novel hypotheses regarding when and how individuals should rely on decision avoidance as a choice strategy and novel insight into why consumers' intentionally decide to not decide.

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# Give Me Your Self: Gifts are Liked More When They Match the Giver's Characteristics

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## EXTENDED ABSTRACT

We often wonder what gifts we should buy to make our friends and relatives happy. Past research has documented many factors that affect recipients' satisfaction with the gifts they receive. Whereas most of this literature focused on the fit between the gift and the recipient (Gino and Flynn 2011; Ward and Broniarczyk 2011) and on the relationship between the giver and recipient (Belk 1976; Ruth, Otnes, and Brunel 1999), our work explores how the fit between the giver and the gift affects recipients' appreciation for gifts. We propose that recipients like a gift more when it matches the giver, i.e., when it contains references to the core characteristics of the giver, because recipients perceive such gifts as congruent with the giver's identity. This proposition builds on people's inherent preference for identity congruence when they consider other people's expressions, and on the role of gifts as expression of the giver's identity.

People not only tend to act in ways that are congruent with their own identity (Oyserman 2007; 2009), they also tend to appreciate, as observers, consistency in other people's actions (Cialdini, Trost, and Newsom 1995; Fiske and Taylor 1991). Given that research in gift giving has highlighted the role of gifts as a tool that allows givers to express their identities (Belk, 1976), we reasoned that gift recipients evaluate gifts in relationship to the givers. In particular we hypothesize gift recipients appreciate gifts that match the giver because they perceive such gifts as congruent with the giver's identity. We found support for the attractiveness of giver-matched gifts across four different studies. Confirming our theoretical account, in each of our studies we found that the perceived congruence of the gift with the giver's identity mediates the effect of matching on our dependent variable. All studies used giver-matched gifts that were aesthetically (as opposed to functionally) related to the giver, ruling out the explanation that recipients are appreciative of giver-matched gifts because they infer higher quality of the gift from the giver's presumed expertise.

In Study 1, participants read a scenario in which they received a mug of "Cupid and Psyche," a painting which is part of the Louvre's collection in Paris. In a between-participants design, the giver was described either as passionate about France (match condition) or as passionate about England (no match condition). Participants appreciated the gift more when it figuratively matched the giver than when it did not.

In Study 2, we decoupled the gift from the act of giving, and demonstrate that the preferences for giver-matched gifts do not depend on recipients' inferences about the giver's motivations to give a giver-matched gift (or not). Participants imagined that their friend Robin moved overseas and left some possessions behind for friends to pick. Participants had to indicate which object they preferred to pick between an urban print ("NY—Towers and Spotlights" by Jerry Driendl) or a landscape print ("Sunbeams through the trees" by Ross Hoddinott). In a between-participants design, participants were told that Robin was passionate about photographing urban sites (urban condition) versus landscapes (landscape condition). We also included a control condition in which no mention was made of photography. Results indicated that participants in the landscape condition preferred the landscape print more than participants in the urban condition, with the control condition falling in between.

Study 3 rules out the alternative explanation that recipients appreciate giver-matched gifts more because these gifts are reminders

of people they like. Participants imagined receiving a gift (a mouse pad displaying ancient images of a South-African tribe). In a 3×2 between-participants design, we manipulated how participants liked the giver (close friend, acquaintance, disliked person) and whether the gift matched the giver (of South African origin and passionate about African music) or not (of Scottish origin and passionate about Scottish music). Results revealed two significant main effects and a lack of interaction between liking for the giver and match. In particular, liking for the giver positively affected gift appreciation; most importantly, participants appreciated giver-matched gifts more than not matched gifts irrespective of how they liked the person who was given the gift.

Study 4 showed that a giver-matched gift is appreciated more than a giver-non-matched gift only if the match concerns a core characteristic of the giver. Participants read a scenario similar to Study 3, and we manipulated whether the key characteristic of the gift (images of a South-African Tribe) matched a core characteristic of the giver (Robin's country of origin), an incidental descriptor of the giver (a country where they once held a tournament of Robin's favorite sport), or nothing (no mention of the country in Robin's description). Whereas gifts that matched a core characteristic of the giver were more appreciated than gifts that did not match anything, gifts that matched a non-core characteristic of the giver did not.

Early research on gift giving highlighted the role of gifts as a tool that allows givers to express their identities (Belk 1976; Schwartz 1967). Our research explored the consequences of doing so for recipients' appreciation. We showed that givers can increase recipients' appreciation by choosing gifts that match their own identity and are in turn perceived as more congruent. Previous research has documented several instances in which people overly focus on themselves when attempting to predict others' reactions (Epley, Keysar, Van Boven, and Gilovich 2004). Egocentric biases might underlie several tendencies among gift givers that ultimately translate into suboptimal recipient happiness such as privileging gift attributes like exclusivity (Teigen, Olsen, and Solas 2005) and stigmatizing regifting practices (Adams, Flynn, and Norton 2012). While we do not claim that participants should neglect including recipients' likes and tastes in the gifts they give, our research suggests that some egocentrism might in fact be beneficial. Future research should investigate how givers should balance the goals of matching the gift with their own and recipients' characteristics.

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# The “Left-to-Right Effect” of Product Location on Consumer Judgment

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## EXTENDED ABSTRACT

Previous research indicates that people implicitly associate horizontal space with temporal concepts of past and future (Ouellet et al. 2010; Santiago et al. 2007; Tversky, Kugelmass, and Winter 1991). For instance, Santiago et al. (2007) proposed that people project the past to left space and the future to right space. Supporting this proposition, they found that judgments were facilitated when past words were responded to with the left hand, and future words with the right hand. Cross-cultural studies (e.g., Ouellet et al. 2010; Tversky et al. 1991) have further demonstrated that a writing system influences the temporal concepts and horizontal space association. Ouellet et al. (2010) found faster responses to past words with the left hand and future words with the right hand for Spanish participants, those who were exposed to a left-to-right writing system, but not for Hebrew participants, who were exposed to a right-to-left writing system. This finding indicates that people who are exposed to a left-to-right writing system tend to associate past with the left and future with the right (Ouellet et al. 2010; Tversky et al. 1991).

Based on this previous research, we expect that consumers will associate horizontal space with properties of the products. In general, newer products are more advanced and of higher quality than products that are introduced to the market earlier. Because of this association between time and the quality of products, consumers will assume that more advanced products are located on the right side of less advanced alternatives. More importantly, when products are displayed in a congruent way with their beliefs (less advanced, lower-quality products are positioned on the left and more advanced, higher-quality products are on the right), we predict that consumers will feel fluent to process product information and evaluate products.

Research on metacognitive experiences has suggested that metacognitive experiences influence consumer judgment in multiple ways (Alter and Oppenheimer 2009; Novemsky et al. 2007). Research showed that when a target was processed fluently, people tended to associate such a feeling with liking and preference (Reber, Winkielman, and Schwartz 1998; Winkielman et al. 2003). Studies on regulatory focus have shown that fit between people’s processing strategy and their regulatory focus stimulates the experience of feeling right, which in turn enhances people’s confidence in and reliance on their cognitive responses (Aaker and Lee 2006; Avnet and Higgins 2006; Cesario, Grant, and Higgins 2004; Schwarz 2006). Extending this previous research, we propose that product location will lead consumers to feel more or less fluent to process information and in turn influence consumers’ confidence in product judgments.

In Study 1, we used three mobile electronic devices of the same brand and varied their specific features (e.g., internet connectivity, display, etc.). One hundred and sixteen participants (61 females;  $M_{\text{age}} = 34.47$ ) were recruited through Amazon’s Mechanical Turk. In the study, participants were asked to assume that they were advising their clients of ideal product positions to help them maximize sales of their brands. After reviewing three possible positions and three products, participants selected the ideal position of each of the products. Results revealed participants were most likely to locate the least advanced product, with the lowest functionality level, on the left and the most advanced product, with the highest functionality level, on the right (55.2%). A t-test showed that the frequency of the left-to-right order was significantly higher than the second most frequent order (16.4%;  $t(115) = 8.361, p = .000$ ).

In study 2, we varied the aspects that differed across a set of products to demonstrate what attributes of products determine consumers’ belief about product location. One hundred and thirty-eight participants (70 females;  $M_{\text{age}} = 36.79$ ) were recruited via Amazon’s Mechanical Turk. The procedure was similar to that used in study 1 except that participants selected product positions across three product categories. Supporting our hypothesis, results showed that participants tended to place cheaper and lower-quality products on the left more expensive and higher-quality products on the right across three product categories ( $ps < .001$ ). Thus, these results indicate that consumers expect to see cheaper, lower-quality products on the left and more expensive, higher-quality products on the right.

Study 3 tested our prediction that consumers would feel right about their product evaluations and feel more confident in their evaluations when products are located in a congruent way with their beliefs. Ninety undergraduates (24 females;  $M_{\text{age}} = 20.81$ ) participated in this study. We employed 2 (product location: left-to-right versus right-to-left) between-subjects design. In the study, participants reviewed three versions of mobile devices offered by the same brand and evaluated them. Next, we asked participants to report their confidence in their product evaluations and the extent to which they felt right or wrong while evaluating the products. Supporting our prediction, participants in the left-to-right condition showed a greater confidence in their product evaluations ( $M = 6.707$ ) than in the right-to-left condition ( $M = 6.068, t(88) = 1.766, p = .004$ , one-tailed). We also found that participants in the left-to-right condition felt right while evaluating products to a greater extent than those in the right-to-left condition ( $M_{\text{left-to-right}} = 7.065, M_{\text{right-to-left}} = 6.432, t(88) = 2.103, p = .038$ ). Last, a bootstrap analysis confirmed that feeling right mediated the impact of product locations on confidence, 95% bootstrapped confidence interval = [-1.2664, -.0892] (Preacher and Hayes 2004).

Recently, there has been a growing attention to Sensory Marketing, which acknowledges how people are affected by their senses to make judgments or decisions (Krishna 2012). However, only limited research has examined the impact of visual locations of products on consumers’ judgments (but see Deng and Kahn 2009; Valenzuela, Raghuram, and Mitakakis 2013). This study advances this area of research by investigating how horizontal product positions influence consumers’ metacognitive experiences and product judgments. In addition to theoretical contributions, the present research offers implications for marketers. Our findings suggest product managers should place lower-quality, less advanced products on the left and higher-quality, more advanced products on the right as this product display fits consumers’ beliefs.

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# Did You Bring Enough for Everybody? How Differences in Anticipated and Actual Reciprocity Lead to Over-contribution in Sharing Contexts

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## EXTENDED ABSTRACT

Broadly speaking, sharing is the partitioning of a resource among members of a group. The current work focused on the pooling and allocation of resources (hereafter, *PA-sharing contexts*), and specifically on the amount consumers contribute to a collective pool of resources from which they and other members of the group will ultimately draw.

Three studies examined the impact of PA- (vs. non-) sharing contexts on the amount of food consumers order (i.e., contribute) and consume. The results suggest that consumers treat PA-sharing contexts that are inherently reciprocal at the time of allocation (e.g., potluck dinners) as non-reciprocal when they are making their contribution decisions. Thus, consumers tend to underweight or completely ignore the amount they will take from others at the time of contribution, focusing instead on the amount they expect to consume and the amount they should contribute for (give to) others. By failing to account for the amount they will take, consumers inadequately adjust their total contribution downwards. Consequently, consumers tend to over-contribute in PA-sharing contexts, which leads to over-consumption and waste.

*Study 1.* Participants were asked to imagine that they were dining at a Buffalo wings restaurant and were randomly assigned to one of four conditions in a 2 (group size: 3 vs. 10) x 2 (sharing context: PA vs. non) between-subjects design. After the participants read the scenario, they indicated which flavor and number of wings they would order (0-40), the number they expected to eat (0-40), and the number they expected to give to others (0-40).

Significant main effects were qualified by the expected interaction ( $F(1, 147) = 4.58, p < .04$ ). Group size did not influence the amount ordered in the non-sharing conditions, while participants in the PA-sharing conditions ordered significantly more wings when the group had ten, versus three, members ( $F(1, 147) = 7.94, p < .006$ ). Intended consumption was not influenced by the interaction of these factors. However, the amount participants intended to give was a significant mediator (95% CI, lower = .2551, upper = 3.9442) of the interactive effects of group size and sharing context on the number of wings ordered.

*Study 2.* Participants were asked to imagine they would have lunch with 7 coworkers on the upcoming Friday and that it had been decided that the group would order food from a local wings restaurant. In the *non-sharing* and *PA-sharing* conditions, participants were told that they were ordering only for themselves or that the group would share all ordered food, respectively, and then indicated (i) how many wings of each available flavor they would order; (ii) the number they expected to eat, give to others, and take from others; and (iii) the number they expected others to order and eat, on average.

Participants in the *taking-salient* condition (the second PA-sharing condition) indicated the amount they expected to eat during the meal and the number of wings they expected to take from others before ordering. Participants in the *giving-salient* condition (the third

PA-sharing condition) estimated the amount their coworkers would order, on average, and the total number of wings they would give their coworkers before ordering. Considering the amount one will take from (vs. give to) others prior to ordering should result in this information being integrated into the decision, thereby significantly reducing the amount of food participants order to levels no different than those in the non-sharing condition.

We focus on the amount of food participants ordered, but briefly discuss other results here. First, neither the amount participants planned to eat, nor the amount they expected others to order or eat, was affected by the sharing (choice) context. Second, the amount participants expected to give and take was only measured in the PA-sharing conditions—unlike study 1 where participants in the non-sharing condition indicated the amount they would give to others—and neither measure was found to be a significant predictor (or mediator) of the amount of food participants ordered in the PA-sharing contexts.

Replicating the results of study 1, participants ordered significantly more wings in the PA-sharing, versus non-sharing, condition ( $F(1, 315) = 26.25, p < .001$ ). This effect was eliminated in the taking-salient condition in which the number of wings ordered was significantly less than in the PA-sharing condition ( $F(1, 315) = 26.96, p < .001$ ) and identical to the number in the non-sharing condition ( $F = .00$ ). The opposite held in the giving-salient condition: the number of wings ordered was significantly more than in the non-sharing condition ( $F(1, 315) = 12.13, p < .001$ ) and not significantly less than in the PA-sharing condition ( $F(1, 315) = 3.07, p > .08$ ). Thus, focusing participants on the amount they would take from (vs. give to) others did (not) eliminate the effects of PA-sharing contexts on the amount of food ordered. Additionally, these results rule out alternative accounts related to expected costs, social norms, and expectations of others' contributions and consumption.

*Study 3.* Study 3 was a field study completed by two executive MBA classes in a South American country. The students were each given a budget roughly equivalent to five U.S. dollars that they could use to purchase their lunch from a set menu of empanadas. Any portion of their budget not spent on food would be given to them in cash (i.e., the study was incentive-compatible). Participants were told either (i) to order what they wanted for lunch with no mention of sharing (the non-sharing condition) or (ii) to order what they wanted for lunch but that the class would be sharing all of the food when it was delivered (the PA-sharing condition).

Those in the PA- (vs. non-) sharing condition ordered significantly more empanadas ( $F(1, 104) = 15.78, p < .001$ ) and ate significantly more empanadas ( $F(1, 104) = 5.17, p < .025$ ). Further, the number of empanadas left-over (waste) was also significantly greater in the PA-sharing condition than in the non-sharing condition ( $F(1, 104) = 5.17, p < .025$ ). Thus, it appears that the over-ordering induced by PA-sharing contexts may result in both over-consumption and waste.

# Minty Fresh! Absolving Dieters of Their Consumption Sins

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## EXTENDED ABSTRACT

Overeating is associated with a lack of self-control, which runs contrary to accepted norms of moral behavior and social prescriptions. Not surprisingly, feelings of shame and guilt often accompany being overweight or obese (Conradt et al. 2008). Overeating can thus have negative consequences not only for one's health but also for one's psyche (Yuker et al. 1995). The stigma associated with obesity motivates many to try to avoid the consumption of energy-dense foods such as chocolate, cookies, and pudding, which they find highly desirable but consider forbidden or taboo (Macht and Dettmer 2006). We propose in the present research that dieters' sense of self-worth, in particular their sense of moral self-worth, is tied up with their food choices, and that they can "wash away" some of the guilt associated with taboo food choices by consuming mint-flavored products. In this research, we propose that the cooling and refreshing oral perceptions created by mint-flavored oral products will wipe away dieters' feelings of guilt associated with taboo food consumption in a manner similar to that which has been observed with physical cleansing in the embodied cognition literature.

Consuming products that are mint-flavored (i.e., that contain menthol compounds) creates sensations of coolness when applied to the skin or mucous membranes in the oral/nasal cavities, because menthol activates trigeminal nerve endings (Karashima et al. 2007). Such temperature-sensitive nerve fibers in the oral/nasal cavity respond to substances that produce hot and cold sensations such as cinnamon and menthol, respectively. Menthol binds to the same neural receptors that are activated by actual declines in body temperature (i.e., TRPA1 and TRPM8; Klein et al. 2010). In this way, the menthol compounds in mint-flavored foods and oral cleansers activate thermoreceptive neurons signaling temperature reduction to the brain. The result of mint exposure in the oral/nasal cavity is typically described by consumers as a highly refreshing experience.

In **study 1**, we explore whether dieters prefer forbidden foods, such as mint-flavored filling cookie, that contain a mint flavor. We found that dieters were significantly more likely to prefer a cookie that contained a minty-flavored filling rather than a vanilla-flavored filling in a within-subjects tasting format. This was evident in terms of both flavor preference and purchase intent. Participants ( $n=116$ ) received three ziplock bags, each of which contained a single Oreo cookie with different flavors: chocolate with vanilla creme, chocolate with mint-flavored creme, and vanilla with vanilla creme. Participants on a diet felt significantly more guilty after tasting the cookies than did those not on a diet. A Pearson chi-square test to see whether the likelihood of choosing the mint-flavored cookie (yes, no) varied as a function of dietary status was significant. Dieters were more likely to choose the minty cookie than were non-dieters. Dieters' favorite cookie was mint, whereas mint was the least favorite among non-dieters. The purchase intent measure for the mint-flavored cookie emerged significant. A follow-up ANOVA shows that dieters were more likely to agree to purchase the product than were non-dieters for the mint-flavored cookie. Neither of the other two cookies exhibited significant differences in purchase intent as a function of dietary status.

In **study 2**, we examine whether dieters who are made to eat regular (i.e., full fat) chocolate rather than the same chocolate labeled as "low fat" are more likely to subsequently choose a breath strip

in a minty (vs. a non-minty) flavor. We expect dieters will exhibit a greater desire for palate cleansing via mint flavored oral products after taboo food consumption. All participants ( $n=209$ ) received a ziplock bag containing three bite-sized pieces of chocolate. A logistic regression showed that the interaction between whether or not mint was chosen as the breath strip flavor as a function of dietary status and chocolate type was significant. Specifically, among non-dieters, there was no effect of chocolate type on the predicted probability of choosing the mint-flavored breath strip. However, among dieters, there was a significant effect of chocolate type, with the probability of choosing the mint-flavored breath strip higher if chocolate labeled regular rather than low-fat had been eaten.

In **study 3**, we expect that mint-flavored cleansing will morally license the dieter to choose a taboo food. Since non-dieters feel less post-consumption guilt after they indulge, we expect non-dieters' choices will not exhibit the same pattern of results. Participants ( $n=374$ ) were provided with either a sample of M&M chocolate or a rice cake to evaluate. Then we asked half of participants to evaluate a toothbrush by brushing their teeth with water in a nearby bathroom. The other half brushed their teeth with minty flavored toothpaste. Finally, participants chose between a pen and a piece of chocolate as a thank you for their participation. We conducted a logistic regression on whether chocolate was the type of gift chosen rather than a pen, as a function of tasting condition, minty condition, dieter and all possible interactions. A three-way interaction was significant. Specifically, dieters who had tasted chocolate rather than a rice cake were less likely to take chocolate as a gift if they had cleansed their mouths with only a toothbrush with water, presumably because the post-consumption guilt they experienced after consuming chocolate had not been counteracted by cleansing with water. When dieters used the minty toothpaste, however, the guilt from the chocolate consumption seems to have been washed away, as is evident in an equal likelihood of choosing chocolate among dieters who had tasted the rice cake instead. This pattern of results was not evident among the non-dieters, for whom the conditional effect of the tasting by cleansing interaction is not significant.

Across three studies, we demonstrate that dieters prefer to consume mint-flavored energy-dense foods and mint-flavored oral cleansers after eating energy-dense foods. Moreover, mint flavoring is shown to license dieters to indulge in taboo food choices through a reduction of consumption guilt. Thus, morally charged implications of food choices emerged here only for dieters, for whom taboo foods such as chocolate have the capacity to create the desire for physical and metaphorical cleansing.

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# The Scrapbook as an Autobiographical Memory Tool

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## EXTENDED ABSTRACT

Autobiographical memories are “recollections of self-referenced information gleaned from everyday life events” (Barclay and Subramaniam 1987, 169). Autobiographical memories do not exist as separate, individual thoughts but are connected by consumers in personal autobiographies of the self. Autobiographies are “stories we tell about our lives” that are constructed as a “continuing interpretation and reinterpretation of our experience” (Bruner 1987, 11-12). Culture makes available certain narrative tools to create autobiographies, such as family stories, diaries, genealogies, and other written accounts. These narrative tools are possessions that have the power to organize memory.

This paper examines the role of narrative tools in the autobiographical memory process; the goal is a rich understanding of the collection, preservation, and reconstruction of autobiographical memory through material possessions. The context for this study is the popular hobby of scrapbooking. A scrapbook is a blank book in which photographs and other paper ephemera are pasted for memory preservation (Christensen 2011). In the United States alone, 4.5 million people participate in scrapbooking and it is a fast-growing sector of the hobby industry with retail sales of \$1.45 billion in 2011 (Scrapbooking.com 2011). Scrapbooks have been called the “material manifestation of memory” (Tucker, Ott, and Buckler 2006, 3) because they are consciously designed to collect and construct autobiographical memories. Consequently, this study uses in-depth interviews with women who scrapbook as a hobby to examine how these consumers collect, preserve, and reconstruct autobiographical memories through the material possession of the scrapbook.

## Method

Individual depth interviews were conducted with twenty women who participated in scrapbooking as a hobby. Each semi-structured interview asked when and how the participant became involved in scrapbooking, how many hours per week she scrapbooked, and her motivation and process. Then, the participant was asked to display her pages, explain how she had made them, and discuss what she liked and disliked about them. The interviews were analyzed using a grounded theory method (Corbin and Strauss 2007) where findings are allowed to emerge from the data in an inductive manner. The researcher conducted open, axial, and selective coding to identify themes and create the model. The outcome is the Possession Memory Framework presented in Figure 1 and explained below.

## Findings

### *Collection of Memory*

The first step in the Possession Memory Framework is the collection of photographs and other ephemera to be included in the scrapbook. Scrapbookers worry that if the right memory markers are not collected, the memory may be irretrievable and lost forever. What is collected and saved is based on a judgment of future value made in the present moment, but scrapbookers in this study were not always sure what they would wish to remember in the future. Consequently, scrapbookers collect many items which non-scrapbookers consider to be rubbish. From the information provided by the scrapbookers, it is plain that the collection of autobiographical memory markers is a premeditated and conscious process, fraught with concern for missing important markers or selecting the wrong markers in the moment.

To compensate for these fears, scrapbookers ‘over-save’ markers and plan their scrapbook pages in great detail.

### *Preservation of Memory*

The second step in the possession memory framework is the preservation of memory through the construction of the scrapbook from the items collected. The first thing that is preserved in the scrapbook is the story of the event depicted in the photographs. Because these anecdotes protect memory, almost all of the scrapbookers asserted that they would not remove or alter their scrapbook pages once they were completed. Scrapbookers also implicitly preserved other types of memories in their albums. The first of these is the memory of the scrapbook creator and her creative identity at the time of scrapbook construction. The final type of memory that is preserved in the scrapbook is a collective, or social memory. Beyond bringing to mind the social connections depicted in the photographs, the scrapbooks evoked memories of the social networks used to create the scrapbook itself.

### *Reconstruction of Memory*

The third step in the possession memory framework is the reconstruction of autobiographical memory through reviewing the scrapbook. Based on the interview data, scrapbooks lend themselves to four types of memory reconstruction.

*Introspection.* One of the ways scrapbookers use their finished albums to cue autobiographical memory is to view them alone in the present time. Introspection provides a method of weaving together memories into an autobiography of identity. This process is not simply remembering an event, but incorporating the memory of that event into a coherent understanding of the self.

*Reunion.* Scrapbookers also mentioned that they expected to view their albums by themselves in the future. This focus on satisfying the future self links back to the over-collection of memory markers by scrapbookers and the planning of scrapbook construction in great detail, for one can never fully know what the future self may want to remember.

*Performance.* The memories cued by scrapbooks are not just reconstructed in solitary contemplation, but in the presence of others as well; this is the ‘performance’ aspect of scrapbooks, where scrapbooks are shared with social networks. This type of reconstructive performance (a) affirms strength and continuity of social relationships, (b) socializes one’s own children into the correct manner of ‘doing’ memory work, and (c) acts as a display of the self-identity of the maker.

*Legacy.* The last type of memory reconstruction permitted by the scrapbook is that which will be done by others in the far future, often after the scrapbooker is gone. The idea that unknown future others will be reconstructing memories from the scrapbook without personal narration from its maker causes many of the participants to worry about the adequacy of their journaling and event narration.

The findings of the current study have implications for marketing theory regarding heirloom possessions, the disposal of possessions, and computer-aided memory technologies.

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# Negative Word-of-Mouth and Trait Self-Esteem: The Inverse Effects of Self-Liking and Self-Competence

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## EXTENDED ABSTRACT

In this research, we examine the relationship between trait self-esteem and the desire to share WOM, revealing a complex and surprising effect. Prior research has largely adopted a single-dimension view of self-esteem (Rosenberg 1986). However, by adopting the two-dimensional view of self-esteem (i.e., self-liking and self-competence), we find that each dimension affects WOM behavior differently following an unsatisfying consumption experience. Specifically, as self-liking increases people tend to share their experiences through WOM more often, but increased levels of self-competence actually results in decreased sharing through WOM. Where as the two-dimensions of self-esteem has no impact on WOM behaviour following a satisfying experience. We argue that this occurs because sharing WOM about negative experiences can be very harmful to an individual's sense of self. Therefore those high in self-liking feel protected from the potential damaging impact of sharing negative WOM and share more WOM than compare to individuals with low self-liking. However, those high in self-competence are deterred because sharing negative WOM will contradict their sense of self as a competent individual, unable to fulfill their desired intentions as a consumer.

## Theoretical Framework

Sharing WOM not only conveys information about the brand, but it also signals information about the speaker and his or her capabilities as a consumer. This consumer-related signaling explains how WOM, particularly positive WOM, serves a self-enhancement motive (e.g., Barasch and Berger 2013; De Angelis et al. 2012; Packard and Wooten 2013). Conversely, sharing WOM about a negative consumption experience potentially damages the social self by demonstrating poor choices and potentially deters the sharing of WOM (Philp and Ashworth 2014). But how does the two-dimensions of self-esteem impact WOM behavior?

Considering that individuals with high self-liking are less susceptible to the influences from others (Clark and Goldsmith 2005; Damon & Hart, 1988; Rosenberg, 1986; Tafarodi & Swann, 2001), and should be more confident in their belief that others see them positively. This positive self-perception should shield them from any possible negative implications that sharing negative WOM may have. Therefore, the possible social costs to sharing negative WOM is decreased, leading to less reluctance to share the negative experience.

*Hypothesis 1: As the self-liking dimension of self-esteem increases, people will be more likely to share WOM about negative product experiences.*

Considering the other dimension of self-esteem, self-competence, other predictions arise. Confidence in their ability to fulfill their desired intentions drives self-perceptions of competence, which should also include the ability to make smart consumption decisions. When purchases do not result in the expected outcome, this indicates an inability to achieve desired consumer intentions, and thus reflects poorly on one's competence. Therefore, sharing a negative consumption experience should contradict how individuals with high

self-competence see themselves and impair typical self-protection strategies (Baumeister 1982; Mussweiler, Gabriel & Bodenhausen 2000). In short, sharing WOM about a negative consumption experience contradicts self-perceptions of competence, so people should be more reluctant to engage in WOM about dissatisfying experiences.

*Hypothesis 2: As the self-competence dimension of self-esteem increases, people will be less likely to share WOM about negative product experiences.*

## Method

Participants completed a survey where the initial question asked them to describe a recent purchase that either met their expectations or did not meet their expectations. The questionnaire following this task asked participants questions regarding their WOM behavior pertaining to this experience, their level of dissatisfaction towards the experience, and their trait self-esteem. Each scale was embedded in a variety of other measures related to their described purchase experience.

## Results and Discussion

To understand how self-liking and self-competence influence the WOM behavior, we performed a hierarchical regression. Anderson (1998) pointed out that the relationship of satisfaction follows a U-shape, where more WOM is shared about experiences that were highly satisfying or dissatisfying. Thus, following Anderson's (1998) lead, we proceeded with our analysis under the expectation that dissatisfaction-satisfaction should have a quadratic relationship with WOM behavior.

Our analysis includes the composite of WOM shared as the outcome variable, and the composites for dissatisfaction with the purchase experience, self-liking, and self-competence as predictors. The results demonstrate that the relationship of satisfaction on WOM is quadratic ( $\beta = .13, p < .001$ ) with a significant portion of the variance explained over the linear effect ( $\Delta R^2 = .11, F(1,393) = 48.97, p < .001$ ).

Adding self-liking and self-competence to the model provides initial support for H1 and H2. As individuals' reported self-liking increases, they are more likely to share that experience through WOM ( $\beta = .33, p < .001$ ). Furthermore, as individuals' reported self-competence increases, we see the predicted inverse reaction—people are less likely to tell others about the experience through WOM ( $\beta = -.20, p < .10$ ). Adding the interaction terms of self-liking X satisfaction<sup>2</sup> and self-competence X satisfaction<sup>2</sup> under the next step in the regression supports our hypotheses that these differences only exist during the sharing of more negative WOM. Results find that as satisfaction with the purchase experience decreases, people who report higher self-liking are more likely to share WOM ( $\beta = .10, p < .05$ ), while people reporting higher levels of self-competence are less likely to share their experiences ( $\beta = -.11, p < .05$ ).

## Conclusion

This research explores the impact of self-esteem on WOM. Adopting a two-dimensional view of self-esteem we find that as self-liking increases people are more likely to share negative WOM, while increased self-perceptions of self-competence tend to impede

the likelihood of sharing negative experiences through WOM. Self-esteem's impact, however, only occurs with dissatisfying experiences as compared to satisfying experiences. The research adds to the literature by presenting negative WOM as self-damaging and poses questions for exploring deterrents to sharing WOM rather than only motivations.

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# Hiding From the Press: Negative Product Reviews, Feeling Incompetent, and Product Usage

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## EXTENDED ABSTRACT

Negative product reviews can have far reaching negative effects on a company and the market success of product. Negative reviews and press have been found to result in decreasing sales (Basuroy et al. 2003; Reinstein and Snyder 2005), poor product evaluations and perceptions (Tybout, Calder, and Sternthal 1981; Wyatt and Badger 1984), and even negatively impact a firm's net present value (Goldenberg et al. 2007). However, what is less explored, is how negative product reviews can impact the consumer who may already own the product.

This current work examines how a product is portrayed in the press and how this can influence self-perceptions as an incompetent consumer and product usage intentions. Specifically, we propose that negative product reviews can negatively impact intentions to use and display the product in public, even when the initial perceptions of the product met expectations. We suggest that negative product reviews can reflect poorly on the consumer who has already bought it because it makes them appear incompetent. Even if the consumer previously enjoyed and was satisfied with the product, using it may expose to others their incompetence as a consumer. To avoid this, consumers will be less willing to use the product in public in the future.

*Hypothesis 1: Dissatisfying consumption experiences will lead to a) individuals fearing that others will see them as an incompetent consumer and b) decreased product usage intentions*

Although this is a simple prediction, we expand this to how negative press can also drive these feelings as well as how these feelings of incompetence can influence product usage intentions. Using certain products portray certain images. We know that individuals approach certain products for the desirable image they portray (Berger and Heath 2007; Burkett 2006; Han, Nunes, and Drèze 2010) and avoid certain products for the undesirable image they might portray (Ashworth, Darke, and Schaller, 2005; White and Dahl 2006). One possible undesirable image is that of an incompetent consumer. How products are portrayed in the media is one method of how items contract certain images, therefore negative press about a product not being a good value and is considered a bad purchase could be evidence that a user of that product is incompetent, despite possibly being satisfied with it. Given the public nature of product reviews, negative press regarding a product that an individual owns will signal to others that they are incompetent consumers. To avoid this undesirable image, consumers will be less willing to use the product in the future, despite being initially satisfied with it. More formally,

*Hypothesis 2: Negative press regarding a product that was recently purchased will make an individual fear appearing as an incompetent consumer and decrease their usage intentions, despite their initial perceptions of the product (i.e., satisfied or dissatisfied).*

*Hypothesis 3: The fear of appearing as an incompetent consumer will mediate the relationship between negative press and decreased intentions to use a product that an individual already owns.*

## Method

Three studies were completed, seeking to understand the driving forces of the fears of appearing as an incompetent consumer as well as how negative product reviews can impact this fear and how this fear plays a role in product usage intentions.

The objective to study 1 was to initially determine that dissatisfying purchase experiences can make an individual concerned that others will judge them as an incompetent consumer and if this can impact usage intentions. Since the fear of appearing as an incompetent consumer is not a widely researched and understood self-image, this first study also seeks to understand what drives this fear more broadly. Results of a hierarchical regression find that dissatisfying experiences significantly predict the fear of appearing incompetent ( $\beta = .15, p < .01$ ). Adding dissatisfaction to the model also explains a significant portion of the variance above the other factors ( $\Delta R^2 = .012, F(1,381) = 7.55, p < .01$ ). Furthermore, the fear of appearing as an incompetent consumer significantly predicts product usage intentions ( $\beta = -.15, p < .10$ ). Also, adding the fear of appearing as an incompetent consumer to the model explains a significant increase in the variance ( $\Delta R^2 = .005, F(1,379) = 3.07, p < .10$ ).

Studies 2 and 3 extend these findings by showing that reading negative product reviews also influences the fear of appearing as an incompetent consumer. Where even after a purchase that is satisfying, reading a negative product review will increase the fear of appearing as an incompetent consumer and decrease future usage intentions. Using the Preacher and Hayes (2008) process mediation analysis shows that reading a negative product review significantly increases the fear of appearing as an incompetent consumer ( $\beta = .92, p < .001$ ) and that this significantly interacts with whether or not the purchase initially met expectations ( $\beta = -.97, p < .01$ ). The fear of appearing as an incompetent consumer significantly mediates the reading of a bad review on usage intentions, where as the fear of appearing incompetent increases, usage intentions significantly decreases ( $\beta = -.41, p < .001$ ).

## Conclusion

This current work points out that existing research has focused on how negative press can impact sales. In other words, how negative press can impact pre-purchase behaviors. Our research instead points out the possible impact of negative press post-purchase. We find that negative press can impact self-perceptions as an incompetent consumer, as well as increase the fears of appearing as an incompetent consumer for using a product that has had some bad press. This has further downstream effects by reducing reported usage intentions. Future research should be more interested in post-purchase behaviors, such as usage, disposal, and storage. This is a highly under explored area in the domain of consumer research. This research helps shine some light on this behavior that is not widely developed.

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# Double-Edged Nature of Free Perks: Consumer Entitlement and Its Consequences in the Marketplace

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## EXTENDED ABSTRACT

Preferential treatment, where some people but not others are offered extra benefits, is a common phenomenon in consumption contexts. Sometimes preferential treatment is based on past history of customers' relationships with a firm and is somehow "earned" through past iterations. In other cases (e.g. getting an unexpected hotel or airline upgrade, instant scratch-and-save promotions) such treatment may be perceived as unearned and socially uncomfortable (Jiang, Hoegg, and Dahl 2013).

Although positive effects of loyalty-based preferential treatment with respect to customer satisfaction and elevated status are well established in the literature (Dreze and Nunes 2009; Lacey, Suh, and Morgan 2007), the effects of unearned preferential treatment are less-studied and hence less clear.

In the present research we explore companies' use of preferential treatment strategies and study how consumer reactions to such experiences can differ depending on their type of relationships with a focal firm. In this work we define customer entitlement as customers' claims for extra effort from a company based on the belief that they deserve it (Wetzel, Hammerschmidt, and Zablah 2014). High levels of psychological entitlement are linked with negative outcomes such as selfish and aggressive behavior in anecdotal reports and existing research (Campbell et al. 2004).

In the present study we argue that in the marketplace higher entitlement is associated with higher propensity to behave opportunistically. Following recent publications, we show that entitlement can be a dynamic mindset (Zitek et al. 2010) and that feeling entitled in one domain can license opportunistic behavior in a completely different domain. We argue that entitlement arises when consumers receive preferential treatment, especially when they get it without any past investments from their side. We base our reasoning on relationship-as-bound and self-serving bias hypotheses in a relational context (Elberly et al. 2011; Sedikides et al. 1998). Those theories show that participants of relationally distant dyads (new customers in our context) manifest the self-serving bias when evaluating the relationship outcome, whereas members of close dyads (loyal customers) share responsibility for the outcome with the partner (a firm). We argue that consumers who have longer relationships with a firm (loyal customers) have lower levels of entitlement and consequently lower desire to behave opportunistically in preferential treatment situations compared to new customers.

We tested our predictions in a series of internet and laboratory studies. Study 1 (N=243), conducted online using Mechanical Turk, is the first to experimentally manipulate consumer entitlement. In an *upgrade* condition, participants read a preferential treatment scenario in which they imagined paying for a standard hotel room and then being upgraded to a deluxe suite instead. In a *standard* condition, the scenario described paying for and receiving the standard room. Finally, in a *suite* condition, the scenario described paying for and receiving the deluxe suite. All participants then completed an Entitlement scale (Campbell et al. 2004). The general tendency to behave unethically was measured by a Consumer ethics scale (Vitell and Muncy 1992). Participants in the upgrade group reported higher entitlement scores ( $M = 4.55$ ) than both control groups ( $M_{suite} = 4.27$  vs.  $M_{standard} = 4.01$ ),  $F(2, 243) = 3.8, p < .05$ . Moreover, partici-

pants reported higher unethical intentions in the upgrade condition ( $M = 3.01$ ) than in the suite condition ( $M = 2.65$ ) and the standard condition ( $M_{control} = 2.73$ ),  $F(2, 243) = 5.7, p < .05$ . This effect of condition on unethical intentions was significantly mediated by entitlement (95% CI for the indirect effect = .0202 to .1835).

Study 2 (N=348) demonstrates the differential impact of preferential treatment on consumer entitlement based on customers' relationship with a focal firm. The procedure was similar to that of Study 1 except that a paragraph describing participants' relationships with the firm (upgrade: loyal vs. new customers) was added. New customers reported higher feelings of entitlement ( $M = 5.19$ ) than loyal customers ( $M = 4.75$ );  $F(1, 345) = 4.27, p < .05$ . Study 3 (N=91) confirmed previous results in a more controlled laboratory setting. A 2 (upgrade vs. control) X 2 (explanation present vs. absent) design allowed us to explore the role of explanations when offering preferential treatment. According to the literature, providing explanations for an unexpected event helps customers to understand the promotional characteristics of such treatment and reduces expectations for such events in the future (Kim and Mattila 2013). Thus we proposed that providing an explanation for preferential treatment should decrease the likelihood of feeling entitled. However, results revealed a main effect only for the upgrade condition ( $F(1, 89) = 3.86, p = .05$ ), with no effect of the explanation factor ( $F(1, 89) = 1.27, p > .10$ ). Finally, Study 4 (N=99) tested the link between preferential treatment and opportunistic behavior in a laboratory experiment. After the hotel room upgrade scenario (upgrade: loyal vs. new customers) adapted from the previous studies, participants were given two minutes to list as many uses as they could think of for a brick. Participants were explicitly asked to work on this task for the full 2 minutes, however, they were able to proceed to the next page at any time by pressing the Next button. New customers were significantly more likely than loyal customers to advance (i.e. press the Next button) before the 2 minutes were up ( $\chi^2(1) = 6.79, p < .01$ ). Moreover, loyal customers wrote more (i.e. number of words,  $M = 7.57$ ) than new customers ( $M = 6.45$ );  $t(97) = 2.05, p < .05$ ).

The current study adds to our knowledge of an underexplored role of entitlement in the marketplace. Our research shows that preferential treatment, or situations when a firm singles out specific customers, can have detrimental effects for a provider. Customers who receive special treatment without any justification tend to feel more entitled to cross limits set for others, compared with those who believe they earned such treatment.

A key possible implication of this research is that customer prioritization can sometimes backfire. All customers need to feel special, but this feeling should be based on past relationships with a company. Theoretical and practical implications will be discussed in the session.

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# Psychoanalytically Reading Hedonic Consumption in the 50 Shades Trilogy

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## EXTENDED ABSTRACT

The libertine philosophy of the Marquis de Sade propagates myriad thought-provoking ideas pertaining to the human condition. In what is arguably his most infamous novel, *The 120 Days of Sodom* (1785), he subverts the most fundamental social mores that prevailed within eighteenth-century France—and which are largely maintained today—by telling stories of incest, pedophilia, homosexuality, torture, and murder. The Marquis de Sade more explicitly elaborates on his philosophical positioning in his dialogue based prose, *The Philosophy in the Bedroom* (1795). In this text, he promotes (sexual) hedonism as the only and the ultimate objective; therein, completely negating other human pursuits such as love and morality. Since the circulation of Sade's writings, his ideas have permeated—with various degrees of tenacity—the sexual discourses in different Western societies across different periods (Jones & Spicer, 2009).

The idea of hedonism has become a mainstay in the marketing literature. More than three decades ago, Hirschman and Holbrook (1982: 92) defined hedonic consumption as: '[T]hose facets of consumer behavior that relate to the multi-sensory, fantasy and emotive aspects of one's experience with products'. This form of consumption is 'motivated by the desire for fantasy, fun and sensual pleasure' (O'Curry and Strahilevitz, 2001: 37). It is within the phenomenological experience of hedonic consumption that one's subjectivity becomes proverbially suspended from reality and enters the realm of fantasy (see Addis and Holbrook, 2001). While hedonic consumption has been empirically investigated from a range of methodological channels (e.g., Chitturi, Raghunathan and Mahajan, 2008; Lofman, 1991), and while this notion subsumes the idea of erotic consumption, little is known about how hedonic consumption becomes a source of the subject's sexual desire. An intervention from psychoanalytic theory presents a fruitful opportunity inasmuch as it offers the analytical resources necessary to conceptualize the libidinal and psychic cathexis of sexual desire. Indeed, this theoretical perspective allows for consideration of how hedonic consumption functions as a psychological mechanism by, and through, which desire manifests.

This paper illuminates how the hedonic consumption of sexual desire, as a discursive representation of subversion against the name-of-the-father, serves to disrupt the normality of the Symbolic Order. To do so, I critically appraise E. L. James' (2011; 2012a; 2012b) *50 Shades* trilogy and, in particular, I scrutinize the character of Christian Grey. The ontology of Christian's character reveals two important ideas. First, the notion of desire is, by nature, grounded in the ideal image; thus, akin to the imaginary its actualization always

remains an impossibility. In other words, desire based on the ideal image is outside of the phenomenological scope of human experience (Prasad, 2012). Second, Christian's character operates as an embodiment of the object of desire, which is present in the silenced interstices of the Symbolic Order and which performs as a persistent reminder of the potential subversion of the laws that constitutes this Order. As such, the hedonic consumption of Christian Grey, both by the protagonist of the books and by its reader, reflects the covert agency of transgressing from social conventions through the enactment of desire.

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# Influence of Spatial Reference Frame of Store Direction on Preference of Stores Varying in Social Density and Social Distance

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## EXTENDED ABSTRACT

Consumers are increasingly using way-finding devices in making spatial judgments such as deciding which store to visit. Despite this popular use of spatial representation by consumers, prior research has not examined how different types of spatial representations of store locations influences store preference. Prior research has also not investigated factors that influence shoppers to shop in a more vs. less crowded store (Hui, Bradlow, and Fader 2009) and in a store visited by socially distal (dissimilar) vs. proximal (similar) consumers. This research fills these gaps by drawing on research from spatial cognition (Klatzky, 1998) and construal level theory (Trope and Liberman 2010) to investigate the influence of spatial representation of stores' locations on consumers' preference of stores varying on social density and social distance.

We posit that allocentric (egocentric) reference frame in which store directions are presented with reference to other landmarks (self) induces abstract (concrete) construal resulting in preference of more (less) crowded stores and of stores visited by socially dissimilar (similar) shoppers. Egocentric representation of two stores constitutes sequential directional information from a person's location to each store (Chen et al., 2009), implying analytical processing and concrete construal (Förster, 2009). Conversely, allocentric representation constitutes location information of one store relative to the other where individuals focus on gestalt like relationship between locations (Chen et al., 2009), implying abstract construal. Additionally, Trope and Liberman (2010) have established that abstract construal increases salience and weight of desirability (vs. feasibility) features whereas concrete construal increases salience and weight of feasibility (vs. desirability) features. Pan and Siemens (2011) have suggested that a more crowded store is more desirable to shop in because consumers perceive it to have high quality products, attractive prices, and more variety. Conversely, a less crowded store is more feasible to shop in because consumers perceive it to be more convenient to shop in. Therefore, we hypothesize that:

*Hypothesis 1: Spatial reference frame of stores' locations influences consumers' preference of stores varying in social density such that egocentric (allocentric) reference frame increases preference for less (more) crowded stores*

*Hypothesis 2: Construal level mediates the influence of spatial reference frame on preference of stores varying on social density*

Similarly, prior research suggests that a store visited by dissimilar shoppers is more desirable to shop in because consumers perceive it to have high product variety and greater variability in quality and price of products; in contrast, a store visited by similar shoppers is more feasible to shop in because consumers perceive it to be more convenient and less effortful. Thus, we hypothesize:

*Hypothesis 3: Spatial reference frame of stores' locations influences consumers' preference of stores varying in social distance such that egocentric (allocentric) frame increases preference for stores visited by similar (dissimilar) shoppers*

*Hypothesis 4: Construal level mediates the influence of spatial reference frame on preference of stores varying in social distance*

We ran six studies to test our hypotheses. In Study 1, we manipulated reference frame using the approach of Brunye and Taylor (2008) and tested the main effect of reference frame on store preference varying in social density and social distance. Results revealed allocentric (egocentric) frame increased preference for shopping at a more (less) crowded DVD store ( $\beta = .89, p < 0.01$ ;  $M_{\text{allocentric}} = 4.95$  vs.  $M_{\text{egocentric}} = 4.06, t = 3.06; p < 0.05$ ). Similarly, allocentric (egocentric) frame increased preference for shopping in a grocery store frequented by dissimilar (similar) shoppers ( $M_{\text{allocentric}} = 5.25$  vs.  $M_{\text{egocentric}} = 4.79, t = 2.58; p < 0.05; \beta = .45, p = .01$ ).

Study 2 replicated Study 1 results by asking subjects to express their preference for grocery shopping at the same store during weekend or weekday (grocery stores are busier over the weekends) or during the evening or the daytime (younger (mixed) shoppers shop in the evening (daytime)) for the social density and social distance tasks, respectively. Participants in allocentric (egocentric) reference frame preferred to shop during the weekend (weekday) ( $M_{\text{Allocentric}} = 5.22$  vs.  $M_{\text{Egocentric}} = 4.5, p < 0.05$ ) and in the daytime (evenings) ( $M_{\text{Allocentric}} = 5.25$  vs.  $M_{\text{Egocentric}} = 4.0, p < 0.05$ ).

Studies 3a and 3b investigated mediation by construal level. Mediation analysis (Preacher and Hayes 2008) show that the main effect of reference frame on store preference varying in social density was mediated by construal level ( $a \times b = .32, 95\% \text{ CI} = 0.01$  to  $1.11$  excluded zero), and the main effect of reference frame on store preference varying in social distance was similarly mediated by construal level ( $a \times b = 1.05, 95\% \text{ CI} = 0.52$  to  $1.75$ ).

Study 4a investigated if consumers perceived the more vs. less crowded store differentiated in desirability and feasibility factors, and if the relative salience of desirability and feasibility factors (measured through response latencies) mediated the effect of reference frame on store preference varying in social density. The more crowded store was rated higher on desirability factors ( $M_{\text{desirability}} = 5.13$  vs.  $M_{\text{(midpoint of scale)}} = 4, p < 0.01$ ) and lower on feasibility factors ( $M_{\text{feasibility}} = 2.66$  vs.  $M_{\text{(midpoint of scale)}} = 4, p < 0.01$ ) than the less crowded store. Mediation analysis revealed that the main effect of reference frame on store preference varying in social density was mediated by desirability-feasibility salience ( $a \times b = 0.73, 95\% \text{ CI} = 0.046$  to  $1.67$  excluded 0).

Study 4b investigated if a store visited by dissimilar vs. similar shoppers differentiated in desirability-feasibility factors, and if desirability-feasibility salience mediated the main effect of reference frame on store preference varying in social distance. A store visited by dissimilar shoppers was rated higher in desirability related attributes ( $M_{\text{desirability}} = 4.9$  vs.  $M_{\text{(midpoint of scale)}} = 4, p < 0.05$ ), and lower in feasibility related attributes ( $M_{\text{feasibility}} = 3.1$  vs.  $M_{\text{(midpoint of scale)}} = 4, p < 0.05$ ) than a store visited by similar shoppers. Mediation analysis revealed that the main effect of reference frame on store preference was mediated by desirability-salience ( $a \times b = .24, 95\% \text{ CI} = 0.06$  to  $.62$ ).

Theoretically, our findings contribute by introducing the concept of spatial reference frame of store's location, identifying it as an antecedent of construal level, and showing its influence on consum-

ers' decision making in a shopping context by influencing whether desirability or feasibility factors become salient.

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# Will the Excitement Help You Remember? The Impact of Ad Arousal on Memory

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## EXTENDED ABSTRACT

Several studies in the psychology literature demonstrate differential effects of arousal on immediate versus-delayed memory (e.g., Quevedo et al., 2003; Sharot & Phelps, 2004). These studies demonstrate a generally consistent positive effect on delayed memory, and either null or negative effects on immediate memory. Researchers acknowledge that further studies using different approaches are needed to elucidate these differential effects (see Quevedo et al., 2003).

Two theoretical approaches have been suggested to account for the demonstrated results: a cognitive approach and a neuroscientific approach.

**Cognitive approach.** Walker's (1958) action decrement theory suggested that memory consolidation (i.e., the process of converting information from short-term memory into long-term memory) is a gradual and enduring process. During the time period in which consolidation occurs, there is a degree of temporal inhibition of recall, which serves to protect the consolidation traces against disruption. More recently, Revelle and colleagues (e.g., Revelle, 1989; Revelle & Loftus, 1990, 1992) extended this explanation and introduced the "tick rate hypothesis", which suggests, "arousal increases the rate at which the environment is sampled. In direct analogy to the clock speed of a computer, this hypothesis predicts that increased arousal should lead to a faster rate of response to environmental cues, but to a decrement in availability in immediate memory due to the increased interference associated with a more rapid sampling rate. Finally, by increasing the rate at which the to be learned material is associated with the internal and external context, the model also predicts that high arousal should facilitate long term retrieval." (Revelle & Loftus, 1992, p. 142).

**Neuroscientific approach.** McGaugh (2000) suggested that emotional arousal leads to neurohormonal changes, which activate ( $\beta$ -adrenergic) receptors in the amygdala. This, in turn, enhances hippocampal-dependent memory consolidation, leading to better recall. Sharot and Yonelinas (2008) postulate that because consolidation of memory takes place over a period of time, arousal should positively impact delayed memory more so than immediate recall. Indeed, recent brain imaging studies have shown that amygdala activation during encoding is related to delayed memory for emotional items (e.g., Bakalash & Riemer, 2013), but not to immediate memory (Kensinger & Schacter 2006). Quevedo et al. (2003) also suggest that different mechanisms are involved in immediate versus delayed memory. While amygdala activation is related to delayed memory, it is not related to immediate memory (Bianchin et al., 1999). In immediate memory, release of substances such as adrenal hormones, which are known to modulate memory storage, may in fact lead to a decrement in immediate memory (Sharot & Phelps, 2004).

In summary, both theoretical approaches suggest a positive effect of arousal on delayed memory, and either a null or negative effect on immediate memory. Our research examines this research question.

## Method

**Sample and Design.** Sixty-nine undergraduate students in introductory business courses participated in a 2 (time between encoding and retrieval: short vs. long)  $\times$  2 (arousal: low vs. high)  $\times$  2 (relevance: low vs. high) experiment. Time between encoding and retrieval was manipulated between subjects by having participants

completing the memory measure 15 minutes or two days after viewing the ads. Arousal and relevance were manipulated within subjects using different ads, as described next.

**Stimuli.** Participants viewed 40 real ads, which were classified into the four arousal  $\times$  relevance conditions (10 ads for each condition). The order of ad presentation was counterbalanced. A pretest was used to select ads for unfamiliar brands. Of the 63 pretested ads, 40 ads were selected that achieved equal representation of ads across the arousal and relevance factors.

**Procedure.** Participants viewed the ads on computer screens and were instructed to focus on the design of the ads. This instruction was given to mirror real-life exposure to ads, wherein consumers usually do not utilize a great deal of cognitive resources while viewing ads. Each ad was presented on the screen for 10 seconds. Order of presentation was counterbalanced. After viewing the ads, the participants completed a filler task, in which they were asked to spend 15 minutes reading three passages. Participants in the immediate recall experiment moved to the retrieval task right after the filler task. Participants in the delayed recall experiment completed the retrieval task two days later.

Ad-arousal had a negative effect on immediate memory but a positive effect on delayed memory. These effects were demonstrated only when arousal was relevant to the ad claim. When arousal was irrelevant to the claim, arousal affected neither immediate nor delayed memory of the ad claim. These results provide insights into the boundary conditions for the effect of arousal on ad claim memory.

The results support Walker's (1958) action decrement theory, suggesting that arousal will improve long-term memory but will inhibit short-term memory. Results also support later theorizing such as the "tick rate hypothesis" (e.g., Revelle, 1989; Revelle & Loftus, 1990, 1992) and neuroscientific research such as by McGaugh (2000) and Sharot and Yonelinas' (2008). As such, our results suggest that advertisers should use arousing messages only if they are interested in improving long-term memory. However, arousing messages should not be used when advertisers want to improve short-term memory.

Our results also suggest that emotionally-arousing appeals influence memory only when those appeals are relevant to the ad claim, but have no effect on memory when they are irrelevant to the ad claim. The interaction between arousal and its relevance to the claim is in line with the broader representation effect proposed by Pham (1996), which suggests that high arousal leads people to focus on cues that can be easily processed. Extending Pham's conceptualization, our research shows that high-arousal appeals can be more easily processed than low-arousal appeals, because they are more salient. Since arousing elements are easily processed, more attention will be paid to them, and in turn they will be better remembered. The arousal elements can serve later as retrieval cues for the ad claim. Thus, improved memory for the arousing elements will improve memory for the ad claim. This is true, however, only if there is an association between the arousing elements and the ad claim.

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# Removing Individuals' License to Misbehave

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## EXTENDED ABSTRACT

Consumers and corporations are increasingly motivated to engage in and promote prosocial, environmental, and ethical actions. As beneficial as these actions are, they are not always as successful or impactful as they could be, as they sometimes lead to undesired consequences. Recent research suggests that when individuals feel they have done a good deed, this in turn grants them 'license' to engage in more self-interested, behaviors which otherwise would have discredited the individual (Jordan, Mullen and Murningham 2011; Khan and Dhar 2006). A number of studies in marketing, psychology, organizational behavior and energy policy have found evidence of such licensing effects (see Miller and Effron 2010; for a review).

It is counterproductive if a good deed is likely to be followed by a selfish or immoral act. Such a regulatory pattern not only threatens people's moral integrity but also undermines personal welfare and progress, yet we are not aware of any research that examines how to counteract it. Therefore the main goal of this research is to fill this gap and develop and test an intervention aimed at counteracting the licensing effect. This intervention targets a critical but often overlooked condition for moral licensing to occur: the *subjective availability* of one's good deeds, i.e. the ease with which relevant instances come to mind. When an individual is tempted to engage in self-interested behavior, if they have recently engaged in a good deed, then they can use this *available* deed as a license to misbehave. Thus, I propose that one point of intervention in the licensing process would be to reduce the *availability* of these recent good deeds, which in turn should counteract the licensing effect.

We argue that one way to reduce the availability of an individual's good deed is to decrease its accessibility in memory. In this paper we draw on previous research on psychological and choice closure to manipulate availability by inducing closure towards individuals' good deeds. In line with research on closure, in a pretest we demonstrate that a physical act of closure – having participants enclose a written recall of their good deeds within an envelope (Li et al. 2010) – reduces the accessibility of individuals' good deeds in memory. Building upon this research, across three experiments we tested whether inducing closure following an initial good deed would remove individuals' 'license to misbehave'.

Experiment 1 provided initial support for our hypothesis that closure would counteract individuals' licensing behavior. Participants were asked to recall either their environment-friendly actions (good deed) or a neutral action. The experimenter then collected all participants' booklets (no closure condition) or collected envelopes in which participants placed their booklets (closure condition). We then tested participant's intentions to engage in immoral actions for personal gain. Consistent with licensing, when there was no closure, individuals who had recalled their good deeds expressed significantly higher intentions to engage in immoral behaviors for personal gain compared to those who recalled a neutral action. Critically, in support of our hypothesis that closure would counteract these effects, once individuals engaged in an act of closure, there was no significant difference in the immoral intentions of those who recalled their good deed and those in the control condition. Engaging in an act of closure, following their good deed, brought participants back to a neutral baseline.

Experiments 2 replicated and extended our findings on several dimensions. First, we extended our results by measuring people's actual behavior (the time and energy they would be willing to expend to help others). Second, we extended the generalizability of our findings by testing the effects of closure on individuals' subsequent good, prosocial behavior. Third, moral licensing is only one side of the moral regulation coin and we wanted to extend the findings to the other side of the coin: moral compensation. Specifically, research on moral regulation has shown that when individuals engage in bad actions that lower their moral self-concept, they are subsequently more likely to engage in compensatory behavior to re-establish a positive self-concept (Jordan et al. 2011; Zhong, Liljenquist and Cain, 2009). Experiment 2 demonstrated that in addition to removing licensing behaviors, inducing closure following a bad action also removes individuals' compensation behaviors.

Experiment 3 extends these results further by counteracting licensing in another domain (prosocial actions) and measuring participants' actual immoral behavior (likelihood of cheating). In addition, it contributed to our understanding of moral licensing by examining a novel moderator of the licensing effect: how special participants' good deeds are to them. According to our model, the availability of an individual's good deed, i.e. the ease with which relevant instances come to mind, is a critical component for licensing behavior to occur. If, when an individual is tempted to misbehave their previous actions do not feel relevant (i.e. do not give them the sense of moral license), then they should no longer show the licensing effect. For example, if an action is objectively good (e.g. recycling) but it does not feel subjectively good to the individual (e.g. just feels like a habitual behavior), then it should not be available as a license to misbehave. Experiment 3 supports this hypothesis by demonstrating that the actor-perceived specialness of a good deed is a significant moderator of the licensing effect.

Given the increasing interest in prosocial, environmental, and ethical actions, it is important that these efforts be as impactful as possible. In order for these efforts to make a significant difference it is critical that individuals do not counteract the progress they make in one domain by subsequently licensing themselves in another. Therefore, understanding the drivers of licensing behaviors and developing and testing interventions aimed at counteracting licensing behaviors is critically important. Our research takes a first step at addressing this issue, by showing that a physical act of closure, enclosing ones good deeds in an envelope, can effectively remove individuals' license to misbehave. We believe these findings can guide the design of small but powerful interventions to improve everyday behavior and increase societies' welfare.

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# What's in a Name? Sound Symbolism of Stock Ticker Symbols Predict Stock Performance

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## EXTENDED ABSTRACT

Despite the assertions of economic theory, the “rational man” appears to be influenced by irrational factors on a daily basis. The current research contributes to this literature by examining the role of a stock’s ticker symbol on its stock performance. Specifically, our research is concerned with the question of “What is in a name?” within the context of ticker performance. Stock investment decisions would seem to be high involvement and rational choice processes, yet research has documented an array of seemingly non-economic influences: the weather (Kamstra, Kramer, and Levi 2003) or the loss of a favorite team (Edmans, García, and Norli 2007). Even the mere fluency (easy of processing) of pronounceable stock names can affect stock performance. Stock names that are more pronounceable outperform those that are less so (Alter and Oppenheimer 2006).

Ticker symbols serve as a key identifier by which investors recognize stocks in which they invest. Consequently, simple changes in ticker symbols can lead to a significant drop in price, presumably because the change induces a certain level of investor confusion (Kadapakkam and Misra 2007). Superstition also affects stock performance. For example, Chinese tickers contain numbers and letters. Using “lucky” numbers in Chinese culture in one’s company ticker leads to higher returns in the first year of trading (Hirshleifer, Jian, and Zhang 2012).

Given the stock ticker symbol’s role as a key identifier, we propose that phonetic symbolism, which is based on the sound of pronounceable ticker symbols, may also affect a stock’s performance after its initial public offering (IPO). Therefore, the choice of ticker symbol sound is a potentially important part of the IPO decision, as its sound could be used to communicate information to potential traders.

Phonetic symbolism refers to this notion that the mere sound of words convey information (French 1977). One way of classifying consonants is as stops or fricatives. Stop consonant sounds are formed through complete closure of articulators so that air cannot escape the mouth. The letters *p*, *t*, *b*, *g*, *d*, and *k* (or hard *c*) are considered stops, whereas the letters *f*, *s*, *v*, and *z* are considered fricatives (Ladefoged 1975). Fricatives do not have complete closure of the articulators, and thus these sounds are created by forcing air through constrictions in the vocal tract. Research shows that these two types of sound convey very different concepts. Relative to fricatives, stops are considered larger, heavier, harder, more powerful, and more masculine (Klink 2000).

Just as brands can utilize the role of sound symbolism to design names (Klink 2000; Lowrey and Shrum 2007; Yorkston and Menon 2004), phonetic symbolism may also be important for designing superior-performing stock tickers. The current research predicts that stop (vs. fricative) consonant sounds, which are more associated with concepts such as power, size, and strength, will outperform those with fricative consonants, at least in the short-term.

Study 1 used the same data set that Alter and Oppenheimer (2006; study 3) generated for their study. Two coders blind to the hypothesis coded whether the initial consonant sound for each pronounceable ticker symbol was a fricative, stop, or neither, with 90% agreement.

To test our hypothesis, we conducted a MANOVA with the stop/fricative distinction as the independent variable and the per-

cent change in stock price at the four time points as the dependent variables. The results lend initial support for our phonetic symbolism hypothesis: Pronounceable stock ticker symbols with initial stop sounds outperform stock symbols with initial fricative sounds throughout the first year of trading.

Study 2 was conducted as a lab study in which business school students read a description of an IPO. Real IPO offerings were used as stimuli, but the ticker symbols were systematically manipulated throughout the IPO descriptions, so that the description and valuation data were the same across the pairings with the exception of the ticker symbols, which either had an initial fricative (e.g. VIF, FON) or stop (e.g. BIF, BON) sound (between subjects). After reading the IPOs, participants indicated how well they thought the stock would perform 1 month and 1 year later (1 = not well at all, much lower price; 9 = very well, much higher price). (Tell what happened here; i.e., report the results in prose).

We also examined how perceptions of different industries, based on gender (masculine vs. feminine), might lead to differing effects. This matchup hypothesis should occur from the “feel right” effect of matching sound meaning to femininity/masculinity of the company, as demonstrated in previous work on phonetic symbolism and brand names (Yorkston and Menon 2004). Stop sounds were predicted (by participants) to outperform fricative sounds for the masculine industry (financial management), but the reverse was found to be true for the feminine industry (restaurant group).

Study 3 used a new secondary dataset from the New York and American stock exchange (IPOs from 1980-2004). Tickers were coded by an individual blind to the hypotheses, for pronounceability and then based on consonant sounds and gender of industry. The stocks were initially analyzed with MANOVA separately for the masculine and feminine industries. Although the feminine industry results were slightly weaker than those of the masculine industry, both sets indicated a pattern in which tickers with initial stop sounds had higher returns. Therefore, the dataset was collapsed across industries to allow for greater power in analyzing the consonant effects. Across the collapsed dataset we find a strong pattern, where stops outperform fricatives significantly, or marginally at least, throughout the first year of trading.

Companies are able to choose their own ticker symbols as they enter exchange markets. Therefore, those who design stock names and tickers during the IPO process would be well served to design their names such that they are easy to pronounce and have a ticker symbol with a stop consonant, to indicate and hopefully induce stronger initial performance. Although this effect might diminish, as more objective performance data becomes available, these effects speak strongly to the ability to get your stock performing on the right foot from the start.

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# A Left-Side Bias? The Influence of Nutrition Label Placement on Product Evaluation

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## EXTENDED ABSTRACT

Due to regulations, products sold worldwide are often required to have nutritional labels. However, companies have considerable flexibility regarding where to place these labels on packages. In this research, we examine whether the lateral (left vs. right) position of a nutrition label influences product perceptions. Specifically, would product perceptions be different if a nutrition label is placed on the left versus the right side of a product package?

Studies in numerical cognition have documented that consumers make numerical judgments quicker and more accurately when the stimuli is displayed congruently (versus incongruently) with the spatial organization of numbers (Proctor and Cho 2006). Specifically, it is argued that individuals use a mental number line to conceptualize magnitude, which is evidenced by superior performance at magnitude comparisons when large (small) numbers are placed on the horizontal right (left). In a store context, this left-to-right mental organization of numbers can influence preferences and choices (Valenzuela and Raghurir 2010).

Given the well-established finding that horizontal left (right) side of space is associated with small (large) number, we expect that consumers will apply this mental-schema to the evaluation of caloric information. Hence, when caloric information is presented on the left side of the package (vs. right), consumers will associate the caloric information with smaller magnitude and therefore deem it less harmful to nutritional valuations of the product. We tested our hypothesis with the help of four studies.

Study 1A used a 3 (placement of nutritional label on package: left vs. right vs. center) X 2 (healthfulness of product: healthy vs. unhealthy) between-subjects experiment. We examined the moderating effects of healthfulness of the product since the halo effect that healthy products typically carry (Chandon and Wansink 2007) could attenuate the influence of nutritional label placement on evaluations. Photo-shopped versions of different product package images were created. The nutritional information of a frozen yogurt product was placed on the left, center, or right side of the product packaging. The center condition served as a baseline. In order to manipulate healthfulness of the products, the caloric information provided in the packaging equaled the amount found in a low-fat frozen yogurt bar or an ice cream bar. The key dependent variables were nutritional attitude towards the product, measured with a 4-item seven-point scale (Kozup, Creyer, and Burton 2003) and attitude towards the brand, adapted from Burnkrant and Unnava (1995). The results of Study 1A demonstrated that for both types of products, placing the nutritional information on the left led to higher nutritional attitudes than placing it on the right. However, compared to the control condition, the effect of placement (left vs. center) was only significant for the unhealthy product.

In Study 1B, we examine if the *left-small, right-large* associations influence consumer judgments of real products. Actual product packages of a real wafer cookie product were created with the nutrition label seamlessly pasted on the back of the package. The results revealed that participants held higher nutritional attitudes toward the product when the nutritional label was placed on the left compared to the right or the center of the product.

Study 2 demonstrates that consumers with low nutritional involvement, who are more likely to minimize the cognitive effort required to analyze nutritional information, are more vulnerable to

the placement of caloric information than those consumers with high nutritional involvement. In this study, we manipulated caloric placement in the front façade of a lab-created version of a granola product and then measured nutritional involvement. As expected, the results showed that participants low on nutritional involvement evaluated the product higher on nutrition value when the information was on the left compared to the right. However, the effect was attenuated for participants with high nutritional involvement.

Study 3 explored some of the process differences that occur when nutritional information is placed on the left versus right side of a product package. Also, to examine robust experimental scenarios, Study 3 provided a broad health claim “low-fat”, which was placed on the left (vs. right) of an unhealthy (vs. healthy) package. We expect, that similar to when numerical caloric information is provided, low-fat claims will be evaluated as more credible when placed on the left because this side of space is associated with small/low numerical quantities. We analyzed participants’ thought protocols to gain some insights into the underlying process. We classified the thoughts participants had about the product into two categories: “Health benefits” vs. “Health harms”. The results revealed that for unhealthy products, a low-fat claim on the left of the product led to higher number of health benefit thoughts compared to when it was on the right. Furthermore, when the product was unhealthy, placing the claim on the left (vs. right) led participants to perceive the health claim as more believable. However, when the product was healthy, the placement of the low-fat claim did not influence how much participants elaborated on the health benefits of the product or how much they believed the claim, which is consistent with the health halo account. Results of a mediation test demonstrated that the number of health benefit thoughts about the product mediated the effect of nutritional information placement on belief, suggesting that placement, leads to changes in elaboration, which subsequently makes the claim more believable.

Our research studies contribute to the understanding of how mental organization of magnitude can influence consumer evaluations of quantitative information. Across four studies, we provide evidence that the placement of a nutritional label on the left (vs. right) of the product results in higher nutritional valuations of the product. From a practical perspective, it can help regulators/managers decide optimal positions for placing nutritional information on product packages.

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# Targeting Dis-identification Strategies with Consumer Communications: The Case of Sexual Health Risk in Men Who Have Covert Sex with Men (MCSM)

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## EXTENDED ABSTRACT

### Introduction

Research on men who engage in covert sexual activity with other men (MCSM), tends to focus on generalizable similarities across racialised categorisations (Braz et al 2007). However, research emerging more recently suggests that men engaged in this activity are much more diverse than previously understood and that more in-depth research is required to begin to unpick the nature of their engagement with their behaviour in general and risk in particular (Robinson & Vidal-Ortiz 2013). HIV infections continue to increase worldwide, and challenges are being made to the efficacy of sexual health promotions, suggesting a more nuanced approach to the one-size-fits-all individualised character of much sexual health marketing communications (Lee 2007). To this end, we address the research question of how to target sexual-health related social marketing communications and services to men engaged in covert sexual activity with men (MCSM) through the development of a nuanced understanding of the risk assessment process within this diverse and challenging sub-cultural group.

### Conceptualisation and theory development

The conceptualisation of this research intersects two concepts, risk and dis-identification. The literature on MCSM focuses on stigma and denial, and we suggest dis-identification offers a potential new lens on this activity. Dis-identification relates to an effort being made, or strategy employed to achieve distance from a particular identity, context, group or organisation (Devers et al 2009). This is characteristic of MCSM, who largely do not conflate their sexual behaviour with their sexual identity (Robinson & Vidal-Ortiz 2013) involving active disavowal of non-heterosexual identity groups. Risk is a common theme in research on HIV communications in general. We take a social constructivist approach to risk which involves the formation of a chain between three conceptual objects, the object deemed to pose a risk, a putative harm and a linkage alleging some form of causation between the two, located within multiple and often conflicting discourses of risk (McGuire and Hardy 2013) which might be ambiguous and shifting and within membership of social groups that impact an individual's perception of risk (Baral et al 2013). Using a novel intersection of these two concepts we develop a framework which elaborates upon how in the face of this multiplex notion of risk, different dis-identification strategies result in either: the subject not locating themselves within the risk context of HIV infection or; the subject locating themselves within the risk context but with a reduced perception of risk.

### Method

Qualitative research methods are not common across this subject group due to access and sensitivity issues, and most of the literature is located within disciplines that focus on making statistical inferences from large datasets. However it has been argued that "this search for generalizable models has come at the expense of understanding unique cultural patterns and social dynamics often found in sub-groups that foster high-risk sexual behaviour" (Barnshaw and Letukas 2010:487). In this study qualitative techniques were employed, both online (utilising chat services) and off line in-

depth interviews and ethnographic encounters. The emergence of the internet as a primary site to facilitate the meeting of sexual partners for gay/bisexual men in general, provides a way in to this community (Blackwell 2010). The research engaged people on contact sites using an overt, but pseudonomised identity as a researcher investigating sexual behaviour. Participants were assured complete confidentiality. Through prolonged contact, a general knowledge about the subject and associated practices was acquired over a three year period, as is commensurate with ethnographic approaches designed to understand a sub-culture. The predominant data collection came from key informants recruited who were asked in more depth about their experiences, over longer periods and several contact instances. In total 10 individuals were involved in multiple in-depth interviews, although over 50 individuals engaged in some kind of discussion or data collection activity. Advice over psychosexual and sexual health counselling services was offered.

### Main findings

The main findings of the research document various dis-identification strategies MCSM employ that may result in unsafe sexual activity. The categories are summarised as: happenstance; substance-linked; sub-cultural; projection and normalisation. Happenstance dis-identification offers impulse behaviour explanatory narratives; Substance linked dis-identification offers altered mental state explanatory narratives, and sub-cultural dis-identification offers alternative lifestyle explanatory narratives. These three strategies result in reduced perception of personal responsibility, locating the subject's understanding of their behaviour as outside of the risk context for HIV. Projection and normalisation dis-identification strategies are more planned, and although they locate the subject's understanding of their behaviour as inside of the risk context for HIV, they interfere with the causal chain leading to high risk assessment. Several suggestions for targeted social marketing interventions are made based on the different strategies employed.

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# Tangible Possessions and the Self – How Objects Reduce Perceived Distance to Their Symbolized Meanings

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## EXTENDED ABSTRACT

Consumers tend to surround themselves with objects that carry self-defining meanings. They wear clothes that suit their personalities, they own furniture that embodies their lifestyles, they keep souvenirs of vacations they like to remember, and they are fond of pictures of people or events that are central to their selves. As Belk (1988) notes, “[that] we are what we have is perhaps the most basic and powerful fact of consumer behavior” (p. 139) – accordingly, a considerable amount of research has investigated the self-extending nature of possessions (e.g., Wallendorf and Arnould 1988; Kleine, Kleine, and Allen 1995; Ahuvia 2005). However, little theoretical knowledge exists regarding the question of how the tangibility of possessions relates to their self-extension function. Researchers frequently refer to “material” or “physical” objects (Belk 1988; Wallendorf and Arnould 1988), suggesting that possessions indeed need to be tangible to fulfill a self-extending function. But they also refer to abstract possessions such as ideas, experiences, or relationships (Belk 1988; Wallendorf and Arnould 1988), indicating that possessions forming part of the self do not need to have a solid, graspable form. However, if consumers indeed value possessions because they help them to build a sense of self, then it seems likely that concrete and tangible possessions may better serve this function than possessions that are just as abstract as their owners’ personality. Furthermore, an increase of intangible possessions such as digital goods (Belk 2013) as well as a growing interest in access-based and experience-oriented consumption styles (Bardhi and Eckhardt 2012; Bardhi, Eckhardt, and Arnould 2012; van Boven and Gilovich 2003) raises the need to understand how the tangibility of possessions contributes to self-extension processes.

Against this background, this research seeks to examine how the tangibility of possessions affects their ability to serve a self-extending function. In contrast to a large amount of literature in consumer research, the relevance of symbolic objects is here not seen solely in their semiotic connection to a signified meaning (see, e.g., Grayson and Shulman 2000) but particularly in the perceived spatial proximity that they establish between their meaning and the body and mind of a person. Building upon construal-level theory (for an overview see Liberman, Trope, and Stephan 2007), we argue that close, symbolic objects reduce the perceived distance to their signified meanings. We further argue that this reduction of perceived distance results in an increase of self-extension and more positive behavior (behavioral intentions) towards the signified meaning. We claim that through this process tangible possessions bridge the gap between the self and meanings that define the self.

Four studies support our conceptual framework. Study 1 supports the basic hypothesis that a symbolic possession (i.e., wedding ring) can reduce perceived distance to a self-defining, past event (i.e., wedding). Study 2 refines this finding by revealing that the spatial distance to a symbolic object (i.e., a mug) influences the perceived distance to its signified meaning (i.e., a personal experience that is attached to the mug). More specifically, the results indicate that a decrease of spatial distance to a symbolic object leads to a decrease of perceived distance to its meaning. Building upon these findings, study 3 tests the interaction of object distance (i.e., a tennis ball)

and the object’s symbolic connection to a meaning (i.e., Wimbledon Championship) on perceived distance, self-extension and behavioral intentions towards that meaning (i.e., Wimbledon Championship). The results support the assumption that objects only reduce perceived distance to meanings when (1) they are spatially close and when (2) they are symbolically connected to the meaning. Moreover, the results indicate that a reduction of perceived distance towards a meaning results in increased self-extension and more positive behavioral intentions towards that meaning. Study 4 provides further support for the influence of symbolic objects on behavioral outcomes. Results indicate that symbolic objects (i.e., membership card) can increase the self-extension to an entity that cannot be experienced directly (i.e., a club that is yet to be founded). Moreover, the results indicate that this increase in self-extension leads to more positive behavioral intentions as well as actual behavior towards the entity (i.e., the club).

In sum, our results support the notion that objects can reduce the perceived distance to their signified meanings. As postulated, we find support that this effect is moderated by the symbolic connection between an object and a meaning. We also find support for the hypotheses that the reduction of perceived distance towards a meaning results in stronger self-extension as well as more positive behavioral intentions and actual behavior towards that meaning.

Our conceptual framework offers a potential psychological explanation for the personal importance of tangible possessions. It suggests how tangible objects can shape and strengthen the connection between individuals and intangible, self-defining meanings (e.g., relationships, events, organizations, and services). Our approach also provides a possible psychological explanation for why certain meaningful objects (e.g., rings and membership cards) receive their cultural relevance. We encourage a further investigation of the importance of physical properties of possessions, their spatial relation to consumers, and their semiotic connection to their signified meanings. Furthermore, our approach offers a new perspective on the current discussion of the importance of material possessions. Our results support the notion that concrete possessions facilitate the connection between consumers and abstract meanings. Hence, we argue that the tangibility of objects has an essential value in itself that is mostly neglected in contemporary utility-focused perspectives of economic goods (Bardhi and Eckhardt 2012; Bardhi, Eckhardt, and Arnould 2012).

Finally our research develops a new perspective on construal-level theory. Our results suggest that construal-level might not only be induced by distance to entities per se but also by material artefacts that symbolically represent these entities and therefore make them directly experienceable. This argumentation establishes a further promising avenue for future research in the field of semiotics and construal-level theory.

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# Service With a Smile or Screen? How Replacing Personnel With Machines Affects Customers' Satisfaction With a Service

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## EXTENDED ABSTRACT

In strive for increased service productivity, businesses often substitute expensive service personnel with self-service technologies and actively push customers towards self-service channels (White, Breazeale, and Collier 2012). However, are human and non-human service channels really interchangeable and do customers respond to these service channels in the same way? Previous research does not provide an answer to this question. In two experiments the present research thus examines 1) whether customer satisfaction with an identical service outcome differs between personal and technology-based self-service channels and 2) why and when satisfaction levels may differ.

According to the person-sensitivity bias (Moon and Conlon 2002) human perceptions and evaluations of an outcome depend on whether the source is human or non-human. In particular, this bias suggests that humans are evaluated in more extreme manners, getting more credit for good outcomes on the one hand, but also taking more blame for bad outcomes than their non-human counterparts on the other. While this bias has been demonstrated in a series of studies in social psychology (e.g., the evaluation of security cameras versus security personnel; Moon and Conlon 2002), applications within the marketing field are scarce or almost non-existent. Contrary to the propositions of the person-sensitivity bias, social response theory (Reeves and Nass 1996) suggests that humans respond quite similarly to machines and humans. Findings of this line of research indicate that customers treat their interaction with a machine as a social encounter and hence also make social attributions regardless of their human or non-human counterpart.

In an attempt to reconcile these disparate findings, this research proposes that customers evaluate personal, "high-touch" services in more extreme manners than technology-based, "high-tech" services, as suggested by the person-sensitivity bias. That is, customers should be more (less) satisfied with a good (bad) service when a person instead of a machine delivers the service. However, consistent with social response theory, we also propose that customers make self-serving attributions regardless of the service channel. That is, customers should always be willing to accept more responsibility for a good outcome, while denying responsibility for poor outcomes. Nonetheless, we propose that channel differences arise as customers undergo a fundamental attribution error and thus overestimate the power of a service employee to intentionally cause an outcome (Jones and Harris 1967). Customers should hence attribute consistently more responsibility for an outcome to the provider when using a personal service instead of a self-service. Customers using a self-service, on the contrary, should be more likely to consider external, situational factors as well as their own contributions as these factors are more salient to the self than when observing the behavior of other people (egocentric bias: Ross and Sicoly 1979).

To test our assumptions, we conducted an online experiment with a 2 (self-service / personal service channel) x 2 (high / low customer participation) x 3 (poor / neutral / delightful quality service outcome) between-subjects design, in which participants were confronted with different service scenarios. A total of 1243 subjects participated in our main experiment, with our sample closely following U.S. census information. As we expected, results confirm a person-sensitivity bias in service encounters. Accordingly, when service out-

comes are good, customers are more satisfied with the provider of an identical outcome when using a personal service channel (PSC:  $M = 6.61$ ) instead of a self-service (SST:  $M = 6.46$ ;  $F(1, 395) = 4.18$ ,  $p < .04$ ). When service outcomes are poor, however, customers are more satisfied (or less dissatisfied) when using a technology-based self-service ( $M = 1.45$ ) instead of a traditional personal service ( $M = 1.33$ ;  $F(1, 397) = 3.92$ ,  $p < .05$ ). Findings further suggest that these channel effects arise because customers make different causal inferences for a service outcome when using a self-service instead of a traditional personal service. Accordingly, results reveal that customers of a personal service seem to overestimate the power of the service employee to cause a specific outcome and assume that the employee causes it intentionally. As a consequence, customers attribute more responsibility to the provider when using a personal service instead of a technology-based self-service, especially when outcomes are good (good outcome:  $MSST = 5.57$  vs.  $MPSC = 5.88$ ;  $F(1, 395) = 7.77$ ,  $p = .01$ ; poor outcome:  $MSST = 5.33$  vs.  $MPSC = 5.56$ ;  $F(1, 397) = 2.87$ ,  $p = .09$ ). Customers using a technology-based self-service, on the contrary, are more egocentric and hence consistently attribute more responsibility to themselves (good outcome:  $MSST = 3.92$  vs.  $MPSC = 3.38$ ;  $F(1, 395) = 15.33$ ,  $p < .001$ ; poor outcome:  $MSST = 3.42$  vs.  $MPSC = 3.07$ ;  $F(1, 397) = 5.39$ ,  $p = .02$ ) or – when outcomes are poor – to external, situational factors ( $MSST = 2.30$  vs.  $MPSC = 1.87$ ;  $F(1, 397) = 12.72$ ,  $p < .001$ ).

By drawing from literature on interdependence vs. independence and extending the main experiment to an intercultural level, a follow-up experiment conducted in India demonstrates that the channel differences mostly arise in highly independent (Western) cultures and cease to exist in more interdependent (Eastern) cultures. Results reveal that one reason for this limitation is the fact that customers from highly interdependent cultures differ from their Western counterparts by assigning responsibility for an outcome differently to maintain social harmony. This study thus demonstrates an important boundary for the channel effect uncovered in our main experiment.

To date, most research has underlined the appeal of self-services for service providers or customers and has focused on determinants of the customers' acceptance and adoption of these service channels (e.g., Meuter et al. 2005). The present research demonstrates, however, that humans and machines are not interchangeable in service delivery. From a theoretical point of view, it is important to understand whether and why customer satisfaction is harder to achieve when customers interact with a machine instead of a person. From a managerial point of view, a contrast of the impact of personal vs. technology-based service channels provides important insights into possible drawbacks of self-service technologies and offers insights on when or how their introduction may be most appropriate.

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# Product Gamification

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## EXTENDED ABSTRACT

Facilitating consumer-company interactions by utilizing game based mechanics is a recent phenomenon that attracted substantial awareness in business practice: until 2014, more than 70 % of the Forbes Global 2000 organizations may have at least one gamification application (Gartner, 2012). However academic research on the role of gamification in consumer-company interactions is silent on both its consequences and the underlying psychological process. This paper examines the preconditions, psychological mechanisms, and behavioral consequences of game-based consumer-company interactions. Specifically, the current research introduces the concept of *product gamification* whereby consumers “unlock” an object (such as a product, feature, or offer) in a gamified shopping context. We predict and show that product gamification can facilitate consumer preference and choice during the purchase process caused by the challenge that is induced by the gamified shopping experience. This research extends and generalizes recent work on the positive implications of induced effort such as the increased desirability of alternatives (Kim and Labroo 2011; Schrift, Netzer, and Kivetz 2011).

We offer empirical evidence from five studies on the influence of product gamification on consumer preferences and choice. The converging evidence from both field and lab data shows that product gamification relative to a non-gamified shopping process increases consumers’ preferences for the unlocked alternative and increases the number of chosen product features in a gamified shopping situation relative to non-gamified, i.e. traditional, shopping situations.

In study 1, 96 students were randomly assigned to either a product gamification or control condition. In the product gamification condition, participants played a beerpong game and were informed that an alternative chocolate bar is unlocked if they throw a ping pong ball across a table into one of six (empty) cups successfully. Participants were free to trade their initial choice with the unlocked chocolate bar (which was identical except for the packaging color). Participants of the control condition completed a filler task, controlling for mere effort between conditions. As predicted, participants in the product gamification condition switched significantly more often to the unlocked chocolate bar relative to participants in the control condition ( $M_{\text{Game}}=60\%$ ,  $M_{\text{Control}}=39\%$ ,  $F(1,94)=4.120$ ,  $p < .05$ ).

A second study examined whether product gamification can convert non-buyers to buyers. 85 students ( $M_{\text{Age}}=22.36$ ,  $SD_{\text{Age}}=2.74$ , 41% females) were randomly assigned to either a product gamification or a control condition. Mirroring the experimental paradigm of Study 1, participants played a beerpong game to unlock the opportunity to buy a university branded coffee mug for 2 Swiss Francs (which they had to pay on the spot). In line with our theorizing, participants in the product gamification condition relative to a control condition almost doubled the choice rate for the university coffee mug ( $M_{\text{Game}}=58\%$ ,  $M_{\text{Control}}=33\%$ ,  $F(1,83)=5.686$ ,  $p < .05$ ). More importantly, the number of beerpong throws had a significant positive influence on the likelihood to make a coffee mug purchase ( $\beta_{\text{Throws}}=.20$ ,  $z(45)=3.58$ ,  $p = .05$ ), in support of the proposed challenge account.

The following three studies examined the psychological process of product gamification. Specifically, Study 3 manipulated the product gamification challenge between subjects (a more challenging 2x3 puzzle vs. an easy to solve 2x2 puzzle vs. control). Generalizing

the previous results, we examined whether the effect wears off in a sequential choice situation. Specifically, we examined whether product gamification also affects consumers’ option choice in a product customization context with customizable travel mugs. As predicted, the more challenging puzzle made consumers more likely to choose an unlocked travel mug option ( $B_{\text{GameChall-Control}}=.56$ ,  $z=2.02$ ,  $p < .05$ ;  $B_{\text{GameChall-GameEasy}}=.71$ ,  $z = 2.61$ ,  $p < .01$ ;  $SD_{\text{Intercept}} = .66$ ). More importantly, the gamification effect was reduced when no challenge was present ( $B_{\text{Control-GameEasy}}=.15$ ,  $z\text{-value}=.67$ ,  $p > .50$ ).

In Study 4, we tested the boundary condition whether the effect of a gamified unlocking of options decreases with an increasing number of to be unlocked options. Mirroring the experimental paradigm of Study 4, we found that participants in the product gamification condition were more likely to choose the unlocked feature relative to participants in the control condition ( $M_{\text{Game}}=79.1\%$ ,  $M_{\text{Control}}=71.3\%$ ;  $F(1,88)=5.63$ ,  $p < .05$ ). To provide a more rigorous test at the individual level, we estimated a linear mixed model with random intercept to account for repeated choices at the individual level. Supporting the between subjects results, we find that the unlocked travel mug options were chosen significantly more often in the product gamification condition relative to the control condition ( $B_{\text{Game}}=.20$ ,  $z = 2.41$ ,  $p < .05$ ;  $SD_{\text{Intercept}}=.31$ ). Providing evidence on the underlying process, a multilevel mediation model revealed that these effects are driven by a significant increase in consumers’ perceived challenge of the customization experience (bootstrapped indirect effects of the gamification condition on feature choice:  $B_{\text{Indirect}}=.02$ ,  $p < .05$ ;  $B_{\text{Direct}}=.05$ ,  $p < .1$ ). Adding challenge as a predictor of feature choice reduced the direct effect to marginal significance ( $B_{\text{Game}}=.14$ ,  $z=1.75$ ,  $p < .1$ ,  $B_{\text{Challenge}}=.13$ ,  $p < .01$ ,  $SD_{\text{Intercept}}=.24$ ), indicating full mediation.

Finally, Study 5 ruled out the alternative explanation that consumers habitually learn to choose a non-default option in the context of a gamified product customization task with men’s dress shirts. In line with our theorizing, Study 5 showed that consumers only choose those options that were unlocked in the gamified customization task, but did not choose those shirt features that were not locked during the product customization task.

To the best of the authors’ knowledge, this is the first series of empirical studies using gamification elements in a consumer choice context. In a series of five studies based on both field and lab data, we provide converging evidence that unlocking product features in a gamified choice situation draws consumers attention, preference, and ultimate choice toward the gamified option. What is surprising is the influence of a gamified purchase situation on both varying conceptualizations of consumer preference (e.g., switching to another option as in Study 1, actual purchase as in Study 2, or consumers’ preference for specific options as in Studies 3 to 5), and that these effects were reproduced by a variety of games that required a different set of skills (e.g., beerpong, puzzles, racing game).

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# Uniformity Bias in Attribute Perception and Evaluation

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## EXTENDED ABSTRACT

Suppose you are willing to pay \$3 for a small 10 oz. coffee, how much would you be willing to pay for a medium 15 oz. coffee and a large 20 oz. coffee? Your answers to these questions tell us something about your rate of exchange between coffee cup size and money. This rate of exchange is akin to a riskless value function  $V(x)$  that indicates for any attribute level  $x$  the level of your subjective valuation (Simonson and Tversky 1992; Tversky and Kahneman 1991; Tversky and Simonson 1993). Marketers care about rates of exchange and value functions because it allows them to make better decisions related to the design of product sets and price setting. For instance, should the intermediate cup size be positioned closer to the small cup size, closer to the large cup size, or right in the middle of the small and large cup sizes?

This paper demonstrates that consumers tend to value intermediate options as uniformly or equally spaced between the inferior and superior options regardless of the actual spacing of the options. For instance, consumers tend to value 12 oz. right in the middle of 10 oz. and 20 oz. Similarly, they tend to value 18 oz. right in the middle of 10 oz. and 20 oz. As a consequence of this *Uniformity Bias* the curvature of the value function varies dramatically depending on whether options are spaced in an accelerating manner (10, 12, 20 oz.), a uniform manner (10, 15, 20 oz.), or a decelerating manner (10, 18, 20 oz.).

Research on how the mind processes magnitudes suggests that humans learn how to assess ordinal rank before cardinal value (Brannon 2002; Wynn 1990). Consider again the coffee example above. Regardless of whether the intermediate option has 12, 15, or 18 oz. the ordinal information associated with the intermediate option remains the same: It is second in size. If consumers encode ordinal information when evaluating numeric attributes and if ordinal information carries over to continuous judgments, the ordinal information will bias consumer valuations toward treating different alternatives as uniformly spaced, regardless of actual spacing.

In a series of experiments, we will establish uniformity bias and its effect on value functions (experiments 1-3) and provide process evidence for our proposition that consumers use ordinal cues when evaluating alternatives (experiments 4-5).

*Experiment 1:* Participants were asked to imagine that Canon had just released three new camera models; the three cameras were identical in every way except for their resolution. The cameras had 5, 7, and 15 megapixels in the accelerating-spaced condition, 5, 10, and 15 megapixels in the uniformly-spaced condition, and 5, 13, and 15 megapixels in the decelerating-spaced condition. For each camera participants indicated its value (in dollars) and photo quality (13-point scale). To compare the spacing of participants' judgments relative to the spacing of attribute levels, both judgments and attribute levels were transformed according to the formula: . For instance, in the decelerating condition the *actual* attribute levels would be scaled 0, 0.8, and 1. If a consumer valued the options at \$150, \$200, and \$250, the value judgments would be rescaled to 0, 0.5, and 1. Consistent with uniformity bias, in the accelerating condition, participants' value ( $M=0.33$ ;  $SD=0.15$ ) and quality judgments ( $M=0.45$ ;  $SD=0.17$ ) were significantly higher than the rescaled *actual* attribute level ( $0.20$ ,  $ps<.0001$ ). In the decelerating condition, participants' value ( $M=0.64$ ;  $SD=0.16$ ) and quality judgments ( $M=0.80$ ;  $SD=0.17$ ) were significantly lower than the rescaled *actual* attribute

level ( $0.80$ ,  $ps<.0001$ ). That is, when attributes were spaced in an accelerating manner participants overvalued the intermediate option relative to its actual attribute level—producing a concave value function. In contrast, when spaced in a decelerating manner participants undervalued the intermediate option—producing a concave value function. The uniform condition was included as a check to ensure that there were no systematic response biases; no response bias was found in the current or subsequent experiments.

*Experiments 2 and 3:* Whereas experiment 1 held the exterior options constant and manipulated the intermediate option between participants, experiment 2 held the intermediate option constant and manipulated the exterior options between participants. Experiment 3 assessed uniformity bias in a multi-attribute paradigm, employing standard methods used in conjoint studies. Results of both experiments again indicated that in the accelerating conditions, participants tended to treat the options as uniformly spaced, regardless of actual spacing (i.e., overvaluing the intermediate option relative to its *actual* level), producing a concave value function. In the decelerating conditions, participants undervalued the intermediate option relative to its *actual* level, producing a convex value function.

*Experiments 4 and 5:* According to our account, consumers use ordinal cues when evaluating options. We tested this hypothesis by decreasing the salience of ordinal cues in experiment 4 and increasing their salience in experiment 5. In experiment 4 we manipulated the number of options (3 vs. 7) and the presentation order (fixed vs. random). When ordinal cues were more difficult to assess (i.e., 7 options presented in a random order), uniformity bias decreased. In experiment 5 we presented options without explicit ordinal cues (e.g., 10 inch, 16 inch, and 18 inch pizzas), with numeric-ordinal labels (e.g., Size 1: 10 inch, Size 2: 16 inch, and Size 3: 18 inch pizzas), or with verbal-ordinal labels (e.g., Small: 10 inch, Medium: 16 inch, and Large: 18 inch pizzas). Consistent with our hypothesis, when ordinal cues were made explicit, using the numeric and verbal labels, uniformity bias increased.

The current research suggests that how consumers value products depends not only on the actual quantitative level of a product, but on the ordinal rank of the attribute. Specifically, consumers appear to use the ordinal position of alternatives as a cue for their valuations of products. Because of this integration of ordinal information when evaluating products, consumers tend to treat intermediate options as uniformly spaced between inferior and superior alternatives, regardless of their actual level. The current research provides a novel behavioral effect, and elucidates the broader cognitive mechanism underlying how consumers derive value.

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## Living in Harmony with Nature: A Post-Human Analysis of Consumers' Relationships with Nature

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### EXTENDED ABSTRACT

Living in harmony with nature is a pervasive ideology of how a “sustainable future” and a “fulfilled life” would look like. Both a vision of a desired future and an imagined past, the idea of living in harmony with nature can be found in a diverse set of contexts, including politics, social movements, popular culture, and marketing. For example, a 2009 Toyota commercial announced that the Prius will bring “harmony between man, nature, and machine.” As marketers, consumers, and society as a whole negotiate their relationships with nature, it is important for consumer researchers to explore what it means to live in harmony with nature.

The notion of living in harmony with nature is highly paradoxical, as consumers seek to live in harmony with a nature that they control and dominate at the same time. From a cultural perspective, living in harmony with nature requires consumers to constantly negotiate between romantic discourses of a sacred, living, and benevolent Mother Nature (Arnould and Price 1993; Canniford and Shankar 2013; Thompson 2004) and conflicting utilitarian discourses that conceptualize nature as passive matter that needs to be dominated and controlled (Merchant 1983). More importantly, consumers' negotiations between these contradicting cultural discourses are complicated by the fact that consumption is situated in material environments of technological objects and natural geographies (Bennett 2010; Canniford and Shankar 2013; Miller 2010). In order to better understand the “harmony paradox,” it is therefore necessary to explore how consumers negotiate tensions between utilitarian and romantic discourses of nature vis-à-vis their experience of material forces of nature and their use of technological objects. In particular, we explore (1) how consumers achieve harmony with nature given their experiences of a sometimes dangerous and threatening nature, and (2) how they are able to combine technology and the domination of nature with their pursuit of harmony with nature.

In alignment with previous research (Canniford and Shankar 2013), we adopt a post-human theory of assemblage (Delanda 2006; Deleuze and Guattari 2008), particularly drawing on the notion of symmetrically distributed agency (Bennett 2010; Pickering 1995). Multi-day, back-country hiking was selected as the context for a visual-material ethnography (Peñaloza and Cayla 2006) because hikers have to frequently overcome tensions between utilitarian and romantic discourses of nature (Michael 2000; Nash 2001) while engaging with material forces of nature that constantly complicate their negotiations of these two cultural discourses. Over a time frame of nine months, the first author participated in six hiking trips as a participant observer, resulting in 114 pages of field notes and about 2,150 photos. In addition, he interviewed 15 individuals who had previously participated in one or more of the field trips.

Findings are presented through three interrelated themes. The first theme highlights how hikers appropriate romantic discourses by seeking harmony in a nature that is perceived as external to civilization. Noting the contradiction that hikers' quest for being in harmony with a “romantic nature” oftentimes exposes them to higher physical dangers in material nature, the subsequent themes explore how harmony can arise when hikers have to struggle with physical dangers of nature. Focusing on these physical dangers, theme 2 finds that hikers' relationship with nature is highly ambivalent: They strive to experience “more nature and less civilization”, but also “more civilization and less nature.” Importantly, informants do not have full control

over what discourses of nature are appropriated, as the relationship they form with nature are co-determined by the material agency of nature. The third theme explores how changes in material nature shift the meanings consumers assign to technological objects that are used during hiking. Using the example of hiking poles, we show how technology does not need to distract hikers from achieving harmony with nature, but can rather support them because technology allows hikers to prevail in the struggle with nature. Thus, technology can become a symbol for being in harmony with nature.

This research offers several contributions that advance and broaden our understanding of the human/nature relationship and materialism more generally. In contrast to conceptualizing technology and other markers of civilization as (unacceptable) betrayals that need to be purged and purified away before feelings of harmony with nature can arise (Canniford and Shankar 2013), our research demonstrates that the meanings of technologies are not fixed but are localized in a particular space and engagement with nature. In certain material-natural conditions, hiking poles are symbols of civilization and the domination of nature, while in other conditions they are symbols of a hiker's pursuit of harmony. Thus, we challenge the notion that harmony with nature can only be found outside civilization, and instead propose that consumers can achieve harmony with nature through civilization. From a more abstract perspective, our research advances our understanding of the dynamics between materialities and cultural discourses by highlighting how the material agency of nature co-determines what cultural discourses consumers can appropriate when making sense of their experience of nature and when assigning meanings to technological objects. Consumers can therefore always only exert partial control over the shaping of the assemblage and what cultural discourses can be appropriated. Finally, we offer managerial implications by discussing how marketers can successfully position their products on the idea of living in harmony with nature.

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# The Role of Category Average Reference Points and Health Halos in Purchase Intentions of Healthy and Hedonic Food

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## EXTENDED ABSTRACT

Although we eat and drink every day, we often find it difficult to discern the nutritional quality of food (Chernev 2008). Marketers have known this for a long time and responded with respective health claims on food packages, such as “low-fat,” “organic” or “creamy” (Wertebroch 1998). Research has shown, however, that such claims can be misleading and sometimes cause malnutrition, including obsessive calorie intake (Chandon and Wansink 2007; Wansink and Chandon 2006).

Nutrition labels are assumed to correct for misleading health claims (Chandon 2013). They are mandatory on most prepackaged products in the US and Europe in order to make consumers' choices healthier (Burton, Garretson, and Velliquette 1999). Existing labels, however, possess only limited effectiveness when it comes to real purchase behavior (Kiesel and Villas-Boas 2013; Mathios 1998; Mojduszka, Caswell, and Harris 2000; Sacks, Rayner, and Swinburn 2009; Sacks et al. 2011). One reason is that most existing numerical labels are harder to interpret than easy-to-understand verbal health claims (Kiesel and Villas-Boas 2013).

A promising avenue to solve the dilemma of unhealthy food choice is the use of average category reference points (CARPs) as a basis for comparative judgments (Viswanathan 1994). CARPs display the average amount of calories and key nutrients in one category and therefore qualify otherwise meaningless nutrition information such as “contains 200 calories.” Thus, external CARPs may correct potentially existing internal reference points, and make food look like vices or virtues (Chernev and Gal 2010).

Although reference points referring to a category average generally have been acknowledged as affecting choice construction (Bettman, Luce, and Payne 1998), existing research has not investigated the impact of such information on food choice. Even more importantly, it is unclear how CARPs can influence purchase intentions. A starting point is that CARPs can alter healthiness perceptions (Viswanathan and Hastak 2002). Healthiness perceptions, then, may translate into increased purchase intentions. For example, learning that a food item has a relatively high calorie content (compared to the ‘average item’ in the category) could reduce healthiness perceptions and stimulate expected guilt while choosing, independent of the absolute energy content. Conversely, learning that a food item such as ice cream has relatively few calories (compared to the ‘average ice cream’) could take away the guilt and justify increased consumption even when it still contains more calories than most other food.

Healthiness perceptions, however, also depend on the category, as different product categories are perceived as more or less healthful per se. While healthful food is often perceived as less tasty (Balasubramanian and Cole 2002; Raghunathan, Naylor, and Hoyer 2006), tasty products are perceived as high in negative nutrients and calories (Belei et al. 2012). In contrast, a product from a healthful category is expected to be low in calories and negative nutrients like sugar and therefore more healthful (a “category halo”). It is also known that different category types affect consumers differently depending on self-control. Consumers with high self-control tend to satiate faster on unhealthy foods, yet consumers with low self-control do not show that pattern for healthy foods (Redden and Haws 2013; Smith 2004).

We find in Study 1 that CARPs affect purchase intention and that this effect is fully mediated by healthiness perception. In addition, the positive effect of CARPs is stronger in hedonic product categories. Moreover, we show the moderating role of self-control is twofold. A low CARP can help consumers with high self-control to consume less of the healthy category; yet, high CARP can lead to positive disconfirmation of the products caloric content. The same applies to the hedonic category for consumers with low self-control. They tend to over-consume on hedonic products. The high CARP leads to positive disconfirmation of the product caloric content and thus purchase intention increases.

In Study 2 we extend previous literature that found that health claims impact healthiness perception (e.g., Ford et al. 1996; Garretson and Burton 2000; Kozup, Creyer, and Burton 2003), by showing that the positive effect of health claims on healthiness perception is not existing but for hedonic categories. Moreover, our findings replicate results of previous studies that showed that health claims lead to increased purchase intention (Kiesel and Villas-Boas 2013) by decreased consumption guilt. Most importantly, we examined if the health halo effect generalizes to conditions where the CARP signals conflicting information. In line with our contention, the halo effect disappeared when the CARP was low. This is an important addition to existing research as consumers have been shown to limit their search to the health claim if present (Kiesel and Villas-Boas 2013; Williams 2005). Howlett et al. (2009) showed that the health halo can be weakened after comparison of actual calorie content and expectation on the calories content. Expectations, however, are subject to bias (Wansink and Chandon 2006), while a CARP is an unambiguous anchor.

From a policy perspective category average reference points represent a powerful mean to nudge consumers towards the choice of more healthy products. CARPs could be used as additional front of pack label or as shelf tag. But policy-makers should be very careful in specifying categories. Our results show that, apart from the ability to reveal betrayal with health claims, high category average reference points can lead to justification of the consumption of unfavorable food, both for rather healthy or hedonic product types. Mis-specification of categories could lead to high CARPs and thus to overconsumption of bad nutrients. Another issue in using CARPs is that food manufacturers could increase category specific averages by introducing products high in bad nutrient. More easily, food manufacturers could communicate self-invented overly high average category points using multiple channels in order to impact consumers to choose “worse” products. We strongly encourage policy-makers to prohibit food makers to communicate such information.

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# The Effect of Numeric Roundness on Probability Perceptions and Choice

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## EXTENDED ABSTRACT

Consumers often make choices associated to their preference for particular numbers (e.g. Boyd 1985; King and Janiszewski 2011; Pavia and Costa 1993; Pope and Simonsohn 2010). These choices involve preferences for brand names that may be alphanumeric (e.g. Boyd 1985; King and Janiszewski 2011; Pavia and Costa 1993), the selection of PIN numbers or passwords, sports jerseys' numbers or even gambling or lottery tickets. This last type of numeric choice differs slightly from the rest. While all of them involve the choice of numbers based on mere preference for them, in the case of lotteries the selection is closely associated to the perceived probability that the chosen number may be the winner. Despite the fact that any given number in a lottery or any random selection process has the same probability of being drawn, people often expend effort on choosing specific numbers on the hopes that their choice will increase their probabilities of winning. For this matter, they usually select numbers that have a personal meaning to them (e.g. birthdates, phone numbers, IDs, etc), that they simply like, or that they believe are more likely to result the winners.

The current paper tackles the question of what type of numeric formats consumers prefer on random selection or gambling or lottery contexts as a result of being considered to have a higher probability of occurrence or of being drawn. Specifically, we study how the roundness or oddness of a numbers affects its probability perceptions and its subsequent likelihood of being selected by a consumer. In contrast with past work on numeric fluency and roundness, which demonstrates that consumers have a preference for round numbers (e.g. Dehaene and Mehler 1992; King and Janiszewski 2011; Kirby and Schindler 1997), we show that in lottery or random selection contexts, people have a preference for odd numbers, as they believe these have higher probabilities of being drawn. These biased probability perceptions lead to a counterintuitive type of outcome: odd numbers are preferred and more likely to be chosen in this type of contexts. We propose that this occurs because odd numbers are usually interpreted as being more concrete or realistic, while round numbers are often seen as more abstract or general, as people often use them to round out numeric information (e.g. Dehaene and Mehler 1992).

The effect presented in this work focuses on the scenario of lotteries, or those where a number is selected by consumers based on how likely they think this will be the drawn or winning number in a random selection process, even though each numeric expression has the same probability of occurrence. We ran four experiments to provide evidence for the effect of numeric roundness on probability perceptions and choice. In our experiments, round numbers were operationalized as those ending on "0" or "5" (Dehaene and Mehler 1992). Experiment 1A was a computer based study where participants were told that they would be participating in a lottery in which they could pick their lottery number among four assigned two digit expressions. Two of these numbers were round and the other two were not and participants were told that if the number they selected matched the last two digits of the winning number of the upcoming Mega Millions lottery that week, they would be receiving a \$20 prize. Experiment 1B was also a computer based study in which participants were told that they would be participating in a lottery game in which they would be allowed to select one number from 0 to 99. As in Experiment 1A, they were told that if their selected number

matched the last two digits of the winning number of the upcoming Mega Millions lottery that week, they would be receiving a \$20 prize. Both of these experiments provided evidence in favor of our hypothesis: round numbers were less likely to be selected.

Experiment 2 employed a similar design as Experiment 1B with a couple of modifications and additions. First, in this case participants were asked to select an eight-digit number as their respective playing number as opposed to one that only contained two characters as in the first two studies. This scenario more closely matched the typical lottery conditions where participants usually pick numbers that contain from eight to twelve digits. In order to keep them involved in the procedure, this time participants were told that if their picked number matched the last eight digits of the upcoming Mega Millions lottery that week, they would be receiving a \$500 prize. This study also provided evidence for our proposed account, as it included a Construal Level scale that had the intention to test if the effect was stronger among participants who had a more abstract mindset, as these would avoid selecting more general and abstract round numbers because they considered them as less likely to be winners. Finally, this

experiment also asked participants to explain why they made their numeric selections (Nisbett and Wilson 1977) with the intention to delve more into the underlying mechanism and rule out some alternative explanations for the effect, such as a desire to select odd numbers due to the perception that round numbers were more likely to be chosen due to their salience (Coupland 2010; Dehaene and Mehler 1992; Jansen and Pollmann 2001).

Experiment 3 tested the external validity of the effect and employed real life data from the Mega Millions lottery. We looked at the winning numbers of this lottery during the last 13 years and a half and analyzed those drawings for which there was a winner, that is, those where someone picked it as their playing number. Consistent with our hypothesis, odd numbers were significantly less likely to be selected as playing numbers, even though naturally, they were as likely to be drawn as winners.

Together, this set of studies document a new effect: odd numbers are more preferred in situations where the choice of a numeric expression is associated to its perceived likelihood of occurrence or of being drawn in a random selection process.

## The effect of numeric roundness on probability perceptions and choice

Consumers often make choices based on their preferences for particular numbers (e.g. Boyd 1985; King and Janiszewski 2011; Pavia and Costa 1993; Pope and Simonsohn 2010). These preferences influence choices of alphanumeric brand names (e.g. Boyd 1985; King and Janiszewski 2011; Pavia and Costa 1993), the selection of PIN numbers or passwords, sports jersey numbers, and even impact gambling and lottery ticket contexts. While in all contexts the choice of numbers reflects mere preferences, in the case of lotteries, the selection reflects an individual's assessments of the perceived probability of that number being chosen as a winner. Despite the fact that any given number in a lottery or any random selection process has the same probability of being drawn, people often expend effort on choosing specific numbers in order to increase their probabilities of winning. Therefore, individuals often select numbers that have a personal meaning to them (e.g. birthdates, phone numbers, student

IDs, etc), that they simply like, or that they believe are lucky or more likely to result the winners.

We investigate how consumers select from among different types of numbers—such as round, odd—in lottery contexts. Round numbers are numbers that end in “0” or “5” (Dehaene and Mehler 1992), while odd numbers are not divisible by two. Specifically, we study how the roundness or oddness of numbers affects assessments of how likely it is to be drawn in a lottery, and therefore its subsequent likelihood of being selected by a consumer. While much prior research demonstrates that consumers have a preference for round numbers (e.g. Dehaene and Mehler 1992; King and Janiszewski 2011; Kirby and Schindler 1997), we show that in lottery or random selection contexts, odd numbers are preferred more. This occurs because odd numbers are perceived to have higher probabilities of being drawn. Delving deeper, we propose this occurs because odd numbers are considered as being more concrete or realistic, while round numbers are more abstract or general, as people often use them to round out numeric information (e.g. Dehaene and Mehler 1992).

Indeed, an understanding of how consumers interpret numbers in gambling and lottery contexts is important for many reasons. From a theoretical perspective, these contexts provide a deeper understanding of how numbers are fundamentally perceived. While typical marketing contexts (e.g., pricing) do provide insights on how size of numbers (e.g., numerosity) and other affiliated qualities are interpreted, they rarely provide insights on understanding of a core feature of numbers—their distribution and properties thereof. For instance, when a number is drawn from a distribution, is it totally random or does it follow systematic patterns? Studying lottery behaviors also provides insights on individuals’ understanding of probabilities. Indeed, such behaviors form a core tenet of behavioral decision theory where lotteries are used to infer rational behavior (von Winterfeldt and Edwards 1986). From a practical perspective too, an understanding of this marketplace is important. As of 2009, the legal gambling industry was estimated to be 335 billion dollars around the world (The Economist, 2010), while the lottery industry in the US accounted for more than 50 billion dollars (Reuters, 2011). From a public policy and social welfare perspective too, lotteries are important. The more frequent players come from lower socioeconomic groups (Beckert and Lutter 2012), and these individuals often spend up to 10% of their income on lottery tickets (Dustan 1997).

We focus on lottery contexts or contexts where a number is selected based on how likely it is expected to be drawn or be a winning number in a random selection process, even though normatively all numbers have the same probability. We conducted four experiments to provide evidence for the effect of numeric roundness on perceptions and choice. In experiment 1A respondents were asked to pick a two-digit lottery number from among four two digit numbers (two round and two odd), and were told that if their selected number matched the last two digits of the winning number of the upcoming Mega Millions lottery, they would be receiving a cash prize. Experiment 1B was similar to 1A (the incentive structure was similar), but respondents were asked to pick a number from 0 to 99. Both experiments provide evidence supporting our hypothesis: round numbers are less likely to be selected.

Experiment 2 was similar to 1B, with a few exceptions. First, participants were asked to pick an eight-digit number, as they might in a typical Mega Millions lottery (which has between 8-12 digits). As in previous studies, participants learned they would receive a cash reward if their picked number matched the last eight digits of the upcoming Mega Millions lottery. This study also provides process support. We included a Construal Level scale to test if the effect was stronger among participants who had a more abstract mindset,

as these would avoid selecting more general and abstract round numbers because they considered them as less likely to be winners. Finally, we asked participants to explain the logic underlying their numerical selections.

In experiment 3 we analyze 13 years of data from the Mega Millions lottery, and show that round numbers are purchased less often, even though naturally, they were as likely to be drawn as winners. This provides external validity for our findings.

## Theoretical Background

### *Preference for Round Numbers*

Research on numerical cognition focuses on two types of numbers—round (Dehaene and Mehler 1992) and odd numbers. Round numbers are considered to be more salient (Dehaene and Mehler 1992; Schindler and Kirby 1997) or fluent (e.g. King and Janiszewski 2011) than odd numbers. Consequently, when asked to generate numbers, participants are more likely to name round numeric expressions (Hornik, Cherian, and Zakay 1994; Hultsman, Hultsman, and Black 1989; Huttenlocher, Hedges, and Bradburn 1990; Tarrant and Manfredo 1993). The same effect holds when consumers are asked to recall numerical information, such as the price of a product (Schindler and Wiman 1989). These effects occur because the human mind has limited cognitive capacity, and people utilize easily processed numbers more (Dehaene and Mehler 1992), especially for higher denominations (Kaufman et al. 1949). This phenomenon extends to alphanumeric brand names, where consumers favor those that include round (Kirby and Schindler 1997) or fluent numbers (King and Janiszewski 2011).

Another stream of research has demonstrated that consumers often treat round numeric expressions as goals or reference points (Pope and Simonsohn 2010). This research finds that people expend more effort towards a goal and perform better when they are close to reaching a performance indicator represented by a round number than when they have already reached such milestone. Similarly, Isaac and Schindler (2014) recently introduced a phenomenon coined as the “Top Ten Effect”, which demonstrates that consumers will react more favorably to improvements in rank that exceed round-numeric-category boundaries (e.g. changing from rank 11 to rank 10) than improvements in rank that cross place-value-category-boundaries (e.g. changing from rank 10 to rank 9). This phenomenon occurs because round numerical expressions are cognitively more available due to their prevalence in daily communication. Together, this stream of work further demonstrates that consumers have a preference for round numbers.

### *Round Numbers and Random Selection Processes*

The current research investigates if the favorable perceptions and choice shares obtained for round numbers in multiple domains extend to that of random selection processes, lotteries, and other related gambling activities. We propose and provide evidence for a counterintuitive finding; despite consumers favoring round numbers in most domains, this will not occur in contexts where the selection of a numeric expression does not only reflect preference, but it is also associated with naïve beliefs relating to the likelihood that this target number will be drawn as the winner. While objectively speaking, any given number participating in a lottery, gamble or any other random selection process has the same probability of being drawn, we predict that in these contexts consumers will be more likely to select numbers that are odd versus round. This contradicts past research showing that when asked to generate numbers, people are more likely to come up with round expressions due to their fluency and ease of processing (Hornik, Cherian, and Zakay 1994; Hultsman, Hults-

man. and Black 1989; Huttenlocher, Hedges, and Bradburn 1990; Tarrant and Manfredo 1993). We make this counterintuitive prediction because we believe that round numbers are perceived as being more abstract or general, which is the reason why they are often used to round out numeric information (e.g. Dehaene and Mehler 1992). Conversely, due to their specificity, we propose that odd numbers are perceived to be more concrete or realistic, which makes them more likely to be randomly drawn as a winner in a lottery.

### *Positive Effects of Odd Numbers*

As discussed earlier, past research suggests that round numbers are usually more preferred (e.g. Dehaene and Mehler 1992; Kirby and Schindler 1997). However, there is one exception. Thomas, Simon and Kadiyali (2010) showed that in the context of price bargaining, it is more favorable to list sale prices in odd numeric formats as opposed to round ones. This is because odd price formats are judged to be relatively smaller in magnitude than equivalent round ones, which leads to positive reactions from consumers as these are judged to be better deals. This seems to occur because odd numbers are more often used for smaller numeric denominations (Dehaene and Mehler 1992), while round expressions are more common for larger numbers. Consequently, the authors suggest that odd numbers are considered smaller than equivalent round expressions. While in our case, our results do not depend on an odd number being perceived to be smaller or larger but instead more likely to be drawn in a random selection process. Further, like Thomas et al. (2010), we document a new context in which odd numbers may evoke higher preference than round ones.

### **Experiment 1A**

Experiment 1A (N=450) was a computer-based study in which participants were told they would be participating in a lottery. Participants were asked to select one out of four two-digit numbers (10, 89, 50 and 37). They were told that if their selected number matched the last two digits of the winning number of the next Mega Millions lottery drawn that week, they would receive a \$20 prize. We expected the two round numbers—"10" and "50"—to be chosen less often than the two odd numbers—"89" and "37".

### *Results and Discussion*

As expected, round numbers were significantly less likely to be selected (M=31%) than odd numbers (M=69%). Moreover, the choice shares for both groups were significantly different from 50% ( $p < .0001$ ).

In this study participants had to choose from a pre-determined set. In the next study we accord consumers more flexibility in their number selection.

### **Experiment 1B**

In this study (N=449) we asked participants to pick a number from 0 to 99. Once again, participants were told that if their number of choice matched the last two digits of the winning number of the next Mega Millions lottery drawn that week, they would receive a \$20 prize.

### *Results and Discussion*

As expected, we find that when given the option to pick a lottery number from 0–99, only 11% of participants chose a round one instead of the expected 20% ( $p < .0001$ ).

This experiment extends the effect to contexts where participants have more flexibility in selecting numbers (pick on their own) instead of being constrained to a fixed set of options. Our findings are divergent from past research, which suggests that consumers

are more likely to mention round numbers when asked to generate numeric expressions (Hornik, Cherian, and Zakay 1994; Hultsman, Hultsman, and Black 1989; Huttenlocher, Hedges, and Bradburn 1990; Tarrant and Manfredo 1993). This suggests that these effects may be moderated by the context in which the numeric expressions are generated, as round formats will not prevail in cases where numbers are being selected based on their likelihood to be drawn in a random selection process. We conducted a subsequent study in which we tested the effects in a more general setting, with eight digit numbers. This experiment provides additional evidence in favor of our effect mechanism.

### **Experiment 2**

Experiment 2 (N=407) had three objectives. First, we test our findings using eight digit lottery numbers. This is consistent with major, national lotteries, which usually use tickets that range from eight to twelve digits. We also investigate the moderating role of construal level on choice, and show that our effects are stronger among participants with a more abstract mindset. We believe this occurs because an abstract mindset makes the round numbers (which are fundamentally abstract) seem more abstract and general, and, therefore less likely to be drawn. Finally, we also asked participants to explain (Nisbett and Wilson 1977) the strategies underlying their choice of lottery numbers. We expect to show that odd numbers are believed to be more likely to occur, and are therefore chosen more often in lotteries or in random selection processes.

The design was similar to that used in Experiment 1B. However, in this case participants were told that they would be selecting an eight-digit number for their lottery ticket. Participants were told that if their eight-digit number matched the last eight digits of the next drawing of the Mega Millions lottery that week, they would be receiving \$500 (due to the higher challenge the game involved). We also rule out other explanations. It is possible that participants may feel that other participants would select round numbers and so if the participant wins (with a round number), they may have to share their winnings with others, as their likelihood of picking the same round number may be higher. Therefore, we told participants explicitly that each number could only be selected once and that they did not need to worry about sharing their prize.

At the end participants were asked to explain why they made their choice and were administered the 25-item Behavioral Identification Form (BIF; Vallacher and Wegner 1989), used to measure construal level (e.g. Trope and Liberman 2010).

### *Results and Discussion*

As predicted, participants picked numbers ending in round digits ("0" or "5") less than the expected 20% of the time (M=12.5%;  $p < .0001$ ). Furthermore, participants who were more prone to think abstractly were less likely to pick round numbers ( $\chi^2 = 4.89$ ;  $p < .03$ ), probably because they saw these as being less concrete than those who were prone to thinking more concretely. Finally, verbal protocols showed that aside from cases where participants made their choices based on numbers that conveyed special meaning to them (e.g. birthdays, PIN numbers, Student ID Number, etc.) or based on pure random selection (e.g. typed 8 digits without thinking), more than 50% of participants made their choices based on a number's perceived likelihood of being drawn as the winner. On the other hand, these results rule out the alternative explanation that the effect may be due to participants' picking an odd number to reduce their likelihood of having to share the prize, as less than 2% of subjects provided such explanation. The fact that we get significant results despite the large proportion of people who selected numbers

that has a special meaning to them provides evidence for the robustness of our effects, as this was stronger when we excluded such cases ( $p < .001$ ).

This experiment demonstrates the robustness of our results and shows they occur even with eight digit numbers. Moreover, our effects are associated with how abstract consumers perceive the round or odd numbers to be. When in an abstract mindset, the round numbers are seen as being more general or abstract, and hence less likely to be drawn, and is therefore chosen less often. Finally, verbal protocols (Nisbett and Wilson 1977) provide conclusive support; individuals make choices based on how likely they think their picked number is to be drawn. We also analyze secondary data from the Mega Millions lottery to explore if the documented effects hold in real world contexts.

### Experiment 3

We analyze data from more than 13 years of the Mega Millions lottery (August 2000 to October 2013) to test the external validity of our effects. This lottery is held twice a week, thus providing us with a total of 1382 observations. We had information about the date each lottery was played, the size of the prize, and the drawn number. The data did not explicitly indicate if on a given week the prize had been sold or claimed, however, we were able to determine this based on each drawing's prize. Specifically, if the prize for a given lottery increased (decreased) relative to the previous drawing, this meant that the previous lottery was not won (won and a prize was claimed). We also tried to obtain data on all of the purchased numbers for this lottery, in order to analyze the overall frequency of odd versus round numbers sold, however, this information is not made public due to privacy and security concerns. We predicted that while a lottery ticket ending with a round number would be as equally likely to be drawn as any other number (10%), this would be less likely to be sold, and consequently, be less likely to be claimed by a consumer. These effects occur as consumers believe lottery tickets ending with a round number to be less likely to be a winner.

### Results and Discussion

As expected, we find that 20.69% of the time the lottery number drawn as the winner was round (this includes all numbers regardless of whether these numbers were picked by consumers or not). Indeed, this result is not significantly different from the expected proportion of 20% ( $p > .26$ ).

However, focusing on the winning drawings—that is, 161 (i.e., those purchased by a consumer during this time)—out of the total 1382 (11.65%), only 14.29% of these (23 out of 161) corresponded to a lottery ticket that was round, which is significantly less than the expected 20% ( $p < .05$ ). It is worth noticing that we demonstrate that this effect is not driven by increased purchase rates for lottery tickets ending on “7”, as these only represented 8.1% of the sold winning numbers, directionally less than the expected 10%.

This study provides external validity for our effects; the winning numbers sold by the Mega Millions lottery during the analyzed 13 year period were less likely to be round. Moreover, this experiment also shows that this effect is not due to increased choice shares for lottery numbers ending on “7”, as sales for these were actually below their expected 10% share.

### General Discussion

Across four experiments, we show that despite past research documenting preference for round (e.g. Dehaene and Mehler 1992; Kirby and Schindler 1997) and fluent numbers (e.g. King and Janiszewski 2011), these numbers are less likely to be selected in lotteries, as consumers believe these numbers have a lower probability

of being a winner. This may be because round numbers are usually used to round out numerical information, and hence are considered as being more abstract or general (e.g. Trope and Liberman 2010). The present findings also rule out alternative explanations such as consumers resorting to odd numbers as a strategy to avoid having to share their prizes with someone who picked the same numeric expression as they did, or related to an increased incidence of sold prizes ending on number “7”. Finally, we show the external validity of our findings, by replicating the effect using more than 13 years of data of the Mega Millions lottery.

### Future Research

While we investigate the effect of numeric roundness on probability perceptions and choice in contexts involving random selection processes or lotteries, it is possible that this phenomenon may also apply to other domains. For example, it may be the case that consumers may evaluate events with probabilities that end with an odd number (e.g., 68%) as being more likely to occur relative to those of a higher magnitude but ending with a round number (e.g. 70%). Future work in this area should investigate if the documented effects can be extended to this and other contexts.

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# Risky “BIG”ness: How Conspicuous Signals Persuade the Self but Dissuade Others

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## EXTENDED ABSTRACT

People often use cues to convey information about themselves that is not directly perceivable. These cues vary in magnitude (Berger and Ward 2010; Han, Nunes, and Drèze 2010) and can take the form of brands (Han et al. 2010; Nelissen and Meijers 2011; Wang and Griskevicius 2014; Wernerfelt 1990), products (Belk, Bahn, and Mayer 1982; Berger and Heath 2007; Holman 1981; Rucker and Galinsky 2008), or behaviors (Ferraro, Kirmani, and Matherly 2013). Whatever the strength and medium, the purpose of signals is to indicate traits that are not easily observed, such as wealth, power, intelligence, femininity, romantic devotion, etc. (Han et al. 2010; Nelissen and Meijers 2011; Park and John 2010; Rucker and Galinsky 2008; Wang and Griskevicius 2014).

At its core, signaling is a communication process where information can be both sent and received. A sender has a message (“I am generous.”) that he wishes to send to a receiver and does so by encoding the message (e.g., leaving a large tip). This communication process is interactional, in that a senders’ own perception is affected by what she predicts will be the reaction of the receiver and a receiver’s interpretation may be skewed by what he perceives to be the intentions of the sender (Calder and Burnkrant 1977; Holman 1981). Thus, there are two important communication outcomes of signaling: what the receiver thinks of the sender (“She is (not) generous.”) and what the sender thinks of himself (“I am (not) generous.”).

The present research focuses on this interplay by examining the signal’s interpretation from both the receiver’s perspective, and the sender’s perspective. Furthermore, we demonstrate that this interplay between both the sender and receiver on the signal’s interpretation is influenced by the strength of the signal (i.e., conspicuousness) and the familiarity between the senders and receivers. Specifically, we find that unfamiliar receivers degrade the trait information contained in conspicuous signals; this same conspicuous signal enhances the sender’s belief in the extent to which he possesses the trait.

Our research differs from previous research on signaling and conspicuous consumption in several significant ways. First, past research has predominantly focused on questions of when and why signaling occurs, who is more likely to signal, and what types of products serve as better signals (Belk 1981; Berger and Heath 2007; Shavitt and Nelson 2000). In contrast, we examine the communication outcomes of signaling, from both the sender and receiver perspectives, and the moderating roles of signal strength and audience familiarity. Research on senders’ interpretations of signaling has been limited, and has primarily focused on general stereotypical attributions (e.g., “Describe people who purchase this brand.”; Belk et al. 1982; Haire 1950; Shavitt and Nelson 2000). A couple of exceptions have focused on signals of specific traits, such as partner devotion (Wang and Griskevicius 2014) and wealth (Nelissen and Meijers 2011). Both of these papers, however, utilized expensive luxury products as signals. Interpretation of these signals is relatively straightforward and somewhat reliable. Expensive products offer a highly objective signal as they indicate a sufficient level of discretionary wealth needed to purchase. The present research focuses on a variety of sender-specific traits (e.g., intelligence, creativity) which are less reliable signals than wealth in that they are easily imitable.

Some of the variance in subjective interpretations of signals can be attributed to whether receivers perceive a signal as being an authentic representation of the sender (Ferraro et al. 2013). We build

on this foundation in three important ways: (1) by extending receivers’ evaluations of the sender beyond general attitudes to the actual trait being signaled, (2) by examining two important moderators of receivers’ signal interpretations – the conspicuousness of the signal and sender/receiver familiarity, and (3) by not only examining the effectiveness of a signal from the receiver’s perspective, but also the sender’s perspective. This last point is novel, given that, to the best of our knowledge, no research has examined the effect of signaling on the senders themselves. Although research has demonstrated that brand personalities can rub off on consumers (Park and John 2010), research has yet to examine whether signals, be they brands, products, or behaviors, can increase the extent to which consumers’ feel they possess the traits they are signaling. In sum, this research fills an important gap in signaling research by examining the influences of both signal strength and sender/receiver familiarity on the entire signaling process, from the perspectives of both the sender (i.e., signaler) and receiver (i.e., observer).

## Signaling as a Communication Process

The communicative properties of brands and products have long been known (Holman 1981). Consumers often purchase and use brands and products to express aspects of both their individual self and their social identities (Belk 1988; Birdwell 1968; Dolich 1969; Dommer, Swaminathan, and Ahluwalia 2013; Escalas and Bettman 2005; Kassirjian 1971; Landon 1974; Levy 1959; Oyserman 2009; Wernerfelt 1990). Receivers incorporate this signaled information (i.e. the products or brands being used, and how an individual uses these products) into their evaluations and personality assessments of others (see Holman 1981 for a review). In other words, individuals use objects and behaviors to encode information about the self, which receivers then decode.

Signaling with brands, products, and/or behaviors is a precise form of identity self-expression that is typically used to convey information about the self that is not directly observable (Spence 1974). Thus, at its core, signaling is a communication process between a sender (i.e., signaler) and a receiver (i.e., observer). The message is the unobservable trait which the sender encodes through the brand/product/behavior (i.e., signal).

In general, signals can take many forms with varying levels of reliability. For example, GMAT scores tend to be a reliable measure of intelligence. These types of signals are called indices, as they are usually highly correlated with the trait they represent and thus offer a more objective measure of an unobservable attribute (Smith and Harper 1995). Brands, products, and many behaviors, however, are less reliable signals in that they are easily imitable by those who wish to give the impression of possessing a trait without actually having it (Han et al. 2010). This complicates interpretations for receivers, as they must not only accurately decipher the encoded information, but must also determine its authenticity.

## Receivers’ Interpretations of Signals

Unreliable signals, by definition, may or may not be an accurate portrayal of the sender. Receivers may choose to believe the signal (“He drives a Prius so he must care about the environment.”) or believe that the signal is the result of an ulterior motive (“He doesn’t care about the environment. He just drives a Prius to impress others.”). Perhaps as a result, Berger and Ward (2010) find that subtle,

specialized signals (e.g., small logos) may more reliably communicate information to an expert audience. These subtle signals may be more reliable as only a small audience understands them. On the other hand, consumers prefer conspicuous goods when they want to signal to superiority (Han et al. 2010) or adequacy over a larger audience (Rucker and Galinsky 2008). In sum, consumers may favor conspicuous signals when they are trying to pose as someone they are not, while using inconspicuous signals to protect their honest signals from imitation. As such, receivers believe a sender has ulterior motives when conspicuously signaling (Ferraro et al. 2013).

We suggest, however, that the effect of signal conspicuousness on receivers' interpretations will be moderated by the familiarity between the sender and receiver. In general, we expect good people to perform good actions (Heider 1958). When we like someone we are more likely to attribute their actions to their internal characteristics as opposed to external factors (Regan, Straus, and Fazio 1974). The tendency to attribute positive behaviors internally and negative behaviors externally is less present among strangers compared to friends (Taylor and Koivumaki 1976). Therefore, strangers should be more likely than friends to attribute conspicuous signaling to ulterior motives as opposed to internal traits of the sender.

In summary, we expect audience familiarity to moderate the relationships between signal conspicuousness and the receiver's interpretation of the signal. Specifically, we believe there will be a negative relationship between conspicuousness and a receiver's perception that the sender possesses the trait when the receiver is a stranger, but not when the receiver is a friend. Furthermore, we propose that perceptions of authenticity will mediate the relationship between signal strength and sender/receiver familiarity on the receiver's belief in the signal.

### **Senders' Interpretations of Signals**

Although conventionally construed to communicate unobservable information to others, the process of signaling impacts the sender as well. After all, in the communication process senders' perceptions are affected by how they predict receivers will react (Calder and Burnkrant 1977). Thus the signals we send to the world are also subjected to our own interpretations and therefore influence how we feel. For instance, while displaying symbolic brands consumer may acquire and feel some of that brand's personality or traits represented by the brand (Escalas and Bettman 2003; Gao, Wheeler, and Shiv 2009; Park and John 2010; Rucker and Galinsky 2008; Rucker and Galinsky 2009; Swaminathan, Stilley, and Ahluwalia 2009). Furthermore, self-perception theory suggests that much of what we know of ourselves comes from what we think of our own behaviors (Bem 1972). In sum, signals send messages of unobservable traits not only to external audiences, but also internally through a self-perception process.

More conspicuous signals should result in greater feelings of trait possession by the sender. Visibility facilitates construction of our own identities (Berger and Ward 2010; Han et al. 2010). Furthermore, consumers use conspicuous signaling to compensate for inferiorities (Rucker and Galinsky 2008) and to express superiority (Dommer et al. 2013). In fact, given that people adopt the perspective of an outside observer when interpreting their own actions (Bem 1972), they may believe more conspicuous signals provide more evidence that they possess the trait.

As the sender's internal interpretation depends on the action itself (i.e., the conspicuousness of the signal) and context in which the action takes place (i.e., the audience; Bem 1972), we predict that the familiarity between the sender and the audience influences the sender's internal interpretation as well. According to self-perception

theory, senders will infer information about themselves by taking the perspective of others. Senders likely acknowledge that signals of any magnitude will only minimally adjust an established identity that is held by a familiar audience (Cohen & Reed 2006). However, senders may realize their identity is more incomplete with strangers (Braun and Wicklund 1989). Unfamiliar audiences have no pre-existing identity to adjust and signaled information is likely believed to provide an identity basis. As signals become more conspicuous, senders should feel more confident that their signals are heard and attended to and as a result feel more confident that they possess the trait. In sum, we expect that audience familiarity will moderate the relationships between signal conspicuousness and the extent to which the sender feels he possesses the signaled trait. Specifically, we expect a positive relationship between conspicuousness and a sender's felt levels of the trait when the receiver is a stranger, but not when the receiver is a friend. Finally, we believe that trait salience will mediate the relationship between signal conspicuousness and sender/receiver familiarity on the extent to which a sender feels he possess the signaled trait.

### **Study 1: From the Reciever's Perspective**

Eighty-one MBA students (69% male; Mage = 30.5) participated in a 2 (sender: friend vs. stranger) x 2 (signal: conspicuous vs. inconspicuous) between-subjects experiment. Participants either imagined that they noticed (inconspicuous condition) a friend or stranger's Rolex watch or a friend or stranger showed them his Rolex watch (conspicuous condition). Afterwards, participants rated the extent to which the friend or stranger was powerful, respected, and influential on a seven-point scale (1 = "not at all," 7 = "very much so";  $\alpha = .92$ ).

An ANOVA with sender familiarity and conspicuousness predicting perceived status revealed a marginally significant interaction of familiarity with conspicuousness ( $F(1, 77) = 3.41, p = .06$ ; see table for all means.) Strangers who signaled conspicuously were perceived as less powerful than strangers who signaled inconspicuously ( $F(1, 77) = 4.49, p < .04$ ). There was no effect of conspicuous signaling in the friend condition ( $F(1, 77) = .27, p > .60$ ). The pattern of results from study 1 support our prediction that conspicuous signals lead to lower perceptions of status for unfamiliar audience, but not those that are familiar with the sender.

### **Study 2: From the Sender's Perspective**

Ninety-one students (55% male) participated in a two-condition between-subject lab experiment. Participants in the friend (stranger) imagined they would be starting a new job within their company at the same (a new) location, and would be primarily working with people they knew (didn't know). Then, participants were asked to "decorate" their office by drawing a business award that they had won on their new bookshelf. We used the size of their drawing as our measure of conspicuousness. Participants then rated the extent to which they agreed that "intelligent," "competent," and "hardworking" described them on seven-point Likert scales. We averaged these three items to form our overall business ability measure ( $\alpha = .70$ ).

We mean-centered the award area and included it and audience condition in a full factorial model predicting business ability. The main effect of audience was significant ( $F(1, 86) = 4.92, p < .03$ ) but the main effect of award area was not ( $F(1, 86) = 1.91, p > .17$ ). The interaction of audience with award area was significant ( $F(1, 86) = 4.56, p < .04$ ). Importantly, as predicted, the effect of award area was significant and positive in the strangers condition ( $b = .08, t(86) = 2.44, p < .02$ ) but not in the friends condition ( $b = -.02, t(86) = -.54, p > .58$ ).

This pattern of results suggests that participants felt like they had greater business abilities when they displayed an award conspicuously, but only when they imagined the award would primarily be viewed by strangers. For participants who imagined working with friends, the conspicuousness of the award (i.e., award area) had no effect on their felt business ability.

### Study 3A and 3B: Workplace Signaling

In our final two studies, we sought to replicate the results of results of the previous studies, but in a similar context where the signal was manipulated in the same manner for both senders and receivers. In both studies, we manipulated the conspicuousness of the business ability signal by altering the conspicuousness of where the award was displayed in an office (either prominently on the front of the desk, or subtly on a bookcase in the back of the room).

#### Study 3a: Receivers

Two hundred and seventy-six Amazon's Mechanical Turk workers participated in a 2 (sender: friend vs. stranger) x 2 (signal: conspicuous vs. inconspicuous) between-subjects experiment. Participants were asked to imagine that they were going to the office of someone they knew (didn't know) for a meeting. Then, participants were shown a picture of the person's office whom they were meeting with a business award display prominently (subtly). Afterwards, participants responded to measures relating the office inhabitant's authenticity and perceived business ability (perceived intelligence, diligence, and competence).

In an ANOVA with sender and signal in a full factorial model predicting business ability there was a significant interaction of sender with signal ( $F(1, 275) = 4.94, p < .05$ ; see table for all means). An examination of unfamiliar coworkers, demonstrated that those who prominently displayed the award were perceived to have less business ability ( $F(1, 141) = 8.15, p < .01$ ), yet there was no effect of conspicuousness when the signal was sent to a familiar audience ( $F(1, 134) = .69, p = .79$ ).

A similar pattern occurred for perceived authenticity. The interaction of sender with signal was significant ( $F(1, 275) = 12.84, p < .001$ ). This interaction which was predominantly driven by the influence of conspicuousness on authenticity in the unfamiliar condition ( $F(1, 141) = 36.70, p < .001$ ) and not the familiar condition ( $F(1, 134) = 1.79, p = .18$ ).

To examine whether authenticity mediated the effect of sender familiarity and signal conspicuousness on business ability, we used Hayes' (2013) PROCESS model 8. In a 5,000 bootstrapped sample, the 95% confidence interval for the indirect effect of the interaction did not include zero (-.6617, -.1848).

#### Study 3b: Senders

One hundred and sixty-three participants from Amazon's Mechanical Turk completed a similar 2 (audience: friend vs. stranger) x 2 (signal: conspicuous vs. inconspicuous) between-subjects experiment. Participants began by reading the same audience manipulation as in study 2 (i.e., a new job in a new or old location). Participants in the conspicuous (inconspicuous) condition then read, "You have put an intelligence award you received for winning a business intelligence competition on the front of your desk (side of your bookcase)." Participants saw a picture of an office with the award placed in the designated area and were asked to click on the award to ensure that they saw it.

Then participants completed the same measures of business ability from study 2 ( $\alpha = .82$ ). To measure trait salience, participants were asked to think about how large a part of their identity was based

on their business ability and to choose a filled-in circle that best represented this importance. A larger circle represented their overall identity, and smaller filled-in colored circle represented the amount of their identity that pertained to their business ability. The larger the filled-in portion of their identity, the greater the trait salience.

We ran a full factorial ANOVA with receiver (friends vs. stranger) and signal (conspicuous vs. inconspicuous) predicting the participants' felt business ability. The interaction of receiver with signal was marginally significant ( $F(1, 159) = 3.60, p < .06$ ; see table for all means). In the strangers condition, participants felt they had greater business abilities when they imagined conspicuously displaying their award ( $F(1, 159) = 12.94, p < .001$ ). There was no effect of conspicuousness in the friend condition ( $F(1, 159) = 1.14, p > .28$ ).

One participant did not complete the trait salience measure so differences in degrees of freedom from this point on are due to this participant not being included in the analyses. In a full factorial ANOVA with receiver and signal predicting trait salience the only significant effect was the interaction of receiver with signal ( $F(1, 158) = 7.73, p < .01$ ). In the strangers condition, those who imagined conspicuously displaying the award reported greater trait salience than those who imagined inconspicuously displaying the award ( $F(1, 158) = 3.51, p = .06$ ). Interestingly, in the friends condition, the opposite pattern emerged with those who imagined conspicuously displaying the award reporting lower trait salience than those who imagined inconspicuously displaying the award ( $F(1, 158) = 4.22, p < .05$ ).

To examine whether trait salience mediated the effect of conspicuousness on felt intelligence in the stranger condition, we used Hayes' (2013) PROCESS model 8. In a 5,000 bootstrapped sample, the 95% confidence interval for the indirect effect of the interaction did not include zero (-.4686, -.0705).

## CONCLUSION

The results of three studies suggest that conspicuous signals are less likely to be believed by unfamiliar receivers, but conspicuously signaling to unfamiliar receivers actually enhances senders' beliefs in the extent to which they possess the trait.

As a communication process, identity signaling has the ability to convey information that is otherwise unobservable. Yet, the manner in which these signals are sent and the familiarity between both members in the communication process illustrates an interactive component of the signaling process. The understanding of this interactive component supplied by this research demonstrates when and why conspicuous signals can be beneficial or detrimental depending on whether you take the perspective of the sender or receiver. Furthermore, by accounting for heterogeneity in a signal's audience, we further validate our theoretical framework by demonstrating that the process for these effects is moderated by the familiarity between the sender and the receiver.

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# Uncertainty Increases Motivation

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## EXTENDED ABSTRACT

Consumers often invest resources (e.g., effort, time, or money) to pursue an item of an uncertain magnitude. Will uncertainty increase or decrease resource investment (i.e., motivation)? Previous research found that in choice and evaluation, people prefer certain gains over uncertain gains (Bernoulli 1738; Kahneman and Tversky 1979; Gneezy, List, and Wu 2006; von Neumann and Morgenstern 1944). In this research we focus on motivation rather than choice and evaluation, and explore the possibility that while pursuing a reward, people are more motivated by an uncertain reward than by a certain reward, even if the latter entails a higher expected value.

We define a certain reward as a reward of a certain magnitude (e.g., a 100% chance at  $V$ ;  $V > 0$ ) and an uncertain reward as a reward of an uncertain magnitude (e.g., a 50% chance at  $V$  and a 50% chance at  $c$ ;  $V > c > 0$ ). By controlling the best-case scenario of the two rewards, we run a strong test for the motivational impact of uncertainty.

We suggest that uncertainty is exciting and predict that uncertainty increases motivation by generating a positive experience during the pursuit of a reward of an uncertain magnitude. Research has shown that uncertainty about positive outcomes stimulates positive feelings and arousal (i.e., excitement, enjoyment, and suspense; Bar-Anan, Wilson, and Gilbert 2009; Brehm and Self 1989; Lee and Qiu 2009; Wilson et al. 2005; Zillmann 1983). Thus, uncertainty can be a source of positive experience. Moreover, excitement increases motivation because excitement is a positive feeling, and according to motivation theory, positive feelings increase motivation (Czikkentmihalyi 1990; Custers and Aarts 2005; Erez and Isen 2002; Ferguson 2008; Fishbach and Choi 2012; Shah and Kruglanski 2000).

An important moderator of the motivating uncertainty effect is the focus on process (pursing the reward) versus outcome (reward itself) of the reward pursuit. When inside the process of reward pursuit, people spontaneously attend to the process, and affective aspects, such as excitement, are central to their decisions on how much resource to invest to pursue the reward. By contrast, when outside of the process of reward pursuit (e.g., when deciding in prospective), people spontaneously attend to the outcome, and non-affective aspects, such as the value of the outcome, are central to their decisions (Bagozzi and Dholakia 1999; Choi and Fishbach 2011; Gollwitzer 2012; Kivetz 2003; Hsee and Rottenstreich 2004; Millar and Tesser 1986).

We examined the motivating uncertainty effect and its mechanism in four studies, all involving real rewards and resource investment.

Study 1 ( $N = 87$ ) provides an initial demonstration that uncertainty can increase motivation. We found that whereas 70% of participants completed a water-drinking task in pursuit of an uncertain reward (\$2 or \$1 depending on a coin toss), only 43% completed the same task in pursuit of a certain reward (\$2).

Study 2 ( $N = 530$ ) replicates the motivating uncertainty effect across a range of reward probabilities (from 1% to 99%). MTurk participants worked on an ad evaluation task for a bonus, and those who evaluated more ads than the average number across all participants qualified for a bonus. We had two major findings. First, on average, participants incentivized by an uncertain bonus (1%, 40%, 50%, 60%, 99%, an unspecified chance at \$0.50; otherwise, \$0.20)

evaluated more ads than those incentivized by a certain bonus (\$0.50 or \$0.20). Second, each uncertain bonus in this design was more motivating than the certain, economically better bonus (\$0.50).

Studies 3 and 4 investigate the process underlying the motivating uncertainty effect, namely, excitement during the process of reward pursuit. Specifically, Study 3 ( $N = 138$ ) demonstrates that uncertainty increases motivation only during the process of pursuing a reward but not before the process starts. Participants bid against each other for a bag of Godiva truffle chocolates in a multiple-round auction. The bag contained either a certain number of truffle chocolates (5 in an unwrapped bag) or an uncertain number of truffle chocolates (5 or 3 in a wrapped bag); participants either elicited their WTP before the auction (presumably focus on outcome) or throughout the auction (presumably focus on process). We found that when stating WTP in advance participants gave a higher reservation price to the certain bag, but during the actual bidding process, they bid higher for the uncertain bag.

Study 4 ( $N = 185$ ) further examines our account that uncertainty adds excitement to the process and reveals that uncertainty brings excitement and excitement boosts motivation. We manipulated participants' focus by experimentally instructing them to focus on process or outcome (or control, no instruction). We also measured their excitement experience. The findings are that participants who focused on process (or control) priced the uncertain item higher than the certain item, whereas participants who focused on outcome priced the certain item higher, and that the excitement experience mediated the motivating uncertainty effect.

In sum, we document a robust positive effect of uncertainty on motivation: uncertain rewards increase motivation. We further demonstrate that this effect occurs when people focus on process (pursing the reward) rather than when they focus on outcome (the reward itself) and that uncertainty in reward magnitude creates excitement, thereby increasing motivation. Our research yields theoretical contributions about when people react positively or negatively towards uncertainty and practical implications about how to devise cost-efficient incentive systems, including consumer loyalty programs.

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# Ideal Affect as a Choice Criterion: The Role of Ideal Affect in Experiential and Material Purchases

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## EXTENDED ABSTRACT

A considerable number of research has shown that experiences make people happier than material possessions (Carter and Gilovich 2010, 2012; Rosenzweig and Gilovich 2012; Van Boven and Gilovich 2003; Nicolao, Irwin, and Goodman 2009). Then, why are experiences more satisfying? According to the previous findings, experiences tend to provide greater happiness to consumers because they are more open to positive reinterpretations over time and less comparative in evaluations than material possessions (Van Boven and Gilovich 2003). Also, experiences are more closely associated with the self and are more meaningful to one's identity than possessions (Carter and Gilovich 2012). In the current research, we add an additional novel explanation for the enduring satisfaction that experiences might bring: the rich nature of affective experiences in experiential purchases. Specifically, we maintain that consumers derive greater happiness from experiences than from material goods because they are more likely to experience ideal affect, the affective states that they would ideally like to feel, when consuming experiential than in material purchases. The roots of this prediction lie in research on the emphasized role of emotional components in experiential consumption (Havlena and Holbrook 1986). Given that experiences are primarily consumed for the anticipated pleasures that they would evoke (MacInnis, Patrick, and Park 2006), the current research proposes that consumers are more likely to consider affective factors as a criterion and appropriately apply these criteria when choosing experiences than material products. Specifically, we argue that consumers are more likely to make choices in accordance with their ideal affect and this, in turn, makes people feel more enduring satisfaction with their choices in experiential than in material purchases.

According to Tsai, Knutson, and Fung (2006), ideal affect can be categorized in terms of two levels of arousal: high-arousal positive affect (HAP) and low-arousal positive affect (LAP) states. For instance, excitement, enthusiasm, and elation can be described as HAP and calm, peacefulness, and serenity can be described as LAP. In the current research, we argue that differences in valuation of HAP and LAP would yield different consumer choices. That is, consumers who value HAP (LAP) over LAP (HAP) would be more likely to make purchases that will enable them to experience HAP (LAP). More importantly, we propose that the difference in ideal affect would be more accountable in experiential purchases where affective experiences from purchases would be considered as more crucial concern than in material purchases. Thus, we maintain that consumers are more likely to make choices in accordance with their ideal affect when engaging in experiential purchases than in material purchases. Specifically, consumers who value HAP (LAP) over LAP (HAP) are more likely to make HAP (LAP) purchases in experiential than material purchases, and this, in turn, would make people feel happier by allowing them to have more opportunities to feel their ideal affect in experiential than material purchases.

In four studies, we tested the hypothesis whether people are more likely to pursue their ideal affect in experiential than in material purchases. As predicted, the findings demonstrate that ideal affect is more primarily considered as a choice criterion in experiential than in material purchases and it also has a greater influence on consumer satisfaction particularly in experiential purchases. Study 1 provided the initial evidence for our prediction by revealing that participants

were more likely to consider affective factors in experiential than in material purchase. Also, the results showed that participants anticipated experiencing their ideal affect from the purchase when consuming experiences but not material goods. Study 2 showed more supporting evidence for the hypothesis, indicating that people made decisions that reflected their own ideal affect in experiential purchases but not in material purchases. Study 3 replicated the results of Study 1, demonstrating that participants who focused on the experiential aspects of a camera anticipated emotions in accordance with their ideal affect but this result was not observed for participants who focused on the material aspects of a camera. Also, Study 3 revealed the moderating role of mood awareness in the relationship between ideal affect and purchase types. Lastly, Study 4 with real-world data, demonstrated the importance of ideal affect on consumer actual satisfaction, revealing that congruence between individuals' ideal affect and the ideal affect elicited by consumption have greater influence on consumer satisfaction in experiential than in material consumption.

The present research has important theoretical and managerial implications. From a theoretical perspective, this paper contributes to existing literature on experiential and material purchases by adding a novel explanation for enduring pleasure derived from experiences; namely, experiences of ideal affect. We replicated the previous findings by asking participants to recall their own past purchases (Study 1), to imagine a hypothetical purchase scenario (Study 2 and 3), and to make actual choices (Study 4). Particularly, Study 4 yields practical implications by revealing that people would derive more happiness especially when they have ideal affect-congruent experiential consumption. Taken together, our findings demonstrate that consuming experiences which are congruent with individuals' ideal affect would be a key determinant for greater hedonic values that experiences might bring to consumers. From a managerial perspective, the current research provides insight for marketers who mainly promote experiences or leisure activities. Indeed, a considerable number of companies sell experiences. For example, LivingSocial, a deal-of-the-day website that offers a wide range of experiential purchases, has provided a platform for thousands of merchants who are promoting their experiential products. Since numerous merchants are competing to sell their products every day, consumers can easily find several deals for the same category of experiential products (e.g., massage). Then, how would companies appeal consumers effectively? The findings from this research suggest that they should be aware that fulfilling consumers' ideal affect would be a key factor in promoting experiential products. Thus, for marketers who are selling experiences, it would be important to understand target consumers' ideal affect and develop promotion plans emphasizing affective experiences that consumer can derive from their products in order to differentiate their products from other competitors.

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# Keyboard Warriors in Cyberfights: Conflict in Online Communities of Consumption and its Effects on Community Resources

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## EXTENDED ABSTRACT

Conflicts are very common in Online Consumption Communities (OCC) and numerous expressions have developed to describe them. Prior research indicates contradictory effects on community resources, namely social capital and culture. One stream finds that online conflict dissolves social capital and community culture (cf. De Valck 2007) while another stream finds it enhances them (cf. Ewing, Wagstaff, and Power 2013). Therefore, the effect of OCC conflict on community resources is unclear. In this paper, we (1) investigate conflict in OCC to develop a typology, and (2) delineate how each type of OCC conflict impacts community resources. This research contributes to our understanding of OCC conflicts and to the literature on value formation in OCC.

Conflict is a series of interactions where two or more parties pursue mutually incompatible goals and strive to achieve their goal at the expense of the other. It is generally characterized by three markers: parties, normally two of them, an object i.e. the focus of the interaction, and conflict behaviors i.e. actions meant to be hurtful (Husemann and Luedicke 2012). OCC conflict in particular unfolds publicly so it has a fourth marker: on-lookers.

OCC conflict impacts two types of community resources: social capital, the overall level of trust, reciprocity and voluntarism in the group (Mathwick, Wiertz, and De Ruyter 2008) and community culture, the system of discourses and practices attached to the OCC driving the production of meanings (Seraj, 2012). OCC conflict can create negative emotions and inferences about the event, parties and the group thus damaging social capital (cf. Duval Smith 1999; Wiertz et al. 2010) but also the opposite (cf. Ewing et al. 2013; Hardacker 2010). OCC conflict can question the existing status quo, eroding community culture (cf. Forte, Larco, and Bruckman 2009; De Valck 2007) but can also enact and adapt community culture, reinforcing it (cf. Graham 2007; Schau, Muniz and Arnould, 2009). OCC conflict can thus have opposing effects on community resources, and the reasons for this are unclear.

The research context of our netnography is a British forum aimed at fans of electronica and clubbing with over 20,000 members and 7.4 million posts since its creation in 2001. Context selection and the overall netnographic process follow the standards defined by Kozinets (2010). Data was collected over 18 months. Six interviews (200 transcript pages) were conducted investigating the different meanings of OCC conflict and its consequences. 150 threads were purposefully selected for coding based on their perceived interest and relevance to depict conflict, social capital and/or community culture. "Offline" field notes were taken when the first author went clubbing and "online" field notes were taken when the first author contributed to discussions.

Two types of conflicts with seemingly opposing effects on community resources emerge from the data: authentic and performative conflicts. Authentic conflicts correspond to the general definition of conflict provided in the literature review (see above). Authentic conflicts provoke negative emotions and moods leading to negative inferences about the parties and the group, arguably damaging community social capital. They also question group values and norms, plausibly impacting community culture negatively.

Performative conflicts imitate authentic conflicts so that the imitation is only a symbolic representation of the authentic (Goffman, 1974). Performative conflicts are executed by posters (stage performers) consciously interacting in front of on-lookers (the audience) in a dedicated place at a specific time. Inspired by Schechner (2003 [1988]) we identify three types of performative conflicts: rituals, drama and games. Performative conflicts foster feelings of community, entertainment, and personal growth. This builds positive inferences about the parties and the group, nurturing social capital. Performative conflicts also build shared stories and history, contributing to community culture.

Whether conflicts are authentic or performative is ambiguous. Parties can engage in authentic conflicts while the audience frames the experience as performative. A party can also frame a conflict as a performance while the audience and/or the other party experience it as authentic. If the audience frames conflict as a performance, it generally enhances the community's culture and social capital.

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# Affecting Choice and Desire: Hedonic and Utilitarian Feature Presentation Sequences

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## EXTENDED ABSTRACT

The modern consumer is regularly exposed to countless advertisements for products they may not have considered purchasing. Despite the lack of consumer intent to purchase, these ads exist for the pragmatic reason that they increase sales. What makes these appeals most effective? Rather than asking what *type* of information makes an appeal effective, we explore how the *positioning* of the information in an ad can best mesh with the consumer's natural attention and comprehension processes. Consumer products are often conceptualized and marketed to fulfill either utilitarian needs or hedonic desires (Dahr & Wertenboch, 2000). In reality, most products possess multiple attributes, some of which are utilitarian, and others that are hedonic. When assessing the value of something novel, people generally process information sequentially, that is, one feature at a time (Johnson, Häubl, & Keinan, 2007). Therefore, this project investigates whether the order with which people learn about hedonic and utilitarian features of a product affects their desire.

We present evidence from four experiments to suggest that, in general, a hedonic-to-utilitarian—i.e., hedonic primacy—sequence (versus a utilitarian primacy sequence) is more effective at generating desire for the product. This effect is mediated by the rated importance of utilitarian—but not hedonic—elements, suggesting a use of utilitarian information to rationalize desire resulting from hedonic engagement. We rule out unobserved differences between hedonic and utilitarian features using a single set of attributes for a given product where each attribute can be framed as hedonic or utilitarian. Furthermore, we observe this effect for both branded and unbranded products and across durable and consumable products. We also test this hypothesis when either including or omitting brand information to reveal that brand associations do not account for the effect. Ultimately, we identify a moderating condition whereby, when baseline interest is sufficiently high, utilitarian primacy allows motivated consumers to begin justifying their desire immediately with utilitarian information, resulting in greater overall desire. Together these findings provide evidence that beginning a message with hedonic information induces greater desire for the product, which is then justified using practical, utilitarian information.

In experiment 1, online participants learned serialized information about a pair of unbranded headphones. Participants were randomly assigned to view headphone features in hedonic primacy order ( $n = 40$ ) or in utilitarian primacy order ( $n = 40$ ). After exposure to the product attributes, participants were surveyed on their global attitude and their hypothetical willingness-to-pay (WTP) for a raffle ticket for the headphones. WTP was significantly higher for individuals in the hedonic primacy condition ( $t(78) = 2.00, p = .049$ ).

In experiment 2, students already participating in other in-lab surveys were also asked to rate a brand of chewing gum. Half of participants saw the features in the hedonic primacy order ( $n = 50$ ), while the others saw the utilitarian primacy order ( $n = 51$ ). Participants were asked to rate the importance of each feature as it was presented and they were then given the opportunity to indicate their preference for a pack of the gum (retail value \$1.79) versus \$1.00 cash (1-7 scale, 1 = \$1, 7 = gum). Those exposed to a hedonic primacy order were more likely to choose the pack of gum over the dollar ( $t(100) = 2.04, p = .044$ ). Furthermore, although the features

had been pretested to be of equal importance, when the features were presented in a serialized fashion, the perceived importance of utilitarian features was heightened when those features were presented after hedonic features (versus before them), which mediated the effect of order on desire in a bootstrapped mediation model using 1000 iterations (bias corrected 95% CI: -.483 to -.006).

These findings were replicated in an online context in experiment 3, where brand information was included or omitted when learning about lattes. There was no main effect of brand information presence, nor was there an interactive effect with order of feature presentation, so these cells were collapsed. This suggests that brand information is not a driver of the effect. However, associations with the brand could produce differential initial levels of interest in the product, which we tested in experiment 4 by including a measure of liking for the brand (Apple) of the focal product (iPod Touch).

In experiment 4, we therefore predicted a replication of the effect for people low on liking for Apple because they are likely to have low involvement and interest would therefore be generated through exposure to hedonic information. On the other hand, for those who reported high liking for Apple, we predicted an attenuation of the greater ability of the hedonic primacy to increase desire. A spotlight analysis (Aiken and West, 1991) revealed that at one standard deviation below the mean of pre-existing brand liking, hedonic primacy led to greater desire than did utilitarian primacy ( $b = 0.62, t(97) = 2.77, p = .007$ ). However, at one standard deviation above the mean of pre-existing brand liking, hedonic primacy produced less desire than utilitarian primacy ( $b = -0.40, t(97) = -1.81, p = .073$ ). As in the previous experiments, importance of utilitarian attributes (but not hedonic attributes) mediated the effect of condition on desire in a bootstrapped mediation model.

To summarize, across four experiments, we provide evidence that—holding information constant—simply affecting the ordinal position of hedonic and utilitarian information is sufficient to affect behavioral desire for a product, with hedonic primacy generally producing greater desire. Not only is desire affected, but it would appear that practical, utilitarian information is processed and integrated differently depending on whether involvement (i.e., product desire) exists before utilitarian information presentation. This is true regardless of whether involvement results from exposure to hedonic information or from pre-existing desire. Because the information presented for a given product was the same across conditions, explicit attitudes for each product did not differ between presentation orders across experiments. This work has substantive applications for consumers and marketers alike by suggesting practical methods for directing choice and desire by ordering product and decision information to reflect natural attention processes.

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# The Counterproductive Effects of Fantasies: How Visualizations of Goal Attainment Demotivate Consumer Behavior

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## EXTENDED ABSTRACT

Self-regulation theory proposes that people are motivated to engage in behaviors that aim to achieve specific standards (Carver and Scheier 1982), and continue to engage in these behaviors until the desired end-state is achieved (Forster et al. 2005). In this paper, we examine consumer self-regulatory tendencies within a context that has recently emerged in the consumer literature, namely mental imagery. To date, consumer research has predominantly examined how visualizing product use and benefits aids persuasion in various ways – e.g., visualization of product benefits enhances product evaluations (Escalas 2007; Zhao et al. 2011), improves recall (Petrova and Cialdini 2005), and impacts the ability to discern between strong and weak argument claims (Escalas and Luce 2004). While these findings reliably demonstrate that mental imagery can have beneficial effects on consumer judgment, we show such imagery can ironically produce negative motivational effects, namely visualization can result in premature goal disengagement. We also reveal an affect-based mechanism for this effect, which was not examined in previous mental imagery research.

## Study Hypotheses

In the present research, we provide evidence that visualizing the achievement of a self-relevant goal can impair consumer self-regulatory tendencies by inducing weakly arousing emotions that fail to further motivate goal-congruent behaviors (Hull 1943). However, this ironic effect is contingent on how the goal is visualized – namely it is only apparent when envisioning goals in abstract not concrete terms. More specifically, envisioning the attainment of goals in an abstract way (e.g., achieving one's ideal body appearance in a general sense) triggers an assimilation mechanism that emphasizes desirability rather than feasibility concerns (Trope et al. 2007), whereby the individual vicariously experiences the end state (e.g., life as a beautiful individual) rather than focus on how to achieve the goal. This assimilation process leads to vicarious goal satiation, evoking low arousal positive emotions (i.e. contentment), which no longer energizes goal-congruent action. Conversely, envisioning the attainment of the same goal in a concrete way (e.g., achieving one's ideal body appearance by losing 10 lbs.) focuses attention on feasibility issues and makes individuals aware that more work is required to achieve the goal. This contrast effect emphasizes the discrepancy between one's actual and ideal self-states, evokes highly-arousing negative emotions (i.e. anxiety), which ultimately stimulate goal-congruent behavior. In sum, we propose that fantasies can have a counterproductive effect. Namely, envisioning goal fulfillment abstractly (concretely) generates positively-valenced low (negatively-valenced high) arousal feelings which in turn leads to goal disengagement (pursuit).

## Study Methods and Results

We completed five experiments to test our propositions. In studies 1A and 1B, results revealed that participants who envisioned the attainment of their ideal body appearance in a general way subsequently spent less time engaging in a second goal-related exercise task (e.g. visualizing doing sit-ups, push-ups, etc.) (Study 1A) and reported lower intentions to purchase healthy food items (Study 1B) compared to control and concrete-goal conditions. This confirmed

that visualizing goals abstractly can demotivate goal-congruent activities. On the other hand, mental imagery of goal attainment viewed in concrete terms marginally encouraged participants to spend more time (compared to controls) on the subsequent mental exercises and enhanced their desire of healthy food items. In study 2, moderation and mediation approaches were used to provide preliminary evidence for the proposed affect-based mechanism. The findings showed that visualizing achieving professional goals in an abstract sense reduced intentions to look for internships and participate in case competitions (i.e., goal-relevant behaviors). Importantly, this finding was only present when subjects focused on their feelings during the visualization task, not when they instead focused on the content of the mental simulation. This suggests that affect plays a critical role in reducing goal congruent behavior. Further, mediational evidence revealed that (low) positively-valenced emotional arousal underlies this effect. On the other hand, concrete visualizations of goal fulfillment increased participants' interest in goal-congruent behaviors when focusing on feelings rather than imagery content, however this effect was non-significant. In study 3, we provided a direct replication of the main findings in study 2, and demonstrated that the effects produced by abstract goal visualizations do not carry-over to other domains. For instance, if you fantasize about achieving professional success in an abstract way, while this might demotivate goal-congruent behaviors, it does not impact behaviors associated with other goals (e.g. eating healthy). Finally, in study 4, we employed a standard manipulation of processing style (abstract versus concrete) and further validated our findings: those that were initially induced with an abstract mindset and then asked to visualize attaining their ideal body appearance reported less interest in goal-congruent goods (i.e. gym membership, running shoes) than participants who were initially primed with a concrete mindset.

## Contributions

This paper contributes to the literature in at least three ways. First, while past consumer research typically examined how visualizations of product use and benefits influence consumer judgments, we show that mental imagery has motivational effects on consumer self-regulatory behaviors and decisions, and that these effects are largely negative. In fact, unlike most visualization studies which advocate the merits of mental imagery, visualizing goals in abstract terms can ironically harm goal pursuit initiatives. Second, we show that this effect is at least partially driven by an affect-based process. Using a moderation approach, we showed that abstract goal visualizations impaired self-regulation only when participants' focused on their emotions while imagining achieving their goals. There was also mediational evidence that highlighted the role of positively-valenced low arousal feelings. More specifically, when consumers visualized themselves attaining an ideal self-state in an abstract fashion, they experienced a state of pleasantly relaxing emotions that no longer motivated goal-congruent behaviors. Finally, this study contributes to the self-regulation literature by providing preliminary evidence that (integral) affect not only derives from imagined goal completion, but also influences subsequent goal-congruent behaviors. Further, we provide initial evidence that emotional arousal, an affective dimension often omitted in consumer research, should be considered in conjunction with emotional valence when examining the role of affect in self-regulation.

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# Focusing on the Left Digit: An Encoding or an Estimation Bias?

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## EXTENDED ABSTRACT.

This paper focuses on a well-documented and one of the most pervasive biases in numerical cognition known as the left-digit effect (Manning and Sprott 2009; Thomas and Morwitz 2005). While its robustness and implications have been demonstrated in a variety of contexts, the mechanisms that underlie the left-digit effect continue to be debated (Thomas and Morwitz 2009). It remains unclear whether the left-digit bias occurs due to biased encoding or due to incorrect choice of estimation strategies at the magnitude comparison stage. Some scholars have attributed this effect to consumers' inattention to prices right digits' during price encoding (e.g. Basu 2006; Stiving and Winer 1997). According to the biased encoding account the effect manifests itself because consumers do not pay attention to the right digits to minimize their cognitive effort during price encoding (e.g. Basu 2006; Stiving and Winer 1997); or because consumers, reading prices from left to right, remember left-most digits more vividly. However, the above account is not consistent with the findings in the numerical cognition domain which show that people *automatically* attend to right digits (e.g. Dehaene, et al. 1990; Nuerk et al., 2001). Given that, the left-digit bias should emerge at the stage of mental computations due to consumers' aversion to round-up fractional prices. This research develops and tests the competing predictions that emerge from the biased encoding and the biased estimation accounts.

## Rounding-Up Aversion Account

Rounding fractional prices to the closest whole dollar amounts (e.g. 2.99 to 3.00), in most cases, eliminates the left-digit effect. If instead consumers round the prices down (e.g. 2.99 to 2.00), they are likely to overestimate the difference between 2.99 and 4.00. Why are people reluctant to round-up numbers in multi-digit subtractions? Unlike the proponents of the biased encoding account who argue that the left-digit bias is caused by cognitive miserliness or left-to-right reading, we believe that aversion to round-up is caused by the motivation to preserve the integrity of multi-digit numbers.

According to our account, when performing magnitude comparisons consumers are intrinsically motivated to preserve prices' magnitude and visual representations intact (Dehaene 1992). Rounding-up a number, compared to rounding-down, inevitably reduces the perceived symbolic similarity between the original number and the rounded number. For example, 2.75 seems more visually similar to 2.00 than to 3.00. The rounding-up aversion account suggests that the left-digit effect is more likely for stimulus-based than for memory-based price comparisons, since the former make visual similarity between actual and rounded prices more accessible (Zhang and Wang 2005). In contrast, the biased encoding account suggests that memory-based comparisons, being more cognitively demanding (e.g. Lynch and Srull, 1982), should make the left-digit bias more likely.

Further, to preserve the price magnitude information consumers' should be more willing to round prices' that are close to whole dollar amounts in magnitude. Thus, the rounding-up aversion account predicts that the left-digit bias is *more* likely to manifest for 2.75 (less "roundable") than for 2.99 (more "roundable"). The biased encoding account, in contrast, predicts that roundability has no effect on the left-digit bias. The account suggests that boundedly rational consumers only encode prices' left-most digits or are more likely to memorize them (Bizer and Schindler 2000; Coulter 2001), irre-

spective of prices' right digits. Three studies provide support to the predictions of the rounding-up aversion account.

## Study 1

To test the effect of price roundability on the left-digit bias we asked participants to evaluate the magnitude of the difference between regular and sale prices and to report which computational strategy they had used for each price pair. Regular and sale prices were manipulated on two key dimensions: left-digit difference between regular and sale prices (misleading vs. control) and price roundability. The study employed a 2 (left-digit difference: misleading vs. control) x 2 (roundability: high vs. low) x 3 (numerical distance: small vs. medium vs. large) within-subjects design (n = 99). The results suggest that the left-digit effect is reduced for prices high in roundability. The analysis of retrospective strategy reports shows that people are more likely to use rounding-up for prices high in roundability.

## Study 2

This study tested the prediction of the rounding-up aversion account that memory-based processing makes people more likely to round up fractional prices and thus reduces the left-digit effect. The study employed a 2 (evaluation mode: stimulus-based vs. memory-based) x 2 (left-digit difference) x 6 (numeric difference) mixed factorial design, with price difference evaluation mode as the only between-subjects factor (n=120). Half of the participants made memory-based evaluations of differences between regular and sale prices while the other half made stimulus-based evaluations. Consistent with our predictions, the effect of left-digit difference was larger under stimulus-based processing, than under memory-based processing.

## Study 3

Just as people are motivated to preserve the integrity visual representations of prices, they are motivated to preserve the price magnitude information. We predict that the effect of memory-based processing will not manifest for prices low in roundability. Magnitude representations should become more salient under memory-based processing when visual symbolic representations are no longer available. Since rounding is likely to distort magnitude representations, memory-based processing should not induce rounding for prices low in roundability. The study employed a 2 (evaluation mode) x 2 (left-digit difference) x 2 (roundability) x 3 (numeric difference) mixed factorial design (n=99). The effect of processing mode was replicated for prices high in roundability: memory-based processing significantly reduced the left-digit bias for prices high in roundability. No effect of processing mode was observed for prices low in roundability.

## General discussion

Three studies provide evidence against the biased encoding account of the left-digit effect (Basu 2006; Schindler and Kirby 1997) and find support for the rounding-up aversion account. Study 1 shows that when prices get closer to whole dollar amounts the left-digit effect is reduced. Study 2 identifies memory-based processing as a mitigating factor reducing the left-digit effect, and study 3 identifies roundability as a moderator of the effect of memory-based processing.

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# The Effect of Embarrassment on Preferences for Brand Conspicuousness: The Roles of Self-Esteem and Self-Brand Connection

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## EXTENDED ABSTRACT

Embarrassment refers to “an aversive and awkward emotional state following events that increase the threat of unwanted evaluation of self from a real or imagined social audience” (Dahl, Manchanda and Argo 2001). While prior consumer research has focused on when such emotions arise in various consumption settings (e.g., Dahl et al. 2001), this paper investigates the downstream consequence of embarrassment on consumer preferences for branded products.

Two general behavioral tendencies accompanying this negative emotion were documented. First, embarrassment may entail a tendency to avoid social interaction. Second, embarrassment may activate a motivation to repair one’s damaged public self-image (Brown 1970). We examine the effect of one important dispositional factor, chronic self-esteem, on consumers’ primary response to embarrassment. Baumeister, Tice, and Hutton (1989) find that people with low self-esteem choose relatively “safer” strategies such as avoiding social contacts to protect themselves from negative events that may threaten their self-views. However, people with higher levels of self-esteem may engage in enhancement approaches to demonstrate their desirable positive attributes in public. This paper focuses on how these two kinds of responses influence consumers’ preferences for brand conspicuousness, which is operationalized as how salient the brand is to others (e.g., product with small vs. large logo). Thus:

**H1:** An incidental feeling of embarrassment makes consumers evaluate a more conspicuous branded product less favorably when they have lower self-esteem but more favorably when they have higher self-esteem.

However, the effect of embarrassment on brand conspicuousness will not occur to all brands. Embarrassment would have influence only when brands are related to self-view. To test this, we investigate the moderator: self-brand connection. The self-brand connection represents the overlaps between consumers and brands in terms of their shared traits and characteristics, and thus, would influence the extent to which consumers can relate the brand to self-concept. We hypothesize that:

**H2:** When consumers feel a greater connection to a brand, embarrassment makes consumers with lower self-esteem (higher self-esteem) evaluate a more conspicuous branded product less (more) favorably. When the self-brand connection is weaker, the interaction effect between embarrassment and self-esteem is diminished.

Two studies were conducted. Study 1 tested H1 and had two parts happening at two points of time. In part 1, we measured participants’ chronic self-esteem using Rosenberg’s (1965). Part 2 happened two weeks later, in which participants performed two alleged independent tasks. First, we manipulated levels of embarrassment using a widely used experiment paradigm (Apsler 1975; Harris 2001). Specifically, participants in the embarrassment (control) condition were asked to sing a weird song in front of others (write down the lyrics). Second, participants were shown images of two Nike T-

shirts differed only in the presence/absence of brand logo and were asked to evaluate the two products. The results supported H1.

In study 2 which tested H2, participants’ self-esteem was also measured when they signed up for the study at time 1, but with a different scale. We asked participants to indicate how much they liked their names on a 7-point scale from 1 (*not at all*) to 7 (*very much*) (Gebauer et al. 2008). Two weeks later, participants were assigned to one of four conditions in a 2 (emotion: embarrassment vs. control)  $\times$  2 (self-brand connection: low vs. high) between-subjects design, and completed three seemingly independent tasks. The first task was an advertisement evaluation task: a TV ad for Durex for embarrassment group and a TV ad of Mac Air for control group. Then, half of the participants were told to identify the personal characteristics they shared with Adidas and the ways in which they differed from Nike (high self-brand connection with Adidas). The other half did the opposite (low self-brand connection with Adidas). Participants were then asked to indicate their preference between the two designs of the same Adidas T-shirt differing only for the size of the logos printed on them. A significant three way interaction effect among emotion, self-esteem and self-brand connection was revealed, as predicted by H2.

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# Learning about the Self through Advertising: The Effect of Behaviorally-Targeted Advertising on Consumer Self-Perceptions and Behavior

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## EXTENDED ABSTRACT

“Behavioral targeting” is an Internet-based advertising strategy that uses a consumer’s online actions to tailor digital ads for that person. Despite its tremendous growth and effectiveness in the marketplace, important questions about this strategy remain, including: (1) are behaviorally-targeted ads more effective than non-targeted ads under all conditions? and (2) what is the psychological process driving increased effectiveness of behaviorally-targeted ads? This research seeks to answer both of these questions.

People seek information about themselves from a variety of sources (Baumeister 1998; Wu, Cutright, and Fitzsimons 2011). While the specific reasons vary across people and contexts, it is clear that consumers are quite sensitive to learning new information about themselves (Coleman and Williams 2013; Sedikides and Strube 1997). This sensitivity can make individuals’ perceptions about themselves remarkably malleable, opening the door for marketers to shape self-views. For example, marketers can reinforce the implications of consumer behavior (see Self-perception Theory: Bem 1967) through “social labeling.” Labeling entails classifying individuals, purportedly on the basis of their behavior, in the hope that they will later act in a manner consistent with that characterization (Tybout and Yalch 1980). We propose that behaviorally-targeted ads can act like a social label, reinforcing the implications of past actions and changing consumers’ beliefs about themselves because they believe the targeting algorithm’s conclusion that they are the type of person who would enjoy the product. We predict that this learning will be sensitive to two moderators.

First, consumers have to recognize an ad as behaviorally targeted. It is only when a consumer recognizes an ad as behaviorally-targeted that it becomes self-relevant; by definition, it is due to something the consumer did. Without being designated, targeted advertisements can be qualitatively identical to ads that are not targeted and the consumer would not interpret the ad as a social label.

Second, self-perception changes will depend on the extent to which consumers like behaviorally-targeted ads. As with other forms of persuasive communication, advertisements may be evaluated based on who is delivering the message and how that source is perceived (Chaiken 1980; McGuire 1978). Liked sources are seen as more credible and result in more compliant behavioral responses (Crano 1970) and persuasion (Pornpitakpan 2004; Tybout and Yalch 1980). Thus, when consumers like targeted ads, they trust them as valid sources of information and respond accordingly, altering their self-perceptions and consumer behavior to be consistent with the implications of the ad, especially when the traits implied by the ad are positive.

Study 1 showed that consumers learn about themselves from ads identified as behaviorally-targeted and that this learning is sensitive to two important moderators. Within a 2 (Advertised product: sophisticated vs. unsophisticated) x 2 (Ad identified as behaviorally-targeted: yes vs. no) x Liking for behaviorally-targeted ads (LBTA—a continuous measure mean-centered) between-subjects design, respondents completed a shopping task and were told that they would view an advertisement. Half were told that this ad was “targeted” from the shopping task, while the other half were not. An advertisement for a sophisticated or unsophisticated product was then presented, after which participants rated their self-sophistication. Changes

in self-perceptions only occurred when the ad conveyed a positive message about the self. This is in line with previous research showing that labeling has a greater effect for positive (vs. negative) labels (Kraut 1973). Second, this change in self-perceptions depended on Liking for behaviorally targeted ads (LBTA)—consumers who liked targeted ads believed what targeted ads said about them more than consumers who disliked targeted ads. This pattern of results supported the hypothesis that making consumers aware that they are being targeted can prompt them to perceive an ad as a social label, which they then use to evaluate their own characteristics.

Study 2 replicated and extended study 1 by exploring the impact of self-perception changes on subsequent behavior using a 2 (Advertised product: environmentally-friendly vs. neutral) x 2 (Ad identified as behaviorally-targeted: yes vs. no) x LBTA between-subjects design. All procedures were identical to Study 1, except that the advertised product was positioned as environmentally-friendly or not and self-perceptions were measured by the Green Consumption Values scale (Haws, Winterich, and Naylor 2014). Upon completion of the study, participants were automatically entered into a lottery to receive \$10 and were asked if they would like to donate any potential winnings to an environmental charity. Results showed that consumers believed themselves to be more environmentally-conscious when they were aware that the ad has been targeted and when they liked targeted ads. In turn, consumers’ revised self-perceptions mediated the conceptually related behavior of donating money to an environmental cause.

Study 3 replicated and generalized prior results using behavioral targeting from online browsing (vs. past purchases) and using the industry standard AdChoices icon, and tested the hypothesis that a change in self-perceptions leads to increased purchase likelihood for the advertised offering using a 2 (Advertised restaurant: sophisticated vs. unsophisticated) x 2 (Ad identified as targeted: yes vs. no) x LBTA between-subjects design. Participants put together a trip itinerary online and spent some time browsing the Internet. All participants were then shown an advertisement that was identified as targeted or not and which featured a restaurant positioned as sophisticated or unsophisticated. Participants reported their own enjoyment of upscale dining and indicated purchase likelihood for a Groupon for the advertised restaurant. Results showed a similar pattern of self-perception changes and that this self-learning mediated purchase intentions for the Groupon.

This research provides several important theoretical contributions. First, we contribute to the literature on self-learning (e.g., Wu, Cutright, and Fitzsimons 2011) by demonstrating that behaviorally-targeted ads are a powerful source of self-learning, serving as a social label. Second, we add to the social labeling literature (Kraut 1973) by showing that social labels conveying positive traits are significantly more effective than are social labels implying negative or neutral self-information. Finally, our findings also complement the literature on influencing consumers to “go green” (e.g., Goldstein, Cialdini, and Griskevicius 2008; Trudel and Argo 2014) by exploring behaviorally-targeted ads as a novel method for encouraging environmentally-friendly actions.

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# Pound Per Pound: Do Heavy Burdens Make Heavy People?

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## EXTENDED ABSTRACT

Excessive body weight has become an increasingly common problem, as an increasing number of the adult world population is overweight and even obese. Obesity is associated with a variety of health risks, contributing to many chronic diseases and disabilities. The increased incidence of weight-related diseases has also led to an overall rise in total health care costs for testing, management, and prevention of these conditions.

Mindless eating, driven by environmental cues that bias food consumption, is a major contributor to obesity. Such eating behavior is often determined not by conscious deliberation, but rather by unconscious influence of cues in consumers' environments. In the current work, we investigate one possible understudied and ubiquitous environmental cue that might contribute to mindless eating. Specifically, we argue that carrying a heavy burden reduces consumers' sensitivity to the type and amount of food they serve, and consequently leads to increased choice of less healthy foods as well as increased consumption. The influence of weight cues is highly relevant for actual consumption settings because consumers often face situations where they carry burdens while making food choices. For example, consumers may carry shopping bags while choosing foods at the mall or use plates and trays to serve foods. In a series of four studies, we provide evidence for the influence of the weight of carried bags (studies 1 and 2), trays (study 3), and plates (study 4) on food choices and consumption. All evidence is from actual food choice and consumption studies: two field studies, one at a mall food court (study 1) and one at a cafeteria (study 2) and two in a lab setting (studies 3-4).

More specifically, study 1 provides initial evidence for increased consumption of unhealthy, higher calorie foods given burden in a field setting. If burden indeed distracts people from the food decision making process, carrying a heavy load would lead people to choose more indulgent, unhealthy food. The findings demonstrate that the extent of burden is indeed associated with choice of higher calorie meals. Study 2 aims to provide converging evidence that consumers burdened by greater weight choose less healthy, more caloric foods in a field setting with actual food choices (in this case, a cafeteria). The results again support the idea that burdened participants choose less healthy foods. Next, study 3 aimed to demonstrate that greater burden leads to serving increased amounts of food and that this effect is likely to be enhanced when the food is liked more, which is indeed confirmed by the findings. Moreover, the analysis offers initial process evidence by showing that burdened participants did not pay as

much attention to the food served, consequently not registering how much they served themselves. Study 4 replicates and extends the first three studies by first directly manipulating burden through another widely used serving dish – plates – and by offering formal process evidence on the mediating role of reduced attention under burden that leads to less healthy food choices.

From a theoretical perspective, our studies make contributions to several research streams. First, the studies contribute to research in mindless eating by documenting an important factor in the environment that can trigger increased choice of unhealthy foods as well as overall food consumption, focusing on the prevalent but neglected dimension of burden. In this they offer an easy intervention to improve choice healthiness. Second, the studies contribute to our understanding of the effects of physical burdens, extending our understanding of how heavy weight affects product judgment and choice by drawing attention away from the choice process. Third, the research contributes to literature on cognitive resources, by providing an initial demonstration that physical load (burden) can serve as a type of cognitive load in its effects on attention. Fourth, the studies offer a potential contribution to the literature on licensing and the justification of hedonic choice, in documenting that people holding heavier weights selectively increase their choice of favored indulgent foods, in effect using weight as a cover for serving themselves more of the foods they like.

The studies also have important implications for consumer welfare. Across many real world situations, consumers carry loads while choosing food. If these loads could lead to increased unhealthy choices and food consumption, consumers and businesses alike should be made aware that burden can lead to mindless eating, so that preventative measures can be taken. Controlling environmental cues such as the weight of the serving dish could be helpful in guiding consumers towards healthier choices in spite their mindless behavior. Also, consumers themselves often look for strategies to manage food choice situations. The current research may offer another method consumers could use. Specifically, consumers that self-serve food at home or at social events may opt to use lighter serving dishes as yet another strategy to optimize food choices. Educating consumers about the potential biases in their choices may also help reduce the impact of burden on choice. If one knows about the reduced attention to food choices and portions caused by burden, they can avoid making food choices when burdened, to an extent, in the same way as they can avoid shopping when hungry.

# Imagine there's No Calories: Simulation Underlies the Effects of Hunger on Serving Size Estimates

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## EXTENDED ABSTRACT

Consumers often simulate a consumption experience before purchase (Elder and Krishna 2012, Shiv and Huber 2000). Simulation involves prospective product experience, which can change subsequent evaluation. Across three studies, we demonstrate that deliberate and spontaneous simulations of food experience influence consumer judgments related to products' physical dimensions and energy.

Across three studies we show that consumers' simulation of a consumption experience before purchase may lead to systematic biases in judgment and evaluation. We specifically demonstrate that both deliberate and spontaneous simulations of food experience can influence and bias consumer judgments related to a product's physical dimensions and energy intake.

In the past decade, the concept of mental simulation has received increasing attention in consumer research (Escales and Luce 2004, Eldar and Krishna 2011). MacInnis and Price (1987) presented a comprehensive review of earlier imagery research, pointing out the overall beneficial effects of imagery. Imagery in general, and imagination of product interaction in particular, has been found to increase persuasion, product ratings and intentions to buy (Keller and McGill 1994, Nowlis et al. 2004, Petrova and Cialdini 2005, Shiv and Huber 2000).

Pertinent to the current work, simulation has also been shown to be involved in the process of functional perception. In Proffitt's work on distance perception, simulation has been implicated as the mechanism underlying distortions in distance perception due to reduced physical capacities (Proffitt 2006, Witt and Proffitt 2008). Distances seem further away to people when their capacity to traverse them is reduced. This is because in such situations distance *feels subjectively* longer. This functional alteration in perception depends on simulation (Witt and Proffitt 2008).

We argue for a similar dependency on simulation of the functional effects of hunger and burden on size and calorie judgments (Tal and Wansink 2014a, Tal and Wansink 2014b). Simulation allows the consumer to experience how their physical state alters product experience. This alteration in subjective experience is in turn reflected in subsequent judgment. Because one's needs are greater when hungry or burdened, food is experienced as subjectively smaller, and consequently appears smaller. That is because the food is smaller relative to one's needs. Simulating eating when hungry makes this alteration in functionality apparent. In other words, simulating eating when hungry makes one see a food as being smaller.

Our first study was intended to support the role of simulation in reducing estimated food quantity due to hunger (Tal and Wansink 2014a). Participants (N = 62) were asked to fast for five hours prior to the study. They were then asked to estimate the weight of three baked goods: muffin, bagel, and cookie. Half the participants were asked to vividly imagine eating each item before giving their evaluations. The other half were not asked to simulate eating the items. We eliminated observations over 3SD from the mean. Participants who simulated eating estimated lower average weight per item (7.03 ounces) than did participants who did not (9.39 ounces):  $F(1,56)=5.16, p=.03$ .

The second study attempted a conceptual replication with both weight and energy as our dependent variable (Tal and Wansink 2014b). Participants (N=59) estimated how many ounces each of three snack packages contained, as well as the number of hours of energy they provided. There was a significant effect of simulation

on estimated weight, such that participants who simulated eating estimated fewer hours of energy (3.46) than did participants who did not simulate (4.88):  $F(1, 57)=4.7, p=.03$ . There was a similar effect for estimated weight: participants who simulated eating estimated lower weight (21.2 ounces) than did participants who did not simulate (30.28 ounces):  $F(1, 57)=6.65, p=.01$ .

Simulations occur spontaneously as well as deliberately (Barsalou 2003, 2009). If simulation is indeed the crucial mechanism behind physical states' influence on judgment, we should see the effects disappear under conditions that prevent spontaneous simulation. Having brain circuits occupied with the enactment of particular actions should block simulation of competing actions (Witt and Proffitt 2009). Specifically, chewing would prevent automatic simulation of other actions with the mouth (Topolinski and Strack 2009). If simulation is indeed responsible for the reduced estimation of energy due to hunger shown earlier, such blocking given competing action would eliminate reduced energy estimates due to hunger. Size, as well as energy estimates, should seem subjectively smaller when one's need (hunger) is greater (Tal and Wansink 2014b), but such effects should depend on the conditions for simulation (no chewing).

Participants (N=52) were asked to rate six different food items divided into two groups. Each participant chewed gum while rating one group of four items, and did not chew gum for the other group. The product group for which participants chewed gum was rotated between participants, such that some participants chewed gum while rating item group 1 (Wheat thins, cookies, Tostitos), and others chewed gum while rating item group 2 (cereal, donut, potato chips). Participants were asked to evaluate the percentage of daily energy each food-item provides, as well as estimating food size by estimating how large a bowl would be required to serve the product. Participants then reported their hunger level on a scale of 1 (= not at all hungry) to 9 (= very hungry).

Analyses used a continuous measure of hunger, but reported means employ a median split of reported hunger level. One extreme outlying observation (over 10 SD beyond the mean) was eliminated. Hungry participants rated items as containing less of the daily calorie requirement (12.52%), on average, than non-hungry participants (17.9%). However, these effects only occurred for items during the evaluation of which participants were not chewing gum. The interaction between chewing and hunger was significant at a .03 level:  $F(1,40) =4.77$ . Non-chewing participants also estimated size as smaller when hungry (5.04) than when not hungry (5.53), but no such effect occurred for items for which participants were chewing gum. The interaction between chewing and hunger here was significant at a .04 level:  $F(1,40)=.04$ .

The current study provides further support for the role of spontaneous simulation in generating effects of physical state on product judgment. The effects of hunger on estimated energy in study 1 were replicated, but only for items for which participants were not chewing gum. When participants chewed gum, hunger did not lead to reduced evaluations of energy. Similar patterns were found for estimated product size. This is ostensibly because chewing gum precluded the spontaneous generation of simulation of eating. An additional study demonstrated that lack of visibility, a further condition of simulation, also eliminates the effects of hunger on energy estimation. Overall,

the studies demonstrate the role of simulation in generating the effects of physical states on judgments relating to serving size.

In addition to its theoretical contributions, the research at hand has important practical implications. For one, prior research concerning simulations has focused on their positive effect on judgment: increases in involvement, persuasion, and positive attitudes. The current research shows that simulations may at times have, from a marketer's perspective, detrimental effects on judgment, such as reductions in how much energy a product is thought to provide.

For consumers, too, simulations may have harmful consequences. If one fantasizes about food when grocery shopping, they might consequently lower their evaluation of how caloric a product is or how much of it there is, and so feel licensed to purchase more of the product, particularly when hungry. The studies indicate that such alterations may occur even without deliberate simulation. Even mere visual exposure to products can trigger these changes in judgment. Assuming that current physical state is not relevant for a consumer's decision, judgment about product properties and, consequently, desirability, is better done in circumstances that do not support the spontaneous generation of simulation. This might help prevent the greater choice and consumption of higher calorie foods that occurs when consumers are hungry (Wansink, Tal and Shimizu 2012; Tal and Wansink 2013). On a policy level, given the prevalence of automatic simulation and so its effects the studies emphasize the importance of judging products according to objectively posted values.

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# Trigger Healthy: How Samples can Create a Healthy Shopping Momentum

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## EXTENDED ABSTRACT

Consumer choice can be guided and determined wide array of situational factors, rather than by stable preferences (Bettman et al. 1998, Ariely 2008). A person's current physical and motivational states, for example, can lead them to make more impulsive choices that are not consistent with their ongoing preferences (Loewenstein 1998, van den Bergh et al. 2008). Similarly, elements in one's environment, rather than one's preferences, can lead one to choose particular products over others, for instance by leading them to opt for healthy or unhealthy foods (Wansink 2008).

Choice behavior, then, may at times be quite arbitrary, shaped by temporary factors from the person or their environment. However, once a person has made a choice, this choice may shape subsequent choice behavior (Ariely and Norton 2007). This concept of coherent arbitrariness, supported in multiple studies, claims that once a behavior is engaged in, even in a single instance, a person would tend to see such behavior as reflecting their preferences, and so would persist in similar choice behaviors (Ariely et al. 2003, 2006). Such behavior is further bolstered by peoples' need for consistency (Festinger 1957).

The current paper examines the notion that consumers do not even need to perceive a behavior as emanating from their own choice in order to maintain it and follow it with consistent behavior. We demonstrate that even if choice was determined by situational variables rather than actual choice, consumers would subsequently be biased towards choices that are consistent with the initial "choice". In other words, even behavior that is not chosen, but rather determined by the situation, can lead to consistent subsequent behavior. Specifically, if one is given a healthy (vs. unhealthy) choice, subsequent behavior would be biased towards more healthy choices.

Consumers display a general tendency to persist in behavior. Once "the dam is broken" and behavior is engaged in, consumers may well continue to engage in a behavior. This has been shown to express itself in shopping behavior in general, in a "shopping momentum", whereby once a consumer starts shopping, i.e., purchase a first item, they continue to make more purchases of the same type (Dhar et al. 2007). Here we see that a momentum can be more general, being channeled towards buying products of a particular type or class.

The current research explores whether the tendency to persist in initial choices may extend beyond choices of a particular product to choices of product types or classes. Specifically, we explore whether making a choice for a healthy/utilitarian or indulgent/hedonic product can lead one to make subsequent grocery choices that are consistent with the initial choice. More specifically, we explore whether giving a person an initial utilitarian or hedonic choice can lead to a shopping basket that is more hedonic or utilitarian overall.

In our first study, participants (N = 57) were asked to imagine they got a cookie (apple) sample at a grocery store before shopping. They then chose grocery products in a virtual grocery store designed specifically to offer a parallel selection of low-calorie/healthy and high-calorie/unhealthy options. We calculated a "health index" by deducting the number of high-calorie/unhealthy options from the number of low-calorie/healthy options. Participants who imagined getting an apple sample chose healthier shopping baskets (4.1) than did participants asked to imagine getting a cookie (1.3):  $t(55) = -2.06$ ,  $p = .04$ . A replication with actual sampling of a healthy vs. unhealthy product produced similar effects.

A followup study was conducted at a grocery store. Participants were recruited at the store. Half were given a cookie, and half an apple. We subsequently gathered receipts documenting what each participant purchased. Initial analysis indicates increases in healthy purchases for those who received an apple, versus a cookie, sample. Spending on fruits and vegetables, for instance, was \$6.41 for apple tasters, and only \$5.02 for cookie tasters.

Further studies will explore the mechanisms behind this phenomenon. It may be that once a person engages in a behavior, they subconsciously and automatically assume that the behavior was self-chosen, and so engage in consistent behavior. In other words, it may be that even given a clear external cause for one's behavior (being given a sample, or even being forced to take a sample), subconsciously the person feels like they have made a choice, and so engages in consistent choices. If this is the case, these trigger healthy effects may be due to altered self-perception (Bem 1972).

Alternately, it may be that behavior is automatically guided towards consistent choices, without need for mediation by a conscious perception of one's self, one's attitudes or preferences. Subsequent studies will explore these options. For instance, if the behavior is automatic rather than being mediated by conscious observation and categorization of one's behavior, effects should persist even when there's a deficiency of cognitive resources. Additional research may also explore whether a clearer attribution of behavior to external causes, for instance emphasizing that a food option was taken due to the dictates of the situation rather than free choice, would lead to lower consistency of subsequent shopping with the sample received. Alternately, research can examine whether increasing the feeling that one has made a free choice would increase the size of the effect, indicating the role of erroneously perceived self-determined behavior in generating the effects.

The current research has immediate practical applications for consumer welfare. Specifically, it implies that if choice settings could be engineered towards making consumers "opt for" choices that are better for them, subsequent choices would be influenced towards better shopping baskets and consumption behaviors. An obvious application demonstrated in our second study is to store samples. As demonstrated in study two, giving consumers a healthy or unhealthy sample can drive subsequent choices towards a healthier or less healthy shopping basket. Similar triggering of healthy choices can be undertaken in meal contexts.

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# Reconceptualizing and Theorizing About Digital Consumer Services: A Critical Review

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## EXTENDED ABSTRACT

Since products and services increasingly embed digital technologies, it has become progressively difficult to disentangle digital products and services from their underlying information technology (IT) infrastructures (Furtmueller, Wilderom & Mueller 2010; Benlian, Koufaris and Hess 2011; Tate and Johnstone 2011). Leading widely used measures of service quality are becoming increasingly divorced from the everyday practice of digital service design and delivery. With reference to service quality, a perusal of the archival academic and practitioner literature for the past three decades reveals the overriding dominance of a singular definition of service quality and its associated measurement instrument: The ServQual. This instrument originated in the services marketing discipline (Parasuraman, Zeithaml and Berry 1988) and was appropriated by information systems researchers before the advent of the internet (Pitt, Watson and Kavan 1995; 1997). It has since become the normal standard for service quality measurement.

Various arguments have been proposed as to why the seemingly well-established constructs of an academic discipline may need to be extensively reconceptualised (Burton-Jones and Straub 2006). These include lack of an accepted definition, theoretical support, validation or an accepted approach for selecting a definition and measure that is relevant to the context at hand. There have been some questions raised about the validity of IS-ServQual measures (Tate and Evermann 2010; Sylvester et al., 2013; Tate et al., 2014). In line with this critique, it is more than fair to observe that there is an absence of an accepted definition of digital service quality in the voluminous archives, and that defining the nature of service has been a serious challenge to researchers. The meaning of “service” in academia and practice has been changing and is increasingly broad and unclear (Edvardsson et al., 2005; Lusch and Vargo 2006; Furtmueller, Wilderom and van Dick 2010). The current scales fall short in competently integrating the new internet services concepts and entirely fail to integrate the requirements of digital consumers and changing digital technologies such as mobile services (Tate and Evermann 2009). The increasing diversity of disciplines engaged in service quality research calls for a comprehensive synthesis of the chief insights in the scattered studies. To advance knowledge in this crisis, integrative and cross-disciplinary thinking, along with building on insights from theories in services, marketing, psychology information systems, internet research and the human computer interaction literatures are needed (Furtmueller, 2012).

Historic definitions of services have concentrated on the differences between services and products. Two leading definitions of service are the “IHIP” definitions (Zeithaml, Parasuraman and Berry 1985) and the “Nordic” definition (Grönroos 1984). The “IHIP” definition concentrates on the process of service delivery. Leading services scholars argued “...the concept of service and service characteristics shows that the definitions are too narrow and the characteristics are outdated as generic service characteristics” (Edvardsson, Gustafsson and Roosn 2005, p. 107). Half of the interviewed services experts reported claimed that the IHIP characteristics do not portray the essence of a service in a meaningful, generic way and therefore “should not be used” (p. 115). They further stated there was a possibility they were going to stop using the IHIP when teaching. Services marketing scholars at the 2003 American Marketing Academy Serv-Sig conference in Reims expressed disappointment with the develop-

ment of the service research discipline, questioning whether or not existing service concepts are applicable to internet services and other self-service technologies. It has been argued that the “IHIP” definition is inappropriate for digital services (Tate and Evermann 2009). Digital services are in fact typically standardised, not heterogeneous; tangible; developed independently of their consumption, and non-perishable.

We believe that Lovelock and Gummerson’s (2004) call to discard services as a general category of research and focus on specific service categories, in combination with a search for new and more defensible characteristics of service; is salient to advance digital services research. This requires a fresh, grounded and inductive approach and the development of a relevant context-sensitive taxonomy. Several methodologies could be used independently, or in concert. Among these the most promising are metaphor analysis, repertory grid technique, and grounded literature analysis techniques. Techniques exist in the social sciences for using metaphor as a research tool (Lakoff and Johnson 1980). Schmidt summarizes a 25 year old research tradition showing that metaphors “provide pre-conceptual orientation with respect to thought and experience that is hardly accessible, or accessible only with analytical aids, in rational discussion. Qualitative research needs an approach that allows a systematic reflection of the metaphors in which, and through which, we perceive, speak, think, and act” (2005). Further, structured qualitative techniques such as repertory grid technique have been shown to be effective for eliciting understanding of cognition about information systems phenomena (Tan and Hunter 2002). This framework could be used in conjunction with metaphor analysis, or independently, to elucidate the similarities and differences in the ways people think about different digital services offerings. Repertory grid technique is based on personal construct theory (Kelly 1955). Kelly argues that individuals use their own “personal constructs” to understand, interpret and anticipate events that occur around them. In addition, literature analysis and “literature as data” techniques (Sylvester et al., 2011; Wolfswinkel et al., 2013) can be used to harmonize heterogeneous literature from multi-disciplines and to identify under-researched areas. The literature review method outlined by Wolfswinkel et al. (2013) draws on grounded theory to analyze and code research literature. This could be applied to leading, highly cited (but incommensurate) conceptual articles and definitions of services and service quality.

A well-grounded taxonomy of digital service types, developed inductively, and based on people’s cognition about the digital services they use or are involved with can drive a new research agenda for digital services research. This will include better quality measures and instrumentation, continuously updated and upgraded understanding of value and quality drivers, along with an improved ability to carry out targeted literature analysis from the large corpus of research literature. Expectations are rising steadily, especially in top-tier journals, about the quality of conceptualization and theorizing prior to developing models or survey instruments. Further attempts to carry out empirical research on digital services in the absence of these clear conceptual definitions are most likely to be of limited value.

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# The CSR Surprise Effect: When Unexpected CSR Activity Enhances Brand Evaluations

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## EXTENDED ABSTRACT

### Introduction

This research examines the influence of CSR expectancy on brand evaluations. Expectancy of a CSR activity is the extent to which a CSR activity deviates from consumers' mental schema regarding brands' CSR activities (Heckler and Childers 1992). We show that unexpected CSR activities have a positive influence on brand evaluations when CSR fit is high, and that the effect is mediated by cognitive processes.

### Theoretical Framework

According to dual process models of persuasion (Petty and Cacioppo 1986), consumers' motivation to process information influences whether they scrutinize information (i.e. central route) or use simple heuristics (i.e., peripheral route; Petty, Cacioppo, and Schuman 1983). Expectancy is one of the antecedents to motivation to process information (Meyers-Levy and Tybout 1989). We therefore posit that when the CSR fit is high, an unexpected CSR activity (but not an expected CSR activity) initiates elaboration. As elaboration increases, sincere CSR motivations of the brand become more salient (Ellen, Webb, and Mohr 2006). When the CSR activity is expected, consumers do not invest cognitive effort in evaluating the brand and use simple heuristic that CSR is a good deed (Simmons and Becker-Olsen 2006). Given that central route processing has a stronger positive impact on persuasion compared to the peripheral route (Petty and Cacioppo 1986), we predict a positive effect of the unexpected CSR activity when CSR fit is high. We further predict the indirect effect of expectancy (conditional on CSR fit) on brand evaluations is mediated by (a) elaboration and (b) perceived sincerity of the brand's CSR motivations. When CSR fit is low, we do not predict an effect of expectancy of the CSR activity on brand evaluations.

### Study 1

Using a fashion brand, expectancy was manipulated by changing the implementation strategy (high [low] expectancy: donation per sale [tweet]) and fit was manipulated by changing the nature of a product donation (high [low] fit: clothes [toiletries]), as validated in pretests.

The study ( $n = 158$ ) employed a 2 (CSR fit)  $\times$  2 (expectancy) between-participants design. Participants provided brand evaluations and reported their perceptions about sincerity of the brand's CSR motivation (Ellen, Webb, and Mohr 2006). An ANOVA with fit and expectancy as independent variables revealed a significant interaction of fit and expectancy ( $F(1, 174) = 4.59, p < .05$ ) on brand evaluation. When fit was high, unexpected CSR activity led to more favourable brand evaluations compared to expected CSR activity (5.87 vs. 5.36;  $F(1, 174) = 5.39, p < .05$ ). When fit was low, expectancy did not affect brand evaluations ( $p > .3$ ). Process analysis confirmed mediating role of sincerity of brand's CSR motivation ( $ab = -.09, 90\% \text{ CI} = \{-.18, -.01\}$ ).

### Study 2

Using a coffee brand, expectancy was manipulated by varying the cause (high [low] expectancy: financial support [Hepatitis B vaccination]) and fit was manipulated by varying the target of the CSR

activity (high [low] fit: coffee farmers [underprivileged children]). Manipulations were successful without any crossover effects.

In addition to brand evaluation and perceived sincerity measures, this study included thought protocols to measure elaboration, pre and post-treatment affect, and a measure of perceived uniqueness of the CSR activity. An ANOVA with fit and expectancy as the independent variables revealed a significant interaction effect of fit and expectancy on brand evaluation ( $F(1, 154) = 5.30, p < .05$ ). When fit was high, the unexpected CSR activity resulted in more favorable brand evaluations than the expected CSR activity (5.67 vs. 5.06;  $F(1, 154) = 7.29, p < .01$ ). When fit was low, expectancy did not affect consumers' brand evaluations ( $p > .10$ ). Process analysis with elaboration as the mediator, expectancy as the independent variable, fit as the moderator, and brand evaluations as the dependent variable revealed a significant conditional indirect effect of expectancy ( $estimate = -.09, 95\% \text{ CI} = \{-.17, -.04\}$ ). A serial mediation model (model 6) with fit  $\times$  expectancy interaction as the independent variable, elaboration as the proximal mediator, perceived sincerity of brand's CSR motivations as the distal revealed a significant conditional indirect effect of fit  $\times$  expectancy through elaboration and sincere CSR motivations ( $a_1a_2b_2 = -.04, 95\% \text{ CI} = \{-.08, -.01\}$ ). Affect and uniqueness explanations were not supported.

### Study 3

Given that involvement influences consumers' motivation to process information positively (Petty, Cacioppo, and Schuman 1983), CSR expectancy should have no effect on consumers who are already highly involved in brands' CSR activities. However, consumers who are not highly involved in brands' CSR activities should be influenced by the expectancy of the CSR activity when CSR fit is high. Study 3 ( $n = 117$ ) tested this boundary condition, using a 2 (expectancy: low, high)  $\times$  2 (CSR involvement: low, high) between-participants design. Given that expectancy influences involvement when it is measured as a state variable (Karmarkar and Tormala 2010), we used a proxy measure (NEP scale; Dunlap et al. 2000). Manipulations and measures were similar to Study 2. In a regression of brand evaluations on expectancy and CSR involvement, the interaction between expectancy and CSR involvement was significant ( $\beta = .22, p < .05$ ). When consumers' CSR involvement was low, the unexpected CSR activity, compared to the expected CSR activity, led to more favorable brand evaluations (5.97 vs. 5.35;  $\beta = -.31, p < .05$ ). The positive effect of the unexpected CSR activity disappeared for consumers with high CSR involvement ( $p > .10$ ).

### General Discussion

This research extends the literature in three ways: It conceptualizes CSR expectancy and shows positive effect of unexpected CSR activities when CSR fit is high. Second, it clarifies the role of elaborations in the CSR literature. Earlier research showed negative effects of elaboration in response to low CSR fit (Menon and Kahn 2003; Simmons and Becker-Olsen 2006). However, when low expectancy motivates consumers to elaborate on high fit CSR information, scrutinizing CSR information enhances brand evaluations. Finally, we demonstrate a boundary condition for the positive effect of the unexpected CSR.

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# Fun Made Me Do It! Transforming Consumer Well-being Through Serious Play

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## EXTENDED ABSTRACT

The lifestyle of the average North American consumer is becoming increasingly inactive. In 2008, an estimated 80 percent of U.S. jobs were classified as either completely sedentary or as requiring only light levels of physical activity (Church et al. 2011), meaning the vast majority of the adult population is sitting for a minimum of 40 hours per week. In addition, studies have shown that spending more time seated can increase one's risk for obesity, type 2 diabetes (Hu 2003), cardiovascular disease (King et al. 1995), anxiety (Schoenfeld et al. 2013), and can even result in premature death (Danaei et al. 2009).

Consumers are not blind to these issues, and most people understand the multifarious benefits associated with regular exercise. They know that being more active on a daily basis can lead to weight loss, increased overall health, and can even bolster mood and self-esteem. But if so many consumers both acknowledge the problem and understand the solution, why aren't more of them doing something about it?

The answer may be, simply, that most exercise is just not very fun. In the current research we propose that a potential solution to this problem may be found in serious play. Serious play is defined as the use of fun and playful activities to achieve targeted goals (Beech et al. 2004; Statler, Roos, and Victor 2009). Herein we argue that serious play can be utilized as a mechanism to create feelings of fun in consumers while engaging in exercise. We suggest that these feelings of fun will in turn result in increased motivation for exercise, increased engagement in exercise, and heightened well-being.

We test our theory in a longitudinal field study of consumers engaging in a team-based workplace exercise promotion program. Using pre- and post-program surveys linked to daily physical activity, we tested two longitudinal path models: the first investigating the cognitive processes sparked by serious play and their effect on motivation for and subsequent engagement in exercise (Model 1), and the second examining the well-being outcomes engendered by these changes in cognition (Model 2). More specifically, Model 1 posits that experiences of fun will be associated with increases in self- and group efficacy (belief in the abilities of oneself or one's group; Bandura 1977), which will in turn promote intrinsic motivation and increased exercise behavior. Model 2 expands Model 1 by suggesting that increases in self-efficacy will also be associated with increases in consumer well-being. As our chief goal with this research is to demonstrate a mechanism by which consumers' quality of life may be increased, we position ourselves within the Transformative Consumer Research (TCR) realm (Ozanne and Saatcioglu 2008).

Participants were consumers engaging in a 112-day team-based workplace exercise promotion program. All potential participants were emailed a T1 and a T2 survey, as well as an additional optional survey assessing well-being at T1 and T2. In total, 2,505 consumers completed the T1 and T2 main surveys, while 889 of these consumers completed all four surveys.

The main T1 survey assessed consumers' intrinsic motivation (Ryan, Koestner and Deci 1991), self-efficacy, and group efficacy (Schwarzer and Jerusalem 1995) using three 2-item scales. This survey also included two control variables, autonomy in joining the program and fun expectancy. The T2 survey featured the same six items assessing intrinsic motivation, self-efficacy, and group efficacy, as well as three items meant to assess participants' levels of fun experi-

enced during the program (e.g. "I thought the program was fun"). In addition to this questionnaire data, we were granted access to the 112 daily step counts for each participant for the duration of the program, as recorded via accelerometer (digital pedometer).

Prior to testing our models, we submitted all latent variables to a confirmatory factor analysis (CFA). The model exhibited excellent fit ( $X^2=363.931$ , CFI=.991, NFI=.988, RMSEA=.033 with confidence interval = .029 to .037) (Hu and Bentler 1999), all factor loadings were significant, and the average variance extracted exceeded the average variance squared, indicating strong discriminant validity between all constructs (Fornell and Larcker 1981).

Both Model 1 and Model 2 were tested using a longitudinal auto-regression approach in which T1 values of each construct are regressed onto T2 values of that same construct, as outlined by McArdle (2009). This methodology allowed us to examine participants' T2 scores on each construct while controlling for their T1 values (i.e. change values). The fit indices for Model 1 (N=2,505) revealed excellent fit ( $X^2=833.071$ , CFI=.986, NFI=.983, RMSEA=.041 with confidence interval = .039 to .044). In addition, we found confirmation for our hypotheses: the experience of fun was found to be positively associated with increases in self-efficacy ( $\beta=.16$ ,  $p<.001$ ) and group efficacy ( $\beta=.32$ ,  $p<.001$ ). Increases in group efficacy were positively related to increases in self-efficacy ( $\beta=.08$ ,  $p<.001$ ), increases in self-efficacy were associated with increases in intrinsic motivation ( $\beta=.50$ ,  $p<.001$ ), and increases in intrinsic motivation were associated with increases in exercise behavior ( $\beta=.18$ ,  $p<.001$ ). Fit indices revealed excellent fit for Model 2 as well (N=889) ( $X^2=913.236$ , CFI=.967, NFI=.953, RMSEA=.050 with confidence interval = .046 to .053). All mechanistic pathways outlined in Model 1 were reconfirmed in Model 2, and, as hypothesized, increases in self-efficacy were associated with increases in well-being ( $\beta=.32$ ,  $p<.001$ ).

This longitudinal study demonstrates the power of serious play in inducing meaningful behavioral change. Specifically, these results outline a pathway that may be used to foster consumer well-being and promote consumer engagement in exercise. Model 1 demonstrated that fun created by engagement in serious play is associated with increases in self-efficacy, which in turn are related to increases in intrinsic motivation for and engagement in exercise. Additionally, this experience of fun was found to promote group efficacy, which in turn was associated with greater increases in self-efficacy. Model 2 reconfirmed this mechanistic model, while in addition demonstrating the positive impact of serious play on well-being via the self-efficacy that it promotes. This research contributes to the field of TCR by providing a mechanistic model by which unappealing yet beneficial behaviors (such as exercise, recycling, or smoking cessation) can be promoted.

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# Calendar Mindset: Scheduling Takes the Fun Out and Puts the Work In

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## EXTENDED ABSTRACT

While scheduling is often recommended to aid individuals in time management, we propose that there may be a dark side to scheduling in the realm of leisure activities. Specifically, we show that scheduling leisure activities by placing them on one's calendar can increase the degree to which they are construed as work, leading to lower anticipation utility and greater desire to cancel.

According to temporal organization theory (Fine 1996, Southerton 2006), time is organized around 5 dimensions: (1) duration, or the amount of time allocated to activities, (2) sequence, or the order of activities, (3) synchronization, or coordinating with others, (4) periodicity, or the frequency and repetition of activities, and (5) tempo, or the pace of activities. Scheduling specifically alters one of these dimensions, duration, by setting specific start and end times. We argue that by doing so, scheduling, treats leisure in a manner generally preserved for work tasks, leading these otherwise leisurely activities to take on qualities of work. Furthermore, we propose that through increased work construal, scheduling decreases the anticipation utility of leisure activities, manifested as less positive anticipatory emotions.

*Studies 1A-1G.* We first establish the relationship between scheduling and the work qualities of leisure activities (all tests reported are significant at .05 level). As such, participants in studies 1A-1E prospectively evaluated a leisure activity that was either scheduled or spontaneous. We find that scheduling leisure increases work construal when the calendar is busy (1A:  $M_{\text{Scheduled}} = 5.04$ ,  $M_{\text{Spontaneous}} = 3.44$ ) or not busy (1D:  $M_{\text{Scheduled}} = 3.64$ ,  $M_{\text{Spontaneous}} = 3.10$ ), and when the activity is recurring (1E:  $M_{\text{Scheduled}} = 3.70$ ,  $M_{\text{Spontaneous}} = 3.14$ ), with a friend (1A), solitary (1C:  $M_{\text{Scheduled}} = 4.25$ ,  $M_{\text{Spontaneous}} = 3.31$ ), and self-initiated (1B:  $M_{\text{Scheduled}} = 4.17$ ,  $M_{\text{Spontaneous}} = 3.42$ ). Finally, we demonstrate that the effect holds for a currently experienced leisure event (1F:  $M_{\text{Scheduled}} = 3.12$ ,  $M_{\text{Spontaneous}} = 2.35$ ) and for recalled activities that have actually been taken part in (1G:  $M_{\text{Scheduled}} = 3.40$ ,  $M_{\text{Spontaneous}} = 2.73$ ). These studies establish the robustness of our effect, while providing evidence against the other four dimensions.

*Study 2.* In study 2 we sought to demonstrate the negative downstream consequences of scheduling and work construal on anticipation utility, while simultaneously testing the robustness of our findings to varying specialness of the activity and changes in the calendar considered. To that end, we manipulated how special the event was and used a calendar compromised only of leisure activities. We find that scheduling led to greater work construal both when the event was special ( $M_{\text{Scheduled}} = 3.47$ ,  $M_{\text{Spontaneous}} = 2.53$ ) and more mundane ( $M_{\text{Scheduled}} = 3.33$ ,  $M_{\text{Spontaneous}} = 2.39$ ). Scheduling also led to less positive anticipatory emotions both when the event was special ( $M_{\text{Scheduled}} = 4.80$ ,  $M_{\text{Spontaneous}} = 5.66$ ) and more mundane ( $M_{\text{Scheduled}} = 4.65$ ,  $M_{\text{Spontaneous}} = 5.47$ ). Bootstrapped mediation revealed that the effect of scheduling on emotions was mediated through work construal.

*Studies 3A-3B.* In studies 3A and 3B, we provide direct evidence for the role of the fifth dimension, duration, as the driver of the effect of scheduling on evaluations of leisure. To that end, we introduced an additional condition where participants made rough plans (i.e., no specific start and end times) ahead of time. We predicted that only concretely scheduling, and not just any plan on a calendar, would lead to lower anticipation utility (3A) as mediated through

work construal (3B). Participants in the rough plans condition made a plan with a friend for some time during a gap in their schedule (i.e., between class and a meeting) and marked their plans on a hypothetical calendar in study 3A. In study 3B, participants saw a shaded area of a few hours blocked off on their calendar and marked with "coffee sometime here." We found in both studies that scheduling only led to lower anticipation utility when duration was specifically set (3A:  $M_{\text{Scheduled}} = 4.92$ ,  $M_{\text{RoughPlans}} = 5.28$ ,  $M_{\text{Spontaneous}} = 5.42$ ; 3B:  $M_{\text{Scheduled}} = 4.75$ ,  $M_{\text{RoughPlans}} = 5.43$ ). Furthermore, work construal mediated this effect in study 3B ( $M_{\text{Scheduled}} = 3.68$ ,  $M_{\text{RoughPlans}} = 2.88$ ).

*Study 4.* The purpose of study 4 was to demonstrate that the negative influence of scheduling is unique to leisure (vs. work) tasks. The study followed a 2 (task: work vs. leisure) x 2 (scheduled vs. spontaneous) between subjects design. As predicted, when considering a *leisure* task, those who scheduled ( $M_{\text{Work}} = 3.75$ ,  $M_{\text{Emotions}} = 4.97$ ) construed the task more as work and had less positive anticipatory emotions than those who engaged in the task spontaneously ( $M_{\text{Work}} = 2.67$ ;  $M_{\text{Emotions}} = 5.60$ ). No such difference emerged for those who considered a work task. Finally, bootstrapped mediation analysis revealed that for the leisure activity, the effect of scheduling on attitudes was mediated through work construal.

*Study 5.* The purpose of this study was to test whether the effect of scheduling on anticipatory emotions would hold for retrospective evaluations. Participants considered the last movie they saw, indicated whether it had been scheduled or spontaneous, and rated how positive the movie was and how long ago it occurred. In line with prior work demonstrating that anticipation and memory may be divergent initially following the experience but converge over time (Wood and Bettman 2007), we found the predicted interaction between scheduling and time since the movie such that initially, scheduled leisure was recalled more positively, but over time, this reversed and scheduled leisure was recalled less positively. We conjecture that this initial divergence may result from the motivation to see scheduled leisure as more positive, due to the greater effort associated with such activities as well as the salient alternative of missing out on the activities entirely. Over time, however, such motivations fade, revealing lower memory utility for scheduled leisure.

Supporting our predictions, across twelve studies, we demonstrate that (1) scheduling leisure activities makes them feel more like work, leading to lower anticipation utility, (2) this effect is driven by setting beginning and end times, thus setting duration, (3) is unique to leisure activities, and (4) manifests for memory utility once enough time has passed since the activity.

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# Superordinate Regional Identities and the Salience of Intergroup Rivalry: Effects of Spontaneous Recategorization on Brand Attitudes

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## EXTENDED ABSTRACT

Social identity is a central concept for explaining consumer behavior. Past empirical investigations of social identity effects on consumption have focused on actual or desired social identities likely to be distinctively represented in memory, such as family identity (Reed 2004), college student identity (Cialdini et al. 1976), or cultural or national identity (Torelli 2013). However, no consumer research has focused on regional (geographical-region based) identities that are represented at a superordinate level of categorization, and therefore, by their very nature are typically not as salient as other basic level categories (Mervis and Rosch 1981). For instance, although in the United States people from a given state may define themselves in terms of a distinctive social identity (i.e., Wisconsinites or Minnesotans), larger regions that share similar cultural, economic, and historic roots can also develop a superordinate regional identity (i.e., Upper Midwesterner, Ostergren 1988). Because these aggregate regional identities consist of subgroups in close geographical proximity, they are often considered to be outgroups, or even rival groups. As such, these identities present unique issues of their own. Specifically, recategorization at their superordinate level might not occur spontaneously and has the potential to bring together rival sub-groups.

What subtle cues can prompt recategorization at this superordinate level? How do these identities guide consumer behavior? What is the role that potential rivalries between subgroup identities play in determining the effects of recategorization on consumer behavior? This research tries to provide answer to these questions and contribute to the literature by showing that regional identities can: (1) be subtly activated by environmental cues, (2) lead to assimilation effects and guide behavior in identity-congruent ways, (3) lead to contrast effects and backfire when rivalries between subgroups are salient.

Social identity theory (Tajfel and Turner 1985) posits that people are motivated to identify with their groups in order to reduce subjective uncertainty about who they are as well as to enhance their self-esteem. This self-enhancement motive triggers the more favorable evaluation of ingroup members as well as of things associated with the ingroup. However, ingroup – outgroup boundaries are permeable, as intergroup comparisons often occur within the context of a superordinate category (Turner 1975). Self-categorization can be conceived as a hierarchical arrangement, including social identities (subgroups) that are nested within more inclusive social identities (superordinate groups). People can define themselves in terms of either subgroup or superordinate identities depending on the context, which has profound consequences for their attitudes toward others that might (might not) be considered outgroup members. Specifically, when members of different subgroups (e.g., Minnesotans and Wisconsinites) are induced to think of themselves as a single superordinate group (e.g., Upper Midwesterners) rather than two separate groups, attitudes toward former outgroup members can become more positive (i.e., pro-ingroup bias, Gaertner et al. 1993). However, when recategorization at a superordinate social identity becomes a threat to positivity and distinctiveness, such recategorization processes can backfire and increase intergroup bias (Crisp, Stone, and Hall 2006). We propose that, in certain contexts, encountering a brand associated with a subgroup nested within a common superordinate regional

identity can trigger recategorization at the superordinate level and result in more favorable brand evaluations (i.e., pro-ingroup bias). This will be more likely to occur when consumers have heightened social identity needs and when ingroup-outgroup rivalries are less salient.

Three studies were conducted to test these predictions. Study 1 investigated the attitudes of Minnesotan consumers toward brands symbolizing a subgroup nested within the superordinate identity (Wisconsinites nested within the Upper Midwestern identity) and baseline condition (subgroups not nested within this superordinate identity, e.g., Texans), at high vs. low levels of intergroup rivalry, and as a function of the chronic salience of the superordinate Upper Midwestern identity. Higher (vs. lower) salience of the superordinate identity was positively associated with more favorable evaluations of Wisconsinite brands that were low in rivalry salience. However, this effect dissipated when there was high rivalry salience. There were no effects in the baseline conditions.

Study 2 manipulated salience of social identity needs (salient vs. neutral) and investigated Minnesotan consumers' attitudes toward a rival brand from Wisconsin in a low-rivalry setting (off season football game between the Green Bay Packers—associated with a nested subgroup and Dallas Cowboys—non-nested subgroup). Chronic salience of the superordinate Upper Midwestern identity was measured. Results showed that, in the neutral condition, participants chronically higher (vs. lower) in their social identity needs exhibited greater support for the Green Bay Packers, due to spontaneous support for a brand that fulfills the chronically salient identity needs. In contrast, this relationship was non-significant in the identity salience condition, where all participants (i.e., both low/high chronic Upper Midwest identifiers) favored the Green Bay Packers upon a heightened level of social identity needs.

Finally, study 3 moved the design to a different setting, the 2014 Sochi Winter Olympics (highly salient intergroup rivalry), and investigated American consumers' attitudes toward a Canadian sports team (nested within the superordinate North American identity) playing against a Swedish team (non-nested team) as a function of temporarily salient social identity needs, chronic accessibility of the superordinate North American identity, and salience of intergroup rivalry. Results showed that, in the neutral condition, identification with the superordinate North American group was positively associated with support for the Canadian team for both participants who followed the Olympics closely and those who did not—due to spontaneous support for a team that aligns with chronically salient cultural identity needs. In contrast, when making social identity needs temporarily salient, this relationship was stronger among participants who followed the Olympics closely compared to those who did not—suggesting that the temporary salience of social identity needs did not trigger recategorization among those with a chronically low level of identification with the superordinate North American group for whom the rivalry was salient.

This research demonstrates the contextualization of recategorization at a superordinate regional identity, and the role of rivalry salience and social identity needs in the emergence of pro-ingroup bias toward brands that symbolize a subgroup nested within a superordinate regional identity.

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# Affective Experience over Time: The Role of Event Representation and Counting Direction

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## EXTENDED ABSTRACT

People's affective reactions toward an external stimulus are determined not only by the content of the stimulus but also by the context in which it is experienced. In fact, a substantial body of research has shown that people's affective experiences are highly dependent on contextual factors (Ariely & Zauberman, 2003; Kahn & Wansink, 2004; Wilson & Gilbert, 2008). We examined two contextual variables: event representation (integers vs. progress bar) and counting direction (upward vs. downward). In everyday consumption, the sub-components of many affective episodes such as theme park tours, video games, slideshows, or e-books (rides, rounds, slides, pages) can be presented using integers or segments of a progress bar. The progress of these episodes can be counted in ascending order or descending order. Despite its prevalence in daily life, researchers have not examined how such subtle differences in event representation might influence affective experience over time.

While using integers to represent the subcomponents of an affective episode can segregate it into several distinct units to be enjoyed separately, using a progress bar to represent the same subcomponents can cause them to be perceived as one integrated event. Drawing from Prospect Theory, we propose that an affective episode becomes more enjoyable when it is segregated using the integer format than when it is integrated using a progress bar because segregation allows people to enjoy each subcomponent with a fresh start and increases the marginal utility of each subcomponent (Kahneman & Tversky, 1979; Thaler, 1985). We postulate that the positive effect of the integer format on affective experience will occur when the episode is counted downward because counting the subcomponents downward highlights the decrease in the remaining supply, causing people to savor the end experience more (Cialdini, 2008). However, the effect of event representation will reverse under the upward-counting condition because counting the subcomponents upward essentially highlights the increase in the amount consumed and triggers a cognitive belief of habituation (e.g., the 10<sup>th</sup> bite of chocolate is less tasty than the first bite; Morewedge, Huh, & Vosgerau, 2010).

Experiment 1 employed a 2 (event representation: integer vs. progress bar) x 2 (counting direction: downward vs. upward) between-subjects design. All participants watch a short video clip featuring serene nature images. At the beginning of the study, they were all told that the video had eight nature images. We manipulated event representation by displaying the subcomponents of the video using either integers or a progress bar; and we manipulated counting direction by displaying the number of images either downward or upward. When the video clip finished playing, participants indicated how much they enjoyed it using a 10-point scale. A two-way ANOVA revealed a significant two-way interaction ( $F(1, 82) = 11.26, p = .001$ ): in the downward-counting condition, enjoyment was higher when the video was presented using integers than the progress bar ( $M_{\text{integer}} = 8.84$  vs.  $M_{\text{progress-bar}} = 7.52; F(1, 82) = 7.64, p = .007$ ), corroborating prospect theory and hedonic editing. In the upward-counting condi-

tion, however, the integer format rendered the video less enjoyable ( $M_{\text{integer}} = 7.65$  vs.  $M_{\text{progress-bar}} = 8.59; F(1, 82) = 3.93, p = .05$ ).

Experiment 2 employed the similar 2x2 design. We further tested the hypothesis using a different sensory experience (eating potato chips) and measured the effect on real-time evaluations and amount of actual repeat consumption. Further, we explored the underlying mechanism. All participants learned that they would sample six potato chips. The integers represent the event as sampling six chips separately, whereas the progress bar represents sampling six chips as one integrated event. We manipulated counting direction by asking participants to count the number of chips downward or upward during the sampling. Participants reported momentary experiences by recording their enjoyment of each chip from 1 (not at all) to 10 (very much). Next they reported the overall enjoyment using the item from Experiment 1. To explore the underlying process, we asked participants to rate how much they savored the last chip from 1 ("I treasured the 6<sup>th</sup> chip more than the ones I already had") to 10 ("I treasured the 6<sup>th</sup> chip less than the ones I already had"). As a behavioral measure, we offered participants a bag of eight chips at the end of the study and measured the number of chips consumed.

A two-way ANOVA on overall enjoyment revealed a significant interaction of event representation and counting direction only ( $F(1, 115) = 16.28, p < .001$ ): participants enjoyed the sampling more when it was presented with integers than a progress bar in the downward-counting condition ( $M_{\text{integer}} = 8.13$  vs.  $M_{\text{progress-bar}} = 6.10; F(1, 115) = 12.80, p = .001$ ). However, the effect was reversed in the upward-counting condition ( $M_{\text{integer}} = 6.38$  vs.  $M_{\text{progress-bar}} = 7.70; F(1, 115) = 4.73, p = .03$ ), consistent with Experiment 1. Similar effects were observed in consumption amount.

The real-time ratings were submitted to a 2 (event representation) x 2 (counting direction) x 6 (trial) mixed repeated-measures ANOVA. The analysis revealed a significant interaction of the two between-subjects variables ( $F(1, 115) = 15.88, p < .001$ ) and a three-way interaction ( $F(5, 575) = 3.39, p = .005$ ). These results showed that retrospective evaluations closely tracked momentary experiences and that event representation interacted with counting direction to alter participants' experiences over time during the sampling. Mediation analysis (Preacher & Hayes, 2008; Zhao, Lynch, & Chen, 2010) confirmed that the degree of savoring the end experience partially mediated the interaction of presentation format and counting direction (CI:  $-.441$  to  $-.052$ ).

In sum, data support our hypothesis across different sensory experiences with different measures including retrospective evaluation, real-time evaluations, and actual consumption. Our work contributes to prior research on hedonic editing by using subtle presentational cues to alter affective experience over time. Our work also adds to research on hedonic adaptation (Wilson & Gilbert, 2008) by showing how habituation can be mitigated by proper combinations of the contextual variables studied here (integer and downward counting; progress bar and upward counting). Finally, our results offer important implications for consumer wellbeing.

# Are All Teasers Created Equal?

## The Effectiveness of Sampling Experiences on Desire for the Target Product

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### EXTENDED ABSTRACT

Providing sampling experiences (i.e., “teasers”) is a common marketing practice. For example, Amazon.com invites consumers to “click to look inside” for sample pages; Godiva offers registered chocolate aficionados free chocolate samples. In this research, we study the factors that influence the effectiveness of sampling experiences on inducing consumers’ desire for the target product.

Existing literature has documented the reasons why sampling experiences can increase (Cabanac 1979) or decrease (Steinberg and Yalch 1978; Lammers 1991) desire for the target product. We propose a novel factor that influences the effectiveness of sampling experience, independent of the previous findings. We refer this factor as the *perceived overlap* between the sampling experience (i.e., the experience of consuming the product samples) and the product experience (i.e., the experience of consuming the target product). We reason that, because the sampling experience and the product experience share commonality, consumers could perceive the sampling experience as a part of the product experience (i.e., perceiving overlap). We hypothesize that consumers will desire the target product less when the perceived overlap is higher, because a higher perceived overlap signals to consumers that their desire for the target product has been fulfilled to a greater extent by the sampling experience, and that they do not need to consume the product “again”. Our reasoning is in line with research showing that people disengage from focal activities after engaging in a few related actions and feeling that they have (partially) completed the focal activities (Dhar and Simonson, 1999; Fishbach, Dhar, and Zhang 2006; Laran and Janiszewski 2009).

Then, what influences the perceived overlap? We propose two factors in this research. The first factor is on the environment: the *location of the sample relative to the target product*. We propose that, because object relations in the mental world is a direct reflection of those in the physical world (Shepard and Metzler 1971), consumers would perceive higher overlap when the samples are displayed inside (i.e., physically overlap with) the target product than outside.

The second factor is on the consumer: *consumption expectation*. Because accessible goals lead people to perceive environmental cues as relevant to the goals (Balci et al. 2006; Wilcox et al. 2009), we argue that people with a consumption expectation (i.e., consumption goal) would be more likely to interpret sampling experience as relevant to the product experience, and thus perceive higher overlap, than those without a consumption expectation.

Taken together, we propose the following hypotheses:

**H1:** Product samples displayed inside (vs. outside) the target product would lead to a higher perceived overlap between the sampling experience and the product experience, which further leads to a lower desire for the target product.

**H2:** Consumers with an expectation (vs. without expectation) to consume the target product would perceive a higher perceived overlap between the sampling experience and the product experience, which further leads to a lower desire for the target product.

Studies 1-3 tested H1. Study 1 adopted a 2 (sampling experience: with vs. without)  $\times$  2 (location: inside vs. outside) between-participants design, using a painting album as the target product and two sample paintings to provide a direct sampling experience. In the with-sampling-experience (vs. without-sampling-experience) condition, participants viewed two sample paintings (vs. non-painting pag-

es). In the inside (vs. outside) condition, the pages were shown in an opened album (vs. shown as separate pages next to a closed album). We measured desire to view the whole album and found that, in the with-sampling-experience condition, those in the inside (vs. outside) condition exhibited lower desire; whereas in the without-sampling-experience condition, desire did not differ between the inside and outside conditions. Results in the two with-sampling-experiences conditions supported H1, and results in the two without-sampling-experience conditions (control conditions) ruled out the possibility that the proposed effect may be driven by the inherent positivity of the outside condition.

Study 2 used a causal chain design to test the mechanism in H1. Study 2a used a 2 (location: inside vs. outside) between-participants design to test the first link, from Sample Location to Perceived Overlap. Participants viewed sample paintings (displayed inside vs. outside the target album) and indicated the perceived overlap on a Venn-diagram measure, which used one large circle to represent “Viewing the whole album” and a small circle to represent “Viewing the samples,” and varied the degree of overlap between these two circles from small (denoted as 1) to large (denoted as 7). As predicted, participants in the inside (vs. outside) condition indicated higher perceived overlap. Study 2b used a 2 (perceived overlap: high vs. low) between-participants design to test the second link, from Perceived Overlap to Desire for the Target Product. We imposed high (vs. low) perceived overlap via both verbal and pictorial information on participants, before they viewed sampling paintings. We then measured their desire to view the whole album and found that participants in the high-perceived-overlap (vs. low-perceived-overlap) condition exhibited lower desire.

Study 3 replicated study 1 using a different product (M&M’s chocolate) and videos on eating M&M’s to provide an indirect sampling experience.

Studies 4 to 6 tested H2. Study 4 adopted a 2 (sampling experience: with vs. without)  $\times$  2 (consumer expectation: with vs. without) between-participants design. In the with-expectation (vs. without-expectation) condition participants learned (vs. did not learn) that they would view an album in its entirety. In the with-sampling-experience (vs. without-sampling-experience) condition, participants then viewed (vs. did not view) sample paintings. We measured desire to view the whole album and found that, in the with-sampling-experience condition, with-expectation (vs. without-expectation) participants exhibited lower desire; whereas the reverse was true in the without-sampling-experience condition. Results in the two with-sampling-experience conditions confirmed H2, and results from the two without-sampling-experience conditions ruled out the possibility that the proposed effect may be driven by the inherent positivity of the without-expectation condition. Study 5 found supportive evidence for the causal chain in H2, using similar methods as study 2. Study 6 replicated study 4 using a different product (Ghirardelli chocolate) and videos on eating Ghirardelli to provide indirect sampling experience.

In sum, these empirical studies supported our proposed framework. Theoretical and practical implications will be discussed.

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# Looking Up or Looking Down Makes You Indulge More: The Fit between Store Shelf Cues and Consumer Dispositional Power

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## EXTENDED ABSTRACT

Massive marketer resources are devoted to product displays in retail environments acting on the belief that product display prominence, position and accessibility influence choice. This research adds to our understanding of the role of display-related cues in product preference by demonstrating the role of a product's vertical position in a display (i.e., high or low relative to the consumer) in driving indulgent choice. Specifically, we draw on research on the ergonomics of self-perception and power (Yap, Wazlawek, Lucas, Cuddy and Carney, 2013; Van Kerckhove, Geuensand, and Vermeir, 2012; Huang, Galinsky, Gruenfeld and Guillory, 2011) supporting that the shelf height at which a product is placed (i.e. a high or low product shelf position) cues a sense of power or lack thereof by causing head movements (downward/upward). More importantly, we diverge from most prior research on embodied cognition in the retail context to propose (and demonstrate), based on extant research on the person-environment fit (e.g., Chen, Langner, & Mendoza-Denton, 2009), that it is not the environmentally-induced sense of power (or lack thereof) per se that drives consumer choice between indulgent and prudent options but the match/mismatch with the more enduring dispositional sense of power consumers bring to the retail setting. Finally, we provide evidence for affective instead of cognitive appraisals as the process theorized to drive this interactive effect of environmental and dispositional power on indulgent choices.

Study 1 (N=86) provides support for our prediction that power-altering shelf position cues interact with consumers' dispositional power to influence indulgent choice. Participants recruited through a mall intercept were randomly assigned to one of two shelf position conditions (Low = 47 inches, High = 78 inches). The top shelf of each display contained four boxes each of chocolate cake and mixed fruit. Participants were instructed to imagine that they were in a supermarket, trying to make a choice among two snacks of equal price from a display. After completing this task, we elicited respondents' dispositional power using Anderson and Galinsky's (2006) "generalized sense of power" scale. A logistic regression with snack choice as the outcome variable, shelf position, dispositional power (continuous variable), and their interaction as independent variables, and ratings of fruit and chocolate fanaticism, as well as gender, as covariates revealed the expected interaction (Wald's  $\chi^2= 7.67$ ,  $p<.01$ ). None of the main effects was significant (Wald's  $p>.10$ ). In line with our prediction, high power participants chose chocolate more often in the low shelf position than in the high shelf position condition (66% vs. 41%;  $z= 2.38$ ,  $p<.05$ ) whereas low power participants were more likely to choose chocolate when the snacks were in a high position than a low one (72% vs. 47%;  $z=-2.96$ ,  $p<.005$ ).

Study 2 (N=80) replicates Study 1's finding with a different manipulation of shelf position, while at the same time, providing evidence for the use of affective instead of cognitive appraisals as the process theorized to underlie these power effects. In this study, we kept the shelf height constant across conditions, manipulating shelf position by placing the snacks either on the top shelf (high) or the second from the bottom shelf (low) of a single five-shelf 70 inches display. Apart from recording snack choice, Study 2 assessed the influence of shelf position on respondents' power feelings as a manipulation check using the approach-related items in Levav and

Zhu (2009; 5-point scale: powerful, confident), as well as the extent to which their choice was driven by (a) "the rational side of me" versus "the emotional side of me," and (b) "thoughts" versus "feelings" (7-point scale). Serving as a manipulation check, we identified a significant effect of shelf position on approach-related power ratings ( $r=0.5$ ); looking up to the top shelf resulted in higher ratings ( $M_{top} = 3.05$ ) than looking down ( $M_{knee} = 2.50$ ;  $F(1, 79) = 3.61$ ,  $p<.06$ ). The same logistic regression with snack choice as the outcome variable revealed a significant interaction between the shelf position and dispositional power (Wald's  $\chi^2= 6.2$ ,  $p<.05$ ). As in study 1, high power participants chose chocolate more often when these were placed in the lower position than in the upper position (76% vs. 50%;  $z = -3.97$ ,  $p<.001$ ). However, low power participants were more likely to choose chocolate when these were in the top rather than lower position (75% vs. 59%;  $z = 3.00$ ,  $p<.005$ ). Finally, we identified a significant interaction of how much choice was based on feelings ( $r = .61$ ) between shelf position and dispositional power ( $t = -1.912$ ,  $p<.05$ ). Simple slopes analyses revealed that high dispositional power respondents were more likely to make a feelings-based choice when choosing from the lower position ( $M = 5.37$ ) than the higher position ( $M = 4.39$ ;  $t = 2.27$ ,  $p<.05$ ). Conversely, low dispositional participants were more likely to make a feelings-based choice when choosing from the higher position ( $M = 5.41$ ) than the lower position ( $M = 5.04$ ), though not significantly so ( $p > .20$ ). A simple logistic regression of snack choice as the outcome variable and feelings-based choice as independent variable revealed a significant positive relationship ( $b=.330$ , Wald's  $\chi^2= 3.61$ ,  $p <.05$ ) between feelings-based choice and indulgence.

In doing so, this paper advances our conceptual understanding of the contingent role of the ergonomics of self-perception in the consumption domain. By including dispositions/traits consumers bring to the consumption context, we identify a key moderator of the link between consumers' physical or bodily-induced power states and their choice behavior. Indulgent choices at the FMOT depend not only on cued cognitions of power but on the fit consumers experience between such sense of power and that, which they are more enduringly disposed to. This research can be seen as an example of the dispositional boundary conditions circumscribing the embodied cognition-choice relationship.

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# To Contrast Or Not To Contrast? Consumers' Response To Color Combinations

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## EXTENDED ABSTRACT

Colors are omnipresent in our daily live (Bagchi & Cheema, 2013). Mehta and Zhu (2009) label color as “a fundamental aspect of human perception” (p. 1226). Every object, person, or environment we daily face contains color information (Elliot & Maier, 2007). Therefore, it should not come as a surprise that, supported by technological advances, various disciplines such as neuroscience, biology, and visual cognition, are to some extent involved in studying the complexities of color perception. In contrast, marketing research about color functioning remains scarce (Labrecque & Milne, 2012) despite color's pivotal role in consumers' daily live (Labrecque, Patrick, & Milne, 2013) and color's potential to impact several consumer behavior outcomes such as perceptions of advertising (Gorn et al., 1997), perceived website loading time (Gorn et al., 2004), brand familiarity (Labrecque & Milne, 2012) and product category membership (Bottomley & Doyle, 2006).

Even when marketing research did study the functioning of color and the role of its attributes (i.e., hue, saturation, and value), the focus was on single colors (Deng, Hui, & Hutchinson, 2010; e.g., Bellizzi & Hite, 2006; Labrecque & Milne, 2012; Westerman et al., 2012), ignoring the fact that, in general, colors are rarely experienced in isolation (Schloss & Palmer, 2011). The visual stimuli we daily observe are almost never unicoloured. So is the case for the objects we encounter as consumers. For instance, in online shopping environments, products are presented on a colored website background (Bagchi & Cheema, 2013). Further, product packages, shopping mall walls, logos (Labrecque & Milne, 2012), and so on, also predominantly consist of multiple colors. Consequently, there is still much to discover about consumers' response to color combinations.

Unfortunately, the few empirical studies to date offer contradictory findings. On the one hand, consumers seem to prefer color combinations composed of similar (be it closely related or even matching) colors. On the other hand, consumers seem to like combinations of opposing colors as well (e.g., Deng et al., 2010). These findings are in line with the contradictory propositions of existing color models. That is, some models postulate that complementary colors are perceived to be more aesthetically pleasing compared to combinations of colors that violate this principle (e.g., Itten, 1973; Ostwald, 1969). At the same time, other color models suggest that combinations of colors with similar hues are generally preferred (e.g., Chevreul, 1839). The present study clarifies this ambiguity by suggesting and demonstrating that consumers' preference for color combinations composed of similar versus contrastive colors depends on the type of relationship the colored objects, resulting in those color combinations, symbolize. More specifically, we assume that attractiveness scores of color combinations increase in case there is a match between the type of relationship symbolized by the colored objects and the type of relationship symbolized by the colors making up the color combinations. We distinguish between two types of relationships: a relationship of 'belongingness' and one of 'addition'.

The few previous studies that show a preference for color combinations composed of similar colors mainly presented the colored objects in a figure-ground organization. More specifically, those colored objects are represented by a smaller square depicted against a larger one. We presume that such a spatial organization of those colored objects symbolizes a relationship of belongingness. In other words, the particular figure-ground setup suggests a relationship in

which one object is part of a larger object. The smaller square seems to belong to the larger one against which it is shown. We assume that if the colors used in this figure-ground setup also symbolize a relationship of belongingness (which is the case for similar color hues), attractiveness scores of the respective color combination will increase. Stated otherwise, we believe that a match between the type of relationship the colored objects symbolize and the type of relationship the composing colors symbolize, leads to more positive evaluations of the depicted color combinations. We underpin these assumptions by means of conceptual fluency theory.

Generally speaking, conceptual fluency arises when the mental representation of a target is easier to activate because it offers semantic relatedness to the context in which it appears (Whittlesea, 1993). Such conceptual fluency represents a specific form of processing fluency. In general, experiencing processing fluency evokes a positive affective state that people misattribute to the stimuli they are processing rather than to the ease of processing (Winkielman, Schwarz, Fazendeiro, & Reber, 2003). Translated to the context of this study, we could designate the figure-ground organization as prime and the colors making up the color combination as target. Based on conceptual fluency, one might expect that a conceptual match between the spatial organization (i.e., the prime) and the color combination (i.e., the target) results in a positive affective state which, in turn, results in a more positive evaluation of the target (i.e., the color combination). Taken together, we propose that consumers will evaluate a given color combination more positively if the type of relationship symbolized by the spatial organization of color objects matches the type of relationship symbolized by the composing colors. This general expectation would consequently mean that color combinations composed of complementing or contrastive colors are evaluated more positively in a context also representing this relationship of addition. Such a context is, for instance, present in case the colored stimuli would be organized in a side-by-side rather than a figure-ground setup.

In sum, we assume that consumers give preference to combinations of similar colors when colored objects are characterized by a relationship of 'belongingness' (for instance when the colored objects are in a figure-ground organization). When those colored objects are characterized by a relationship of 'addition' (for instance when the color objects are in a side-by-side organization), however, consumers prefer combinations composed of contrastive colors. In other words, a match between the type of relationship the depicted colors have and the type of relationship the depicted colored objects have, results in conceptual fluency which, in turn, renders consumers' evaluation more positive. These assumptions were tested by means of two experimental studies, which are explained in more detail below. Moreover, a third study demonstrates that this finding has implications for consumer behavior.

## Study 1

Fifteen undergraduate and graduate students from a large European university participated in this experiment. They engaged in a 40-minute session of experimental studies, comprising this study, for which they received a compensation of six euro. We collected our data in a consumer lab. In this way, we eliminated the potentially confounding influence of differences in color presentation arising due to the use of different computer monitors. Each participant viewed all 64 pairwise combinations that could be composed out of



eight color hues. More specifically, we made use of four approximately unique hues (i.e., red, green, yellow, and blue) and their approximate angle bisectors (i.e., orange, chartreuse, cyan, and purple). *Figure 1* displays the eight hues used in this first study. Next to hue (i.e., the pigment of the color; e.g., blue, red), the color attribute of interest in our study, colors can also be differentiated in terms of value (i.e., degree of darkness or lightness of the color) and chroma (i.e., saturation of the color) (Thompson, Palacios, & Varela, 1992). In order to reduce confounds, we only manipulated hue and kept chroma and value constant (cfr. Mehta & Zhu, 2009).

Half of the participants viewed the 64 color combinations in a figure-ground organization, while the other half of the participants viewed the combinations in a side-by-side organization. In other words, hue presentation mode varied between-subjects. In the figure-ground organization condition, figure-ground pairs consisted of a small square (100 x 100 pix) centered on a larger square (300 x 300 pix) (cfr. Schloss & Palmer, 2011). In the other experimental condition, two colored squares (150 x 300 pix) were presented side by side. In both experimental conditions and for each color pair, two possible organizations were tested: A on/to the left of B, and B on/to the left of A. Participants were asked to indicate the extent to which they liked the pair as whole on a 7-point Likert-scale ranging from '1' very unattractive to '7' very attractive.

First of all, a variable representing color hue difference was calculated. As color hue is a circular dimension (see *Figure 1*), the difference in color hue can be calculated as the number of hue steps between two colors in the color circle. For example, the distance between red and yellow is two steps, just as the difference between red and blue. Hence, this variable representing color hue difference ranges from 0 to 4.

As the color combination attractiveness ratings are nested within participants, a multilevel model, estimating these attractiveness ratings as a function of hue presentation mode (figure-ground organization versus side-by-side organization), hue distance, and the interaction between those two variables, was run. Most importantly, this analysis yields a significant interaction effect between hue presentation mode and hue distance ( $\beta = .33, t(943.71) = 3.96, p < .001$ ). That is, results show that in case of a side-by-side hue presentation mode, color combination attractiveness is highest when those combinations are composed of contrastive colors (i.e., in case of maximal hue difference) and decreases as those two composing colors become more similar. The opposite pattern is found for the figure-ground organization: color combination attractiveness is highest when color combinations are composed of colors with minimal hue difference and decreases as those composing colors become more contrastive.

In sum, the results of this first study confirm our assumptions. Findings show that the attractiveness of color combinations composed of similar versus contrastive colors depends on the way in which the colored objects resulting in those color combinations are organized (figure-ground organization versus side-by-side organization). More specifically, when colored objects are organized in a figure-ground setup versus side-by-side setup, attractiveness ratings increase as the composing colors become more similar versus more contrastive. So generally stated, an "increasing match" between the type of relationship the composing colors symbolize (one of belongingness versus addition) and the type of relationship the color objects resulting in the respective color combinations symbolize (one of belongingness versus addition) results in increased color combination attractiveness, presumably through an increasing positive affective state due to conceptual fluency.

## Study 2

the aim of the second experiment is to test our assumptions in a more direct way. More specifically, Study 2 primes participants to interpret each pair of colored objects as either being in a relationship of belongingness or a relationship of addition. Again, the attractiveness of the depicted color combinations is treated as the dependent variable.

Upon arrival in the consumer lab, participants were led to believe that the goal of the study was to examine the effects of interference on people's long-term memory. They were told that they would get to see several objects they needed to remember, and that an interfering task would be inserted before they would be asked to recall the objects they had just seen. The slideshow depicting the objects participants needed to remember served as our experimental manipulation. More specifically, the slideshow either comprised a prime of object interrelationship based on belongingness versus addition. To prime object interrelationships, we used a task described by Higgins and Chaires (1980). All participants were shown the same series of slides depicting 15 objects. Of the 15 objects, five were filler objects that would normally be designated by a single word (e.g., football, banana, scissors) and 10 were objects that would normally be designated by two words linked together by a linking word. In the 'additive relationship' condition, these two objects were linked together by the linking word 'and' (e.g., a bowl and cereal). In the 'belongingness relationship' condition, these two objects were linked together by the word 'of' (e.g., a bowl of cereal). After the participants saw the slides, they completed a task in which they indicated the attractiveness of the depicted color combinations. Colors were presented by means of two rectangles that were equal in size (150 x 300 pix). In order to avoid that either a dependency or additive interpretation of the relationship would be favored, the two rectangles were partially overlapping when presented to participants. A presentation thus holding the middle between a figure-ground organization and a side-by-side organization.

Analogous to the first experiment, we ran a multilevel model. That is, a multilevel regression analyses, estimating color combination attractiveness as a function of object interrelationship condition (belongingness versus addition), hue distance, and the interaction between those two variables, was conducted. As in Study 1, a significant interaction effect resulted ( $\beta = .23, t(2713.75) = 5.53, p < .001$ ). More specifically, when participants were primed with an additive relationship, color combinations composed of colors with a large hue distance were preferred over color combinations composed of more similar color hues. When participants were primed with a relationship of belongingness, color combinations composed of contrastive colors were more likely to be preferred compared to color combinations composed of similar colors.

The results of Study 2 are thus in line with those of Study 1. Generally speaking, color combinations receive higher attractiveness scores in case there is a match between the type of relationship symbolized by the colored objects and the type of relationship symbolized by the colors making up these colored objects.

## Study 3

A third study then was designed to illustrate the importance of this finding in a consumer behavior context. Specifically, in this experiment we vary the mode in which a product bundle is presented to the participants, as well as the color in which the combined products are presented, and we assess participants willingness-to-pay for the product bundle.

The third study was the final study in a 50-minute experimental session for which participants were paid 7 euro. After being paid,

participants were presented with a product bundle, in this case a set of two bottles of Vitamin Water, and participants were given the opportunity to purchase this set of products at a price they could freely determine. A first factor that was manipulated was how this product bundle was presented to the participants: products were either presented as being part of one package (i.e., bundled with a plastic wrapper and referred to a 'one set of bottles'), or they were presented in an additive manner (i.e., bottle A + bottle B). A second factor that was manipulated was the color of the presented bottles. Two color pairs of similar colors were selected (i.e., red and orange, and green and cyan), and two color pairs of contrastive colors were selected (i.e., red and green, and orange and cyan).

The results point to a significant interaction effect ( $F(1,76) = 16.55, p < .001$ ). We find that when products are presented as a 'one-package deal', the willingness to pay is higher when colors are similar ( $M = 1.73$ ) rather than contrasting ( $M = 1.18$ ) in hue ( $p = .013$ ), whereas when products are presented in an additive relationship (e.g., buy one, get another one on top), the willingness to pay is higher when colors are contrasting ( $M = 1.90$ ) rather than similar ( $M = 1.20$ ) in hue ( $p = .002$ ). The results of this third study are in line with those of studies 1 and 2 and demonstrate that how colored objects are presented in a product bundle may have important implications.

### General Discussion

although colors play an important role in affecting consumer behavior (Bagchi & Cheema, 2013), marketing research on color remains scarce. Even if studies are conducted about the impact of color on several consumer outcomes, single colors rather than the interaction between colors have been studied (Deng et al., 2010). Even if color combinations were to be studied, resulting findings are mixed. Some studies indicated that consumers prefer combinations composed of similar or even matching colors, while other studies indicate that consumers prefer combinations composed of contrastive colors (e.g., Deng et al., 2010). The present study clarifies this ambiguity by suggesting and demonstrating that whether consumers' show a preference for color combinations either consisting of similar colors or contrastive colors, depends on how the colored objects, resulting in those color combinations, are related to each other. More specifically, by means of three experimental studies and based on conceptual fluency theory, we show that consumers give preference to combinations of similar colors when colored objects are characterized by a relationship of 'belongingness'. When those colored stimuli are characterized by a relationship of 'addition', however, consumers prefer combinations composed of contrastive colors. In other words, a match between the type of relationship the depicted colors have and the type of relationship the depicted colored objects have, renders consumers' evaluation of the color combinations more positive. The third study exemplifies that this finding has important implications and suggest that marketers should take the color of their products into account when deciding on how to bundle the products.

This study contributes to previous research in several ways. First, despite the ubiquity of color in our daily live, color psychology remains an underdeveloped area characterized by low scientific rigor, among others, due to methodological weaknesses by ignoring some basic principles of experimental research (e.g., not controlling for the effect of other color attributes; Elliot & Maier, 2007). Further, research questions are often practical and pragmatic in nature (Elliot & Maier, 2007). So is the case for the marketing domain (Aslam, 2006; Labrecque & Milne, 2012; Singh, 2006). By conducting a theory driven and solid experiment in the domain of color psychology, this study addresses these issues. Second, most of the few studies

on color in the marketing domain examine the effects of specific dimensions of colors (i.e., hue, saturation, and lightness) on consumer responses (e.g., Bellizzi & Hite, 1992; Gorn, Chattopadhyay, Yi, & Dahl, 1997) thereby focusing on single colors and not color combinations (Deng, Hui, & Hutchinson, 2010). By studying consumers' response to color combinations, this study fills this gap. Third, the few studies investigating people's preference for color combinations call for more studies considering the role of different spatial arrangements of the respective colored stimuli (e.g., Schloss & Palmer, 2011). This study addresses this issue by comparing color combination preferences between figure-ground and side-by-side organizations of colored stimuli. Fourth, by demonstrating that the effects of color combinations depend on the context in which these color combinations are shown (i.e., a context of belongingness versus addition), this study complies with the demand for more research on the contextual effect of colors (e.g., Elliot & Maier, 2007). Finally, we add to fluency research studying the impact of color (e.g., De Bock, Pandelaere, & Van Kenhove, 2013) by identifying a source of processing, and more particularly conceptual, fluency that has largely been overlooked, namely, fluency stemming from a match between the type of relationship colors have and the type of relationship the colored objects have.

Our findings are highly relevant for practitioners who, up until now, often make color choices based on trial and error or the recommendations of consultants whose judgments rely on their own past experience rather than scientific rigor (Labrecque & Milne, 2012). Almost all creative directors interviewed by Gorn et al. (1997) told they were not familiar with color theory and relied mainly on personal preferences and intuition when making color choices. Nevertheless, color is an essential part of marketing communications. It is an integral element of the aesthetics of products, packages, logos, displays, and so on. As colors can meaningfully influence consumers' mood states, perceptions, and behaviors (Aslam, 2006), marketers should thoroughly consider this marketing cue, certainly since inappropriate color choices might end up in strategic failure (Ricks, 1983). There is also an economic benefit to the study of color functioning. For manufacturers, changing the color of products to please consumers' individual aesthetic preferences comes at much lower costs compared to, for instance, having to change a product's shape (Deng, Hui, & Hutchinson, 2010). Color is the least expensive way of changing a product (Parmar, 2004).

Although this research meaningfully contributes to the limited literature on consumers' reactions to color combinations (e.g., Deng et al., 2010), several limitations can be discerned which may give rise to future research. First of all, our experimental studies investigate consumers' preferences for two-color combinations. However, marketing communications in general might be chromatically more complex. Consequently, it would be worthwhile to explore the effect of such complex color compositions on consumer preferences as well. Although preliminary results of Schloss and Palmer (2011) incite them to suggest that once pairwise color preferences are known and understood, enough relational information is available to account for preferences in higher-order combinations, we still believe this to be an important point for further investigation. Second, we attribute the effects we obtain to conceptual fluency, but offer no direct evidence to support this. Future research should aim to test this underlying process. In general, research on color should fully explore the psychological processes through which color operates (Elliot & Maier, 2007). Testing whether conceptual fluency is at play could be done in several ways, for instance by manipulating cognitive load or by including measures of ease of processing or response time during judgment. Third, by relying on conceptual fluency, the current study

focuses on how color effects can depend on the context. However, consumer behavior in general can be influenced by personality, and the interaction between context and personality, as well. Therefore, it might be valuable to enrich the present study by examining whether the current results would hold for every person. Fourth, marketing stimuli such as product packages influence consumer perceptions in several ways, and not only by means of their color. Other design elements, such as size and shape, as well as non-design elements, such as price, affect consumer perceptions as well. Nevertheless, this study focuses on one design factor, color, and more specifically, one color dimension (i.e., hue). Nevertheless, colors can be differentiated based on value (i.e., degree of darkness or lightness of the color) and chroma (i.e., saturation of the color) as well (Thompson et al., 1992). Although we rule out the possibly confounding effects of value and chroma by keeping them constant (cfr. Mehta & Zhu, 2009), it might be worthwhile to examine interaction effects among these color dimensions as well.

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# When ‘Healthier’ Choices Fail to Improve Health: Precommitment to Categorically Healthier Lunch Orders

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## EXTENDED ABSTRACT

Recent years have seen a wave of behavioral research regarding food choice and ways to encourage healthier eating among consumers, often accompanied by discussion sections that extrapolate theoretical findings well beyond the experimental setting. Whereas academic researchers are often primarily concerned with demonstrating that a causal relationship *can* exist, we communicate our results with a non-academic audience hungry for narratives about causal relationships that have meaningfully large effects on their health and well-being. This disconnect between the theoretical implications shown by researchers and the clinical implications desired by the general public is exacerbated by experimental paradigms that fail to reflect the majority of real-world decisions (e.g., forced choice between healthy and unhealthy options) or which measure outcome variables other than those most relevant to clinical outcomes (e.g., rated enjoyment of target options).

Even in field studies which have led to healthier choices (e.g., increasing share of fruits and vegetables in a meal) in real world decisions, direct clinical measures such as calorie reductions are often not included. We show that improving the relative healthiness of a meal or choice still may not be enough to achieve clinically significant outcomes, using meal calorie consumption as a more direct indicator of an intervention’s health impact. We provide field experimental data from a study designed to show that exogenously restricting the timing of lunch orders—that is, experimentally manipulating whether participants ordered a lunch in the morning or at typical lunch hours—can influence the healthiness of the meals ordered. We tested the effect of such a restriction in two stages, allowing us to determine the effect of advance ordering in both the absence and the presence of basic nutrition labeling.

Based on previous findings showing subtle but reliable effects of time delay (Hanks, Just, & Wansink, 2012; Milkman, Rogers, & Bazerman, 2010; Read & van Leeuwen, 1998) and of hunger (Tal & Wansink, 2013) on food ordering behavior, we hypothesized that restricting meal ordering to times when consumers were less likely to be hungry may allow them to “precommit” to healthier choices. In a second stage of the study, we further tested whether advance orders would be healthier in the presence of nutrition information, as such information may be necessary to make healthy decisions.

We recruited employees ( $N = 296$ ) in a corporate office to place lunch orders from an on-site cafeteria via a new online ordering system that we created. This online ordering system removed the visceral and social factors associated with typical meal choices, enabling us to isolate the impact of order timing on food choice. Additionally, the study was presented as a trial period for a system in develop-

ment, rather than as a study of nutrition, to reduce demand effects in consumer behavior.

Across both stages, corporate employees ordered lunches online over a 4-week period divided into two 2-week blocks, where they were randomly assigned to place orders in advance (before 10 am) or at lunchtime (between 11 am and 1:30 pm) during the first block, and switched to the alternate condition for the second block. In stage 1, the menu provided no nutrition information, whereas in stage 2, the menu provided a simple label identifying entrées containing fewer than 500 calories (a dummy variable identifying whether this label was present was included in all analyses). Using mixed model regressions, we tested for differences in calories per order, nested within participant and including basic demographic covariates, to determine the impact of timing restrictions on lunch calories, accounting for individual variation. We powered our analyses to detect a 50 calorie reduction, which is generally agreed upon as the minimal change required for clinical significance.

In line with theoretical predictions, restricting participants to place orders in advance rather than at lunch time marginally reduced lunch calories (574 vs. 602 calories,  $p = 0.07$ ), though not by enough calories to constitute a clinically significant difference. In contrast, the calorie label identifying which entrées had fewer than 500 calories had an independent effect, reducing calories ordered by approximately 60 calories ( $p = 0.01$ ). Ordering in advance (vs. ordering at lunch time) *did* shift entrée choice to low-calorie options (60% vs. 53%,  $p < 0.05$ ). Finally, the vast majority of participants (87%) thought they ordered the same way regardless of when they placed their orders, whereas 10% thought they ordered healthier meals in advance and 3% thought they ordered healthier meals at lunch-time.

This study demonstrates that although participants appear to be healthier when ordering in advance, both as measured by total calories and entrée choice, the timing restriction only reduces total calories ordered by about 30 calories. Our findings support existing theoretical accounts of the relationship between time delay and behavior, suggesting that ordering early may well help people to strategically precommit to a “healthier” order, but do so without sufficiently reducing their consumption to have beneficial health consequences. This result points to the need for researchers to increase the attention paid to clinically relevant outcomes of manipulations in addition to those choice outcomes which test theoretical propositions. Although developing theories to understand how choices are made is critically important, the presumption that such theoretical developments will directly translate into clinically significant outcomes may be overly optimistic.

# Exploring the Links between Action Crises, Cognitions, and Goal-Related Evaluations in Consumer Contexts

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## EXTENDED ABSTRACT

The psychology of quitting goals offers an intriguing lens through which to reconsider consumer goal pursuit. Goals are mental representations of desired future states (Austin and Vancouver 1996; Fishbach, Shah, and Kruglanski 2004). Once a goal is set, whether it is sticking with a physician, purchasing an environmentally-friendly brand of products, or keeping at a weight-loss diet, a growing body of research points to shielding (Shah 2005) and cognitive tuning (Gollwitzer and Bayer 1999) in support of existing goal pursuits. Research has only recently begun to shed light on the mechanisms that break through these goal-protective mechanisms when individuals reduce effort toward or quit goals (e.g. Carver and Scheier 2000; Jostmann and Koole 2009; Louro, Pieters, and Zeelenberg 2007).

Most recently, Brandstätter and Schüler (2013) identify an action crisis “mindset shift,” a return to cognitions about costs and benefits in the middle of goal pursuit, as an important mechanism in the mental process of goal disengagement. Addressing fundamental theoretical questions within goal disengagement theory (Shah and Kruglanski 2008), the present research seeks to explore the nature of action crisis cognitions as well as the impact of action crises on goal commitment. Across four experiments, evidence is found that when consumers imagine or think about an action crisis (a goal pursuit phase where goal setbacks/difficulties lead to an intra-psycho conflict on whether to continue or discontinue goal pursuit- Brandstätter, Herrmann, and Schüler 2013) cost-benefit cognitions break through the implemental cognitive focus normally associated with action phases of goal pursuit (Dhar, Huber, and Khan 2007; Chandran and Morwitz 2005; Gollwitzer, Heckhausen, and Steller 1990). Working through reduced desirability and feasibility evaluations, action crises lead to decreases in goal commitment that likely precede actual disengagement.

## Experiments 1A-1C: Consumer Situations and Action Crisis Cognitions

The first three experiments seek to provide initial evidence that action crisis situations serve as an impetus for the breakthrough of disengagement cost-benefit cognitions in the actional phase of goal pursuit. These studies serve to test whether the pattern of cost-benefit cognitions observed by Brandstätter and Schüler (2013) during an action crisis holds for three different forms of consumer goal pursuits: 1) a service relationship goal (patient-provider relationship, N=75); 2) a product purchasing goal (purchasing environmentally-friendly products, N=72); and 3) a consumption reduction goal (pursuing a weight-loss diet, N=78). Three main categories of goal-related cost-benefits cognitions were examined in these scenario-based studies to investigate differences between participants in an action crisis condition and a no action crisis condition. When imagining themselves in an action crisis situation, participants should report a greater degree of thoughts about costs (CD) and benefits (BD) of disengaging from a goal. The benefits of continuing a goal remain activated during the actional phase of goal pursuit (Brandstätter and Schüler 2013) making it more likely that thoughts about the benefits of continuing (BC) a goal will be higher or roughly equal to the action crisis condition when participants are in a no action crisis condition.

Across the first three experiments, the prediction that action crisis participants would report a higher degree of disengagement-related cost-benefit cognitions was supported. Participants in the action

crisis condition reported a significantly higher degree of thoughts about costs and benefits of discontinuing the goal pursuit. This pattern was repeated across all three consumer goal contexts. For continuation-related cost-benefit thoughts, results were consistent for self-reported thoughts about benefits of continuing the goal, with the action crisis condition participants reporting significantly lower degrees of this type of thought than no action crisis participants. Results were more equivocal (as expected) for thoughts related to costs of continuing the goal with non-significant results in experiment 1A and 1B and an elevated level of these thoughts for action crisis participants in experiment 1C.

## Experiment 2: Action Crisis and Goal-Related Evaluations

The second experiment (N=142) connected the effects of action crisis situations to goal desirability, goal feasibility, and goal commitment while replicating the cost-benefit cognition findings of the first set of experiments. Moving beyond imagined scenarios, participants reflected on a self-selected personal goal in this experiment for improved ecological validity. Adding to the cost-benefit cognition predictions of the first experimental sequence, participants responded to a series of items relating to action crisis (Brandstätter and Schüler 2013), goal desirability, goal feasibility, and goal commitment. The effect of action crisis on goal commitment, an important determinant of goal disengagement (Carver and Scheier 1998), should be mediated by changes in goal-related evaluations of desirability and feasibility (Brehm and Self 1989; Herrmann and Brandstätter 2013).

In experiment 2, cost-benefit cognition findings from the first experimental sequence were largely replicated with a self-selected goal rather than an imagined scenario. The results also confirmed the proposed mediational relationship, with goal desirability and feasibility mediating the relationship between action crisis and goal commitment.

## General Discussion

The four experiments and their results begin to build evidence about how action crisis situations affect consumers. Existing mindset work in psychology (Gollwitzer and Bayer 1999) and consumer research (Chandran and Morwitz 2005; Dhar et al. 2007; Lee and Ariely 2006) heavily relies on the distinction between pre-decisional and post-decisional stages of goal pursuit. However, a situation like an action crisis begins to blur the seemingly clear conceptual boundaries between these stages of goal pursuit (Carver and Scheier 2000; Herrmann and Brandstätter 2013). As the results begin to show in these four experiments, a mindset-like shift seems to co-occur with action crisis situations.

This mindset-like shift refocuses consumers on cost-benefit cognitions in this middle of post-decisional goal pursuit despite the effects of shielding (Shah 2005) and implemental cognitive tuning (Gollwitzer et al. 1990) that should prevent this breakthrough of deliberative cognitions. As shown in the fourth experiment, an action crisis downwardly influences the fundamental goal evaluations of desirability and feasibility which in turn decreases consumer commitment to an existing goal. While much work remains, the current work challenges existing theoretical accounts of goal pursuit and begins to establish the place of action crisis and its associated cognitions in the psychology of consumer goal disengagement.

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# Consumer Propensity to Deviate: Scale Development and Validation

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## EXTENDED ABSTRACT

Deviance has had a bad rap. It can be seen as a source of new products and new-market creation. Conversely, many facets may not be so alluring, despite being “fun” for some consumers. Pornography is edging its way into the mainstream; now a \$97 B global industry (CNBC 2014), 35% of Internet downloads are porn-related, and 40 million Americans regularly visit porn sites (Webroot 2014). Illegal software downloading is ubiquitous – 57% of computer users, worldwide, admit they pirate software (BSA 2012). Once flaunted by the “deviant” minority, seemingly most people now have tattoos – 40% of US adults aged 26-40, and interestingly, 29% say that it makes them feel rebellious (Pew Research 2013). Still, many consumers are not inclined to pursue deviance.

Why do some consumers engage in deviant behavior while others do not? The extant CB literature does not adequately address this research question, nor does it give sufficient attention to the important and pervasive subject of deviance. This is not surprising given the inherent challenges in studying this diverse topic. Conceptual boundaries vary, as does the nature of deviance itself: what is deviant to one person is not to another, and what was deviant many years ago might not be today. Sometimes referred to, in part, as the dark side of CB, deviance was recognized as being difficult and troubling (Hirschman 1991), while also being one of the most important new areas of CB research (Mick 1996). Notwithstanding, since Wells’ (1993) call for greater research into the dark side of CB, little advancement has been made.

In addressing the above research question, the present work is positioned within the limited CB literature on deviant consumption. In so doing, several key contributions are made: most importantly, an adaptable, consumer-focused scale is available to researchers (and managers); our understanding of deviant consumer behavior is enhanced; and the CB literature is enriched as theory from other disciplines (sociology, social psychology, and criminology) is applied.

Overarching procedural approaches for the present scale development research followed those of accomplished scale developers like Netemeyer, Bearden, and Sharma, where mainly survey methodology is employed. Initially, I explored, described and defined *deviance*, and then related it to the consumption experience to arrive at a conceptualization of *deviant consumer behavior*. Subsequently, I focused on consumers’ likelihood to engage in *deviant consumer behavior* by developing and defining a construct entitled, *consumer propensity to deviate* (CPD), which was hypothesized to vary across all consumers to a greater or lesser degree (like many personality traits). CPD was hypothesized as being unidimensional and defined as, the inclination or tendency for consumers to willfully contravene consumption norms as defined by members of a reference group.

The measure for CPD was developed via a comprehensive scale development process that consisted of six studies (two qualitative, and four quantitative) and encompassed seven samples. Exploratory in nature, the initial qualitative studies were intended to enhance fundamental understanding of the domain, as well as to foster item generation. An initial pool of 119 items was reduced to a set of 52 upon completion of these qualitative studies. This resultant set of items formed the basis for the following suite of studies.

The next four quantitative studies were conducted using Web-based survey methodology. Studies 1 and 2 focused on scale refinement by trimming the number of items. Via statistical analyses, conducted with full attentiveness to theory, the number of items was trimmed to a total of seven. Convergent and discriminant validity were assessed and found to be acceptable as was reliability. Subsequently, Studies 3 and 4 examined and demonstrated external aspects of validity: known-group, predictive, and nomological.

Ultimately, a parsimonious, seven-item measure for CPD was developed with demonstrated reliability and validity. Extensive validation procedures were used that included examining relationships between the CPD scale and numerous consumer-related measures of attitudes and behaviors. A unique construct, CPD was shown to differ from conceptually similar constructs. The scale comprised the following items:

1. I try to use products that are the opposite of what others believe I should use.
2. The things I own express my rejection of society.
3. I seek out products, services, or experiences that make me feel like I am an outsider.
4. If most people believe that it is right to buy a certain product, I will buy the “opposite.”
5. I reject society’s values through my consumption.
6. I try to buy things so that I don’t fit in.
7. I actively buy products that others do not like.

Owing to its relatively short length, simplicity, and flexibility, the CPD scale can be applied to a variety of academic and managerial research areas, and modified to suit required research settings. Managers could use this tool as an aid to segment markets and target particular consumers. Consumer psychology and marketing researchers now have a tool that can measure a consumer’s propensity to deliberately contravene consumption norms.

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# Weight Loss at the Cost of Safety is OK for Women: Thin Female Norm and Perceptions of Weight Loss Products Using Before and After Appeals

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## EXTENDED ABSTRACT

### Competing paradigms embedded in advertisements of body images and weight losses

If advertisements portray or consolidate deep seated culture values, the ad world employing thin female ideals seem to indoctrinate female viewers with the value that being thin is being beautiful for women. After all, marketers often employ highly attractive models or product endorsers in their advertisements with the expectation that an attractive person in an advertisement will have a positive effect on both ad and product evaluations (Belch, Belch, & Vilareal, 1987). Advertisements with their overwhelming reliance on female idealized images can act as an important cultural or social agent that may exacerbate, or possibly contribute to a constant wrestling with body image among women. Media researchers provided converging evidence from content analysis of a variety of media outlets that the thin ideal is prevalent and spotlights unrealistically thin models (e.g., Davis, Sommers-Flanagan & Sommers-Flanagan, 1993; Van Zoonen, 1994;). Media researchers argued that when relying on highly attractive models in their messages to transfer the positive affect from models to endorsed products, advertisers set the idealized models as representatives of aspirational reference groups for consumers, especially young women (Gulas & McKeage, 2000). At the individual and psychological level, repeated exposure to idealized images may cause a range of problems such as eating disorders, lowered self-esteem and a distorted perception of one's body image (e.g., Garner, Garfinkel, Schwartz, & Thompson, 1980), or stereotypical perceptions of and behaviors toward men and women (Beckwith, 1994).

On the other hand, in 2010, more than one third of U.S. men and women were obese (Ogden et al., 2012) and this rate is expected to continue to climb. Here lies the opportunity of a weight loss product industry. In 2007 Americans spent \$46.3 billion on weight loss products (Warren and Steiner 2007).

Research on this topic has shown some positive effects of before/after appeals. For example, Lowenstein (1996) defined before/after appeal as a sensory exposure to stimuli creating a sense of impulsivity that leads people to spend more on advertised products. Amos (2008) showed that using before/after photos in a weight loss program advertisement enhances viewers' attitudes towards the product and also increased consumer's willingness to pay. It was also shown that before/after ads are more effective than just single (either before or after) ads (Geier, Schwartz, and Brownell 2003). Recent work shows that ads with before-and-after appeal accounts for 42% of ads in this sector (Amos 2008) and many of these ads display two pictures of a target user, one of the person before product usage and the other after product usage. The contrast in the shape and sizes of the person is intended to demonstrate the effectiveness of the products.

Our paper is to understand how viewers' attitude toward before-and-after ad appeals of weight loss products

Following this qualitative study, it is important to understand how this idealized image in advertising especially in before/after

weight loss ads affect viewers' attitude towards the weight loss products and ads. It is likely that these product advertisements also affect perceptions of potential risk. The media is replete with examples of weight loss products being banned. We argue that before-after appeal may have negative perceptions of products safety. That is, the presentation of a drastic weight change (in the comparison of photos or posted weight loss results) can promote perceptions of risk associated with the products; therefore jeopardizing the perceived product effectiveness whereas a smaller change would not. Therefore, we propose that size of discrepancy (a large vs. moderate discrepancy) can negatively affect perceived product safety. This could be due to the fact that large discrepancy in before and after advertisements triggers persuasion knowledge (Friestad and Wright 1996), causing people to evaluate the ad more negatively in comparison to a small discrepancy.

We also examine the role of gender of the endorser featured in the advertisement in moderating the effects of discrepancy on perceived product safety. Unfortunately, those female consumers who are not satisfied with their appearance are then motivated to engage in risky appearance management behaviors in order to achieve one's desired appearance. Rudd and Lennon (2000) demonstrated that over 50% of their participants engaged in risky appearance management behaviors. For men, the ideal appearance has a different emphasis, the ideal man is preferred to have large, defined muscles and a lean frame (e.g., Furnham, Badmin, & Sneade, 2002; Morrison, Morrison, & Hopkins, 2003; Olivardia, Pope, Borowiecki, & Cohane, 2004).

Based on these different gender appearance ideals, we expect that endorser gender will moderate the effect of the discrepancy. In particular, for male endorsers, perceptions of product safety will be lower when the discrepancy is high as compared to low. In contrast, for female endorsers, given the thin ideal, perceptions of product safety will be higher with the larger discrepancy as compared to small. Therefore, in the current study, we examine the interaction effect of discrepancy level and endorser.

### Study 1

This qualitative study has been conducted to address the broader question of how young women perceive the impact of the idealized images in advertising on themselves and on various others. Six semi-structured, audio-taped interviews were conducted in the large Southern university. Each interview lasted 60-90 minutes. Six female university students, ranging from 22 to 25 years old, were participated in this study. The interviews were conducted on the basis of the guidelines of McCracken (1988) and interview procedures adopted in literature (e.g., Thompson & Haytko, 1997). During interviews, participants were asked different questions, phrased in different ways at different times, surrounded one theme: how does each participant feel, experience, and perceive the impact of thin female images in advertising on themselves and on others?

Results of this qualitative study shows that idealized images not only exerted direct influence on individuals, but exerted influence on individuals via their interactions with others in their interpersonal networks. The thin female ideal, after being filtered at different



stages, could be either fortified or emasculated, depending on the psychological relationship between self and others. In more particular, there is a great deal of emotionality and tension associated with the way in which female consumers deal with the use of thin female images in advertisements. For example, the impact led to a desire to have the body of the models and the products they use that contributes to feelings of dislike, guilt and impulsivity. Similarly, the women believe that these images have a greater negative impact on other female consumers that leads to feelings of pity and sympathy. Our findings indicate that thin female ideals portrayed by the media have farther reaching impacts than previously assumed. Rather than affecting individuals' psychological well-being and behaviors, thin female ideals can be fortified and perpetuated by interpersonal influences and social interactions.

### Study 2

This study was conducted to understand the attitude of female viewers to the ads that promotes idealized person by showing before and after usage of a weight loss product. This study was a one-way between subject design with two conditions of advertisement endorser gender (male vs. female) as independent variable with all female participants (N=32) whom the average age was 21.03 years (SD=3.09). Participants were asked to read a one page color advertisement for a weight loss product with the fictitious name of Vitalism. The advertisement included a description of weight loss program which was identical in all conditions. The ad also included before and after photos of a male or female endorser who used Vitalism over this weight loss program. In the next phase, participants were asked to answer some filler questions and their attitude towards the product, advertisement and the model in the ad.

A t-test with advertisement endorser gender as the independent variables on attitudes towards product shows a significant effect of endorser gender ( $t(25.59) = 2.59, p = .01$ ). This results shows that female have more positive attitude towards weight loss product when the gender of the endorser is female comparing to the situation when the endorser is male ( $M_{\text{female-endorser}} = 3.81, M_{\text{male-endorser}} = 2.62$ ).

To determine if female people have more positive attitudes towards the advertisement when they receive an ad with female endorsee, a t-test with advertisement endorser gender as the independent variables and attitude towards the advertisement as dependent variable conducted and results show a significant difference between participants attitude towards the advertisement based on the gender of endorser ( $t(30) = -2.37, p = .02$ ). In particular female have lower

negative attitude towards advertisement when they see the ad with female endorsee in compare with the time when they receive an ad with male endorsee ( $M_{\text{female-endorser}} = 4.10, M_{\text{male-endorser}} = 4.61$ ).

And finally a t-test was conducted to see if there is any difference on how suspicious is the endorser of the ad. The results shows female people have higher suspiciousness to the model in the ad when the gender of endorser is female in compare with the male endorser ( $t(30) = 2.56, p = .016, M_{\text{female-endorser}} = 3, M_{\text{male-endorser}} = 2$ ).

### Study 3

This experiment was conducted to understand the effect of discrepancy between before/after photos across both male and female. This study was a 2(advertisement endorser gender: male vs. female) x 2(discrepancy: high vs. low) between subjects design (N=104). Similar to study 2, participants were asked to read a one page color advertisement for a weight loss product with the fictitious name of Vitalism. To manipulate discrepancy, participants were shown before and after photos of a person who lost 77 (21) lbs after completing the program (High/Low discrepancy). The same photo was edited to change the discrepancy. In the next phase, participants were asked to answer some filler questions and their safety attitudes towards the product on two items (safe and reliable).

The results revealed main effect of ad-gender ( $F(1,100) = 8.40, p = .005$ ) and a marginal main effect of discrepancy ( $F(1,100) = 3.03, p = .085$ ) that were qualified by a significant interaction ( $F(1,100) = 42.54, p < .001$ ). When the endorser in the advertisement is male, perceptions of the safety of the product are significantly lower when the discrepancy was high ( $M = 2.96$ ) as compared to low ( $M = 5.15, t(52) = 5.84, p < .05$ ). However, this effect reversed when the endorser in the advertisement was female as perceptions of the safety of the product was higher when the discrepancy was high ( $M = 3.92$ ) as compared to low ( $M = 2.65, t(52) = 3.38, p < .05$ ).

### Conclusions

This research contributes to both marketing literature and social marketing. While prior research showed visual priming in the form of before/after photos in advertising leads to positive consumer responses, the current research shows that the size of the discrepancy between the before and after photos influences this effect and results are moderated by the gender of the endorser in the advertisement. Future research aims to examine the underlying mechanism for this effect.

# Spending Time with Mr. Lexus and Paying Money to Doughboy: The Effects of Time and Money on Preference for Anthropomorphized Products

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## EXTENDED ABSTRACT

Anthropomorphism, or attributing human characteristics to non-human entities, has ancient roots in religion, fables, and art. Anthropomorphism has also been pervasive in consumer psychology. One reason people readily anthropomorphize nonhuman entities is that it satisfies their basic need to form social connections (Epley, Waytz, & Cacioppo, 2007). As such, marketers routinely endow products with human traits to enhance their appeal. Indeed, consumers are less willing to discard anthropomorphized products because products seen through an interpersonal perspective are associated with thoughts of social relations—unlike inanimate products, which tend to be associated with instrumentality (Chandler & Schwarz, 2010). However, we believe that extant research linking preference for anthropomorphized objects with social connection captures only half the story by ignoring the context of consumers' interactions with products. We posit that preference for anthropomorphized products also depends on two such contextual factors: the goal behind the consumption of a product and the behavioral norms salient at the time.

Recent research has shown that manipulating the salience of time versus money can affect people's sociality and instrumentality considerations. Activating the concept of time increases people's desire for social interaction (Mogilner, 2010) and feelings of personal connection (Mogilner & Aaker, 2009), suggesting that it triggers behavioral norms consistent with social connectedness. In contrast, activating the concept of money reduces desire for social intimacy (Vohs, Mead, & Goode, 2006) and increases the functional use of social relationships (Fiske 1992; Vohs, Mogilner, Newman, & Aaker, 2012), suggesting that it triggers behavioral norms consistent with instrumentality.

In this research, we suggest that exposure to a desirable anthropomorphic product will make salient the goal of forming social connections, leading people to prefer it over a nonanthropomorphic counterpart, especially if they are simultaneously exposed to the concept of time (vs. money), which should make salient behavioral norms that encourage interpersonal relationships. Conversely, exposure to a functional goal or a quintessentially functional product will highlight the goal of instrumentality, leading people to prefer anthropomorphized products if they are also exposed to the concept of money (vs. time). The salience of money primes norms that sanction the functional use of a humanlike product, whereas the salience of time primes norms that deem it inappropriate to "use" a human—or humanlike object—instrumentally. People are naturally inclined to form social connections with humanlike objects, but when the object is meant to fulfill an instrumental goal, forming a social connection will no longer be the default response. We tested these hypotheses across three studies.

In Study 1, we examined whether being primed with time (vs. money) indeed increases people's preference for anthropomorphized products in the absence of an overt instrumentality goal. Participants from Amazon Mechanical Turk (MTurk;  $N = 127$ ; 56% male, 44% female; mean age = 31.7 years) were shown an advertisement for a Lexus car with text written in first- or third-person (manipulation of anthropomorphism; Aggarwal & McGill, 2007) and were prompted to consider either spending time or spending money on it (Mogilner & Aaker, 2009). Participants then evaluated the car. Six participants were excluded for failing an attention check. A main effect of

the prime emerged after controlling for age and gender,  $F(1, 115) = 11.15, p < .01$ ; importantly, this effect was qualified by an interaction between the prime and anthropomorphism,  $F(1, 115) = 4.24, p = .04$ . Participants exposed to the anthropomorphized car preferred it when primed with time ( $M = 6.95$ ) than with money ( $M = 5.59$ ),  $t(59) = 3.14, p < .01$ ; there were no differences between conditions in preferences for the nonanthropomorphized car ( $M_{\text{time}} = 6.56$ ;  $M_{\text{money}} = 6.01$ ),  $t(58) = 1.31, p = .20$ .

We predicted that these effects of time versus money would reverse when participants viewed products through the lens of a functional goal. In Study 2, participants (MTurk;  $N = 118$ ; 58% male, 42% female; mean age = 31.8 years) completed a scrambled-sentence task with time-related or money-related words (Mogilner & Aaker, 2009). Participants were then given an explicit functional goal of baking cookies for an event and were asked to choose between Nestle and Pillsbury cookie-dough brands. Pillsbury served as the anthropomorphized brand, being associated with the popular Doughboy mascot. Pretest ratings confirmed that Pillsbury ( $M = 3.93$ ) was perceived as more animate, alive, and humanlike than Nestle ( $M = 3.12$ ),  $t(151) = 5.35, p < .001$ . As expected, significantly greater proportion of participants primed with money chose the anthropomorphized Pillsbury brand over the nonanthropomorphized Nestle brand (47.6%) than those primed with time (27.3%),  $\chi^2(1, 118) = 5.15, p = .02$ .

Arguably, the use of real brands in Study 2 could have affected their perceptions on factors other than anthropomorphism. Therefore, in Study 3, we used a product that is consumed only for instrumental reasons: a flu vaccine. As in Study 2, participants (MTurk;  $N = 109$ ; 60% male, 40% female; mean age = 31.1 years) were primed with time or money through the scrambled-sentence task. Next, they read a short message about flu prevention written in first-person (anthropomorphized) or third-person (nonanthropomorphized), alongside an illustration of a syringe with "eyes" added in the anthropomorphized condition. Participants then rated their likelihood of getting vaccinated. Results revealed an interaction between the prime and anthropomorphism,  $F(1, 105) = 3.97, p = .05$ . In the anthropomorphized condition, participants primed with money reported a greater likelihood of being vaccinated ( $M_{\text{money}} = 57.82$ ) than those primed with time ( $M_{\text{time}} = 29.92$ ),  $t(51) = 2.85, p < .01$ ; in the nonanthropomorphized condition, the type of prime made no difference ( $M_{\text{money}} = 47.19$ ;  $M_{\text{time}} = 47.83$ ),  $t(54) = .06, p = .95$ .

Extending prior work showing that the concepts of time and money make salient behavioral norms consistent with social connectedness and instrumentality, respectively, this research reveals that preference for anthropomorphized products depends on the consistency between the consumption goal and the behavioral norms salient at the time. Moreover, this research contributes to the theoretical understanding of anthropomorphism and shows how the properties of objects, the goals of individuals, and behavioral norms interplay to jointly influence people's preferences.

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# Keepin' it Cool: The Behavioral Effects of Wearing Sunglasses

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## EXTENDED ABSTRACT

Do people behave “cooler” when they wear sunglasses and, if so, why does this occur? According to our framework, consumers develop beliefs about the kinds of people who use certain products (e.g., caregivers wear aprons, athletes wear athletic shoes, and cool kids wear sunglasses). These beliefs are incorporated into consumers' schemas for various social identities. Thus, when consumers use a product that is strongly linked to a particular social identity schema – the way sunglasses are linked to the cool identity schema – consumers will exhibit other schema-linked behaviors as well. This view does not imply that consumers deliberately and strategically modify their behavior when they wear sunglasses. Rather, we propose that wearing sunglasses automatically activates a cool identity schema, which causes people to behave cooler without consciously intending to or realizing it.

In support of our theorizing, survey and experimental research demonstrates that (1) sunglasses are part of young adults' schema for a cool identity, and (2) young adults who wear sunglasses exhibit hallmarks of a ‘cool kid’. While these behavioral effects occur without conscious awareness, they depend on the strength of the association between sunglasses and the cool identity schema. That is, chronic or temporary associations to health (i.e., UV protection), rather than coolness, attenuate these behavioral effects.

The meaning of cool has been linked to several characteristics and behaviors, including emotional control (Erber et al. 1996), disregard for authority (Nancarrow et al. 2002; Pountain and Robins 2000), disengagement, or ‘slacking’, at school (Czopp et al. 1998; Milner 2004), disregard for the opinion of others (Belk et al. 2010), behavioral autonomy (Warren and Campbell 2013), and impulsiveness (Frank 1997). The cool identity is also linked to certain consumption practices. Smoking and drug and alcohol use are the most notorious among these, but even unhealthy eating can convey coolness. Young adults see unhealthy food choices as a way to express personal autonomy to peers (Bassett, Chapman, and Beagan 2008) and rebel against parental control (Hill 2002; Stevenson et al. 2007; Stok et al. 2010). In addition, the cool identity is linked to a certain dress code, which, across subcultures, includes wearing sunglasses (Belk et al. 2010; Dinnerstein 1999; Mercer 1997; Moore 2005). Thus, prior research suggests an indirect link between sunglasses and various ‘cool’ behaviors via the cool identity schema. To test our hypothesis that wearing sunglasses causes people to behave cooler, we examine participants' tendency to ‘slack’ on performance tasks, report weaker emotions (i.e., ‘keep their cool’) in response to positive or negative feedback, and make indulgent consumption decisions.

Study 1 was a survey study. Using factor analysis, we established, first, that participants define coolness in terms of contrarian behaviors, including a tendency to control emotions, ‘slack’ on performance tasks, and disregard social norms. Second, relative to other fashion accessories and garments, such as scarves or jeans, participants consider sunglasses particularly cool. In sum, this study established the basic associations we rely on in subsequent studies: sunglasses are considered cool, and coolness means contrarian behavior.

Study 2 tested the prediction that wearing sunglasses causes students to ‘slack’ on an academic test—on which most university students would try to do well—and to express less intense emotions in response to (positive or negative) feedback about their performance. In the lab, participants were informed that they would complete two

unrelated tasks, an English language ability test and a product (i.e., sunglasses) evaluation task. Half were informed that their product evaluations would be more accurate if they wore the sunglasses prior to evaluating them. The other half were not instructed to wear the sunglasses. Instead, the sunglasses remained on their desk, in plain sight, throughout the study. For the language test, participants received 5 minutes to generate as many words as possible from a set of scrambled letters (Dewall et al. 2011). Then they were randomly assigned to receive positive or negative feedback about their performance. Next, they completed Tangney and Dearing's (2002) State Shame and Guilt Scale, which measures feelings of shame, guilty and pride. Lastly, participants completed the ostensibly unrelated product evaluation task (keeping with the cover story). The results indicated that participants who wore sunglasses performed worse on the test than participants who did not wear sunglasses. They also expressed less intense feelings of shame, guilt, and pride in response to performance-related feedback. Importantly, performance did not predict emotions. This suggests that, as predicted, wearing sunglasses produced two independent effects: ‘slacking’ behavior and muted emotion expression.

Study 3 provides evidence that these behavioral effects depend on the perception that sunglasses are cool. All participants wore sunglasses and viewed an advertisement and magazine article that suggested that sunglasses are either an important fashion accessory or an important tool for UV-protection. As our dependent variable, we assessed ‘slacking’ behavior on a matrices task (Gino et al. 2010). We measured the number of matrices completed and the time spent on the task. The results showed that when participants associated sunglasses with health, rather than coolness, the effect of wearing sunglasses on contrarian behavior was attenuated. Similar effects were obtained for performance and time spent on the task, suggesting that sunglasses affect motivation to persist, not actual ability, as we would expect. Importantly, because all participants wore sunglasses and only their beliefs about sunglasses were manipulated, we rule out the possibility that sunglasses are affecting ‘slacking’ by imposing cognitive load or distraction. Instead, the results support the hypothesis that sunglasses exert their effects by activating a cool schema, which leads to contrarian behavior.

Study 4 sought to generalize the behavioral effect of wearing sunglasses to a different measure of coolness: unhealthy eating. We used a procedure similar to study 1's, but with a different dependent variable. The dependent measure consisted of a series of hypothetical menu choices (i.e., appetizer, entrée, dessert, and drink) among options that were either healthy or unhealthy (Fischbach and Zhang 2008). We also tested the hypothesis that the effect of wearing sunglasses depends on *impression management* (Paulhus 1984). Impression management involves two processes: the selection of self-images for public portrayal and the strategic conveying of those images (Leary and Kowalski 1990). As self-presentations become more habitual, people select self-images and manage their self-presentation without consciously realizing that they are doing so (Paulhus 2002). Moreover, the effect of impression management on behavior depends on the particular self-image selected. For example, under baseline conditions (i.e., when responding to a typical research survey), people with high-IM tendencies report stronger intentions to eat healthily compared to those with low-IM tendencies (Sun, Horn, and Merritt 2009). But under conditions that prompt one to portray

an image of coolness, the healthy food preferences of high-IM compared to low-IM respondents should diminish because healthy eating is inconsistent with the cool image (Stok et al. 2010). The results supported this prediction.

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# Is Concealing Emotional Expression Cool?

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## EXTENDED ABSTRACT

Despite a widespread belief that coolness sells products and drives marketplace trends, it is unclear what influences perceptions of coolness (Frank 1997; Heath and Potter 2004; Kerner and Pressman 2007). Researchers have argued that things (products, brands, trends, etc.) become cool through association with cool people, such as a brand's spokesperson, employees, or consumers (Gladwell 1997; Southgate 2004). Therefore, in order to understand what makes things cool, it would help to know what makes people cool.

A number of authors have argued that people become cool by concealing or controlling emotional expression (Bird and Tapp 2008; Connor 1995; Pountain and Robins 2000; Stearns 1994). Thus, according to this view, concealing emotional expression should have a direct, positive effect on perceived coolness. Despite the widespread belief that concealing emotional expression positively relates to coolness, this relationship has not been the subject of empirical testing. Further, the social psychology literature casts doubt on this view since research suggests that concealing the expression of emotion has a negative effect on how individuals are evaluated (Cunningham 1986; Weisbuch, Iyengar, and Ambady 2009).

We conducted three experiments to test whether concealing emotion makes people seem more or less cool. In addition to examining whether concealing emotion has a direct, positive effect on coolness, we examined the contrasting hypothesis: concealing emotions make people seem less cool by making them less likeable. Studies 2 and 3 also examined whether product evaluations are affected by the emotional expression of individuals associated with the product.

Study 1 tested the competing predictions in the context of an introductory conversation between two people. In this study, graduate students ( $n = 74$ ) at a European university rated the coolness of a confederate that was posing as another study participant. Based on random assignment, the confederate either expressed or concealed his or her emotions during a three-minute introductory conversation. Contrary to the belief that concealing emotion is cool, participants considered the confederate less cool when he or she concealed emotions than when he or she expressed emotion ( $M = 4.66$  vs.  $5.35$ ;  $F(1, 66) = 6.53$ ,  $p = .01$ ). Moreover, a mediation test (Hayes, 2013) confirmed that the confederate's likability mediated the effect of concealing emotion on perceived coolness (indirect effect<sub>AxB</sub>:  $-.14$ , 95% C.I. =  $-.34$  to  $-.03$ ).

Study 2 served two purposes: (1) to determine whether the negative effect of concealing emotional expression on perceived coolness would generalize to an advertising context and (2) to determine whether the effect of concealing emotions on the coolness of a product spokesperson would affect product attitudes. Participants ( $n = 193$ ) recruited from Amazon's Mechanical Turk website viewed a print advertisement for Franco Rossi, a real but relatively unfamiliar brand of men's clothing. Participants were randomly assigned to see an advertisement in which the spokesperson concealed or expressed positive emotion. Participants evaluated the spokesperson and the product.

Consistent with study 1, participants perceived the spokesperson to be less cool when he concealed emotion than when he expressed emotion ( $M = 3.49$  vs.  $4.09$ ,  $F(1, 191) = 8.35$ ,  $p < .01$ ). Concealing emotion made the spokesperson seem less cool by making the spokesperson less likeable (indirect effect =  $-.58$ ; 95% C.I. =  $-.75$

to  $-.43$ ). Furthermore, the perceived coolness of the spokesperson had a positive effect on attitudes towards the product ( $b_{\text{pathD}} = .39$ ,  $t = 5.70$ ,  $p < .001$ ). Also, the indirect effect of concealing emotional expression on product attitudes through both likability and perceived coolness was significant (indirect effect =  $-.23$ ; 95% C.I. =  $-.36$  to  $-.13$ ). This indirect effect indicates that concealing emotion made the spokesperson less likeable which then made the spokesperson seem less cool, which in turn negatively affected attitudes towards the advertised product.

Study 3 examined whether the negative effect of concealing emotional expression on coolness would extend to situations in which negative emotion is concealed. Establishing the effect of concealing negative emotions on perceptions of coolness is important since keeping ones cool is a phrase typically used for people who control or conceal the expression of negative emotions, like anger or fear. Similarly to study 2, study 3 also assessed whether the emotional expression of a person affects evaluations of products with which they associate.

To test the effect of concealing negative emotion on perceptions of coolness, we hired a professional actress to make six brief videos. The actress pretended to be responding to a conversation on Skype in which her neighbor said something to evoke fear, sadness, or anger. She expressed or concealed the emotions thus creating videos corresponding to the 2 (expression: express, conceal) x 3 (emotion: sadness, fear, anger) between-subjects design. Based on random assignment, undergraduate students ( $n = 272$ ) were told of the emotionally evoking situation the woman was responding to and then viewed the corresponding video. Afterwards, they evaluated the woman and the hat she was wearing.

A 2 X 3 ANOVA revealed that the only significant effect was the effect of expression (conceal versus express) on coolness. Concealing emotion had a negative effect on coolness ( $M = 2.56$  vs.  $5.35$ ,  $F(1, 266) = 301.08$ ,  $p < .001$ ). Consistent with studies 1 and 2, a mediation model indicated that concealing emotion made the actress less likable which in turn made her appear less cool (indirect effect =  $-.39$ ; 95% CI =  $-.55$  to  $-.28$ ). Furthermore, the coolness of the actress had a positive effect on attitudes towards the hat she was wearing ( $b_{\text{pathD}} = .31$ ,  $t = 4.46$ ,  $p < .001$ ). An analysis of the mediation model showed that concealing emotion affected how the hat was evaluated through likability and then perceived coolness (indirect effect =  $-.12$ ; 95% CI =  $-.20$  to  $-.06$ ).

Despite the belief that people become cool by concealing emotion, we found that concealing emotion makes people seem less cool by making them less likeable. Our research suggests that brands and people can become cool by associating with people (spokespeople, employees, consumers, etc.) who freely express their feelings, not those who attempt to mask or control their emotions.

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# The Consumer Regulation Scale: Strategies for Regulating Responses to Consumption Cues

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## EXTENDED ABSTRACT

Consumption cues can prime a constellation of values, attitudes, and behaviors associated with being a consumer. For example, mere exposure to brands, money, and the word “consumer” have been associated with behaviors that are materialistic, present-oriented, and exchange-oriented (Bauer, James, Wilkie, Kim, and Bodenhausen 2012; Chen, Ng, and Rao 2005; Heyman and Ariely 2004; Vohs, Mead, and Goode 2006, 2008). These effects, combined with the extreme prevalence of these cues in our daily environments, beg the question, how do people self-regulate when and how they respond to such omnipresent cues to consume?

Drawing from anecdotal evidence and tips on how to manage consumer influences (e.g., Schor 2004; Stuart 2008), we propose individuals vary in the extent to which they engage in consumer regulation, that is, the extent to which they attempt to control when and how they respond to consumption cues. Although different types of consumer regulation strategies may exist, we focus on two of the more widely advocated strategies (e.g., Fontinelle 2012; Rook and Hoch 1985; Schor 1998; Stuart 2008). Cue-based strategies include rules and behaviors designed to manage when and where consumption cues are encountered. Budget-based strategies involve the use monetary constraints to manage when an individual considers the purchase and acquisition of marketplace goods. Despite their popularity with consumers and various advocates, their effectiveness has yet to be tested. Thus, the primary purpose of this research is to develop a scale to measure differences in the use of these strategies (termed the “consumer regulation scale”) and to examine which, if either, of these strategies is able to regulate the effects of consumption cues.

In studies 1-3, we develop the consumer regulation scale. The seven-item, two-factor consumer regulation scale is best conceptualized as two different types of strategies: cue-based strategies and budget-based strategies. Both strategies demonstrate adequate reliability and validity. Three studies then address our central research question—that is, whether consumer regulation strategies can attenuate the effect of consumption cues. Study 4 demonstrates that cue-based strategies and budget-based strategies are independently capable of moderating the effect of consumption cues on materialism, present orientation, and exchange orientation. When participants had weaker (1 SD below the mean) or average (at the mean) regulation strategies, the consumption cue significantly increased materialism, present orientation, and exchange orientation. In contrast, when participants were stronger in at least one of the strategies, the effect of the consumption cue was not significant.

In studies 5 and 6, we shift our focus to a domain not traditionally associated with being a consumer. Specifically, because consumerism and conservatism are both correlated with self-focus (Bauer et al. 2012; Belk 1985; Borgmann 2000; Burroughs and Rindfleisch 2002; Johnston 2008; Jost, Glaser, Kruglanski, and Sulloway 2003; Sidanius and Pratto 1999; Stankov 2009), we predict that consumption cues should lead to more conservative political preferences and behavior and that this effect should be mediated by self-focus. Because self-focus is difficult to measure without drawing attention to the self (Eichstaedt and Silvia 2003), we chose a more indirect mea-

sure. We chose exchange orientation because “exchange-oriented individuals are relatively more self-oriented in that they are primarily concerned with monitoring relationship exchanges to make sure they are getting their ‘fair share’” (Chen, Lee-Chai, and Bargh 2001, 175; see also Clark and Mills 2012) and because the relationship between exchange orientation and consumption cues was supported in the previous study. Consistent with our hypotheses, when participants had weaker cue-based and budget-based strategies, being exposed to a consumption cue increased intentions to vote for Republican Mitt Romney in the 2012 American Presidential Election, which subsequently influenced actual voting behavior.

The major contribution of this research is the identification of two moderators of the effects of consumption cues. From a theoretical perspective, identifying moderators provides us with a deeper understanding of the effects. For example, given that the existing literature on the effects of consumption cues conceptualizes these effects as priming effects (e.g., Bauer et al. 2012; Vohs et al. 2008, 2006), it implies that such effects should be automatic and therefore, inevitable (Bargh 2006). Our findings suggest otherwise. Having strong cue-based strategies or budget-based strategies can actually inhibit such effects from occurring. From a practical perspective, identifying moderators enhances our ability to predict differences in the types and sizes of effects that can be expected among different types of people. Further, to the extent that effects are being moderated by individual differences, failure to account for such individual differences may result in the failure to detect the effects altogether—as would have been the case in studies 4, 5, and 6.

In addition, to the best of our knowledge, we are the first to demonstrate the real-world consequences of consumption cues on preferences and behaviors not traditionally associated with being a consumer. This raises interesting questions regarding the effects of consumption cues in other “non-consumer” domains. For instance, our results suggest that viewing students and patients as education and healthcare consumers is more than just a metaphor and could have profound effects on actual behavior. More research is needed to comprehend the true nature and consequences of such effects.

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# My Curiosity Can Resist Anything but Temptation: The Incidental Effects of Curiosity on Inhibiting Self-Control

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## EXTENDED ABSTRACT

Self-control failure (e.g., succumbing to temptation) has been attributed to an increase in desires for temptations that is fueled by deprivation (Hoch and Loewenstein 1991). When the object of desire is unattainable, consumers may seek alternative rewards from exogenous sources (Berger and Shiv 2011; Van Den Bergh, Dewitte, and Warlop 2008; Xiuping 2008). Building on past research, we suggest that curiosity produces a desire for the reward of information that may have detrimental effects on self-control.

Curiosity is characterized by a feeling of knowledge deprivation in response to stimuli or situations that are high in uncertainty or lacking in information (Loewenstein 1994). Furthermore, curiosity activates reward centers of the brain (Jepma et al. 2012; Min Jeong et al. 2009) and an increased desire to seek knowledge (Maner and Gerend 2007). When the reward of information is not attainable, the generalized nature of the reward circuitry may lead curious individuals to desire unrelated rewards and hinder self-control. Thus, we predict that curiosity will negatively impact self-control by increasing a desire for rewards.

However, goal-directed behavior (Mukhopadhyay and Johar 2005) and self-control (Job, Dweck, and Walton 2010; Vohs, Baumeister, and Schmeichel 2012) are influenced by implicit theories about whether willpower is a limited or unlimited resource. Incorporated into these implicit theories about willpower are beliefs regarding the willpower to resist temptations (Job et al. 2010). We propose that if beliefs about willpower influence performance on self-control tasks than it is possible that beliefs about the willpower to resist temptations may influence reactions to an indulgent cue. Thus, these beliefs are predicted to moderate our findings in that curiosity will only increase the desire for rewards and reduce self-control when the willpower to resist temptation is believed to be limited.

### Study 1

Study 1 ( $n = 123$ ) was a single-factor 2 (Curiosity: High vs. Low) between-subjects design with choice of a lowbrow movie (vs. a highbrow movie) as our self-control measure. We manipulated curiosity using an image task (Jepma et al. 2012) and participants chose which movie to watch (Read, Loewenstein, and Kalyanaraman 1999). Level of desire to watch that movie was rated on a 10-item scale (Tiffany and Drobos 1991).

More participants chose the lowbrow (indulgent) choice option in the high curiosity condition than in the low curiosity condition (71.4% vs. 53.7%; Wald's  $\chi^2 = 3.99$ ;  $p < .05$ ). Further, desire for rewards mediated the effect of curiosity on indulgent choice (estimated coefficient of the indirect effect was 0.18 with a 95% confidence interval [CI] exclusive of 0 [0.01, 0.54]). These results demonstrate that priming curiosity decreases self-control by increasing the desire for rewards.

### Study 2A

Study 2a ( $n = 140$ ) was a 2 (Curiosity: High vs. Low)  $\times$  2 (Implicit Theory: Limited vs. Unlimited) between-subjects design with the number of chocolates consumed as our self-control measure. We used the same curiosity manipulation. Participants were given 10 chocolates and completed a different measure of desire: willingness to travel for rewards (Berger and Shiv 2011). Next, participants completed the 6-item implicit theories about the willpower to resist temptations scale (Job et al. 2010).

Consistent with study 1, high curiosity (vs. low) increased chocolate consumption ( $M_{\text{High}} = 5.84$  vs.  $M_{\text{Low}} = 4.60$ ;  $t(138) = 1.96$ ,  $p < .05$ ) and this difference was mediated by desire for rewards (estimated coefficient of the indirect effect was 0.51 with a 95% confidence interval [CI] exclusive of 0 [0.09, 0.95]).

Results showed main effects for curiosity ( $\beta = 0.17$ ,  $t = 2.17$ ,  $p < .05$ ) and implicit theories ( $\beta = -0.28$ ,  $t = -2.39$ ,  $p < .05$ ) that were qualified by a Curiosity $\times$ Implicit Theory interaction ( $\beta = 0.30$ ,  $t = 2.49$ ,  $p < .05$ ). Simple slope analyses revealed that limited theorists consumed more when curiosity was high as opposed to low ( $\beta = 0.36$ ,  $t = 3.22$ ,  $p < .01$ ). Unlimited theorists showed no difference in consumption based on their curiosity level ( $\beta = -0.04$ ,  $t = -0.31$ , *n.s.*). A test of moderated-mediation was significant: the indirect effect of curiosity was significant for limited theorists (estimated coefficient of the indirect effect was 0.67 with a 95% confidence interval [CI] exclusive of 0 [0.12, 1.48]), but was not significant for unlimited theorists (estimated coefficient of the indirect effect was 0.26 with a 95% confidence interval [CI] including 0 [-0.12, 0.89]).

### Study 2b

Study 2b ( $n = 145$ ) was a 2 (Curiosity: High vs. Low)  $\times$  2 (Implicit Theory: Limited vs. Unlimited) between-subjects design. Curiosity was manipulated with a writing task (Lerner and Keltner 2001) and implicit theories about willpower to resist temptations was manipulated using a biased questionnaire (Job et al. 2010; Vohs et al. 2012). Participants' choice of chocolate cake (vs. fresh fruit) measured self-control (Mukhopadhyay and Johar 2005; Shiv and Fedorikhin 1999).

Consistent with study 2a, Curiosity $\times$ Implicit Theory interaction on choice of the indulgent cake was significant (Wald's  $\chi^2 = 4.52$ ;  $p < .05$ ). Limited theorists were more likely to indulge when curiosity was high (61.4%) compared to low (36.0%; Wald's  $\chi^2 = 4.00$ ;  $p < .05$ ). There was no difference in choice between the two curiosity conditions for unlimited theorists (35.5% vs. 46.7%; Wald's  $\chi^2 = .94$ ; *n.s.*).

These two studies demonstrate that implicit theories regarding the willpower to resist temptations moderate whether curiosity increases the desire for rewards and reduces self-control and that endorsing an unlimited resource orientation attenuates the effect of curiosity on the desire for temptations.

### General Discussion

Managers oftentimes rely on curiosity to increase consumers' interest (Menon and Soman 2002; Steenkamp and Baumgartner 1992), but this research shows that by withholding information, managers may spur behaviors with potentially negative outcomes. We

provide evidence that curiosity serves as an impetus for self-control failure because it creates a generalized desire for rewards. Additionally, we demonstrate how beliefs about whether the willpower to resist temptations is a limited or unlimited resource determines who will indulge because curiosity increases their desire for a rewarding temptation and who will be able resist an indulgent temptation. Together, this research advances the curiosity literature.

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# A Recipe for Friendship: Similarity in Food Consumption Promotes Affiliation and Trust

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## EXTENDED ABSTRACT

We first report a pilot study validating our assumption that friends consume similar foods and then test our first hypothesis that people infer social ties based on similar food consumption. We predict observers perceive people eating similar food to be friends, compared with people eating differently or not eating at all (study 1). The remaining studies test our predictions that similarity in food consumption increases trust between strangers through shared experience. We predict that because consuming similar food connects people, those who eat similar foods are more trusting of one another in a trust game (studies 2-3) and are better at conflict resolution through cooperation in negotiating (study 4).

To confirm that friends eat more similarly than strangers, in a pilot study, we recorded the food choices of 50 pairs of friends in an a la carte setting during lunch. We created a “friend” condition by recording the food choices for each person eating in the pair as (dis)similar and a “strangers” condition by generating 1350 nominal dyads by aggregating the meals of individuals from real dyads and rearranging them into randomly matched pairs. We find friends eat more similarly (46%) than strangers, (21%;  $\chi^2(1, N = 1400) = 17.26, p < .001$ ).

Study 1 examined whether observers infer friendship from similar food choices. As predicted, participants were more likely to judge pairs eating similar food as friends (62.3%) compared with pairs who ate no food (55.7%;  $\chi^2(1, N = 1388) = 6.35, p = .012$ ). Further, participants judged only 43% of pairs who ate different food as friends, which is lower than for pairs who ate no food, ( $\chi^2(1, N = 1390) = 22.29, p < .001$ ). These results support our prediction that observers use food similarity as a cue for how connected pairs of individuals are. Both the presence of similar food and dissimilar food were cues of social connectedness.

Studies 2 and 3 tested the hypothesis that strangers who eat similar foods feel closer and trust each other more. Participants ate similar or dissimilar food as another person and participated in an “Investment Game” that operationalized trust as the amount of money invested in a partner. In study 2, participants invested more in a confederate (i.e., trusted more) when a confederate chose the same food ( $M = \$2.37, SD = \$0.85$ ) than different food ( $M = \$1.94, SD = \$0.85; t(67) = 2.10, p = .04$ ). In addition, participants felt closer to confederates choosing the same food as them ( $M = 3.97, SD = .93$ ) than differently ( $M = 3.41, SD = 1.00; t(67) = 2.41, p = .019$ ). Increased closeness mediated the effects of food similarity on trust, ( $\beta$  indirect = .06, SE = .04; 95% C.I. = [.01, .16]; based on 10,000 bootstrap samples).

In study 3, participants assigned the investor role gave more money to fund managers assigned the same food ( $M = \$2.40, SD = \$0.75$ ) than different food ( $M = \$1.86, SD = \$0.99; t(86) = 2.89, p = .005$ ). Investors also felt closer to fund managers consuming the same food ( $M = 3.05, SD = 1.02$ ) than different food ( $M = 2.55, SD = 1.06; t(86) = 2.26, p = .03$ ). Increased closeness partially mediated the effects of food similarity on trust for investors, ( $\beta$  indirect = .06, SE = .04; 95% C.I. = (.01, .16); based on 10,000 bootstrap

samples). Studies 2 and 3 support our theory that sharing in a similar food consumption experience increases closeness and trust between strangers. Even when assigned similar foods, strangers felt closer to and gave more to their partner in a subsequent trust game, compared with strangers assigned to different food.

Study 4 examined the implication of increased trust between strangers who consume similarly for cooperation in negotiation situations and improved outcomes. We predicted and found sharing in a food experience results in a faster resolution of conflict and more beneficial outcomes to both parties compared with those who consumed differently. Pairs in a negotiation who ate similar food settled faster with fewer strike days ( $M = 3.63, SD = 4.05$ ) than pairs who ate different food ( $M = 7.33, SD = 6.69; t(60) = 2.66, p = .01$ ). Those eating similar food had better outcomes overall ( $M = \$-857,109, SD = \$3,183,018$ ) than those eating dissimilarly ( $M = \$-1,813,667, SD = \$3,866,621; F(120) = 10.41, p = .002$ ). Because participants were paid based on performance, those who ate similar food ended up earning more ( $M = \$4.52, SD = \$0.63$ ) than those assigned to different foods ( $M = \$4.08, SD = \$0.86; F(1,120) = 13.45, p < .001$ ). Lastly, those eating the same felt marginally closer ( $M = 2.96, SD = 0.92$ ) than those eating differently ( $M = 2.69, SD = 0.85; F(120) = 2.97, p = .087$ ). These results suggest an important implication of eating similar food in negotiating: participants on separate sides of an argument who consumed similarly reached a faster resolution benefiting both parties.

People pursue many goals through the food they consume, such as, taste, nutrition, and cost (Connors, Bisogni, Sobal, and Devine 2001). This research identifies affiliation as a particularly important goal in food selection and consumption (Cruwys et al. 2012; McFerran, Dahl, Fitzsimons, and Morales 2009), and documents not only that affiliation breeds similar food consumption, but that incidental, similar consumption breeds affiliation. Although similarity in food consumption should not be indicative of whether two people will get along or whether a person is more trustworthy, we find that individuals treat it as such, feeling closer and trusting those who consume as they do. In this way, food serves as a social lubricant; by consuming similarly, people can immediately begin to feel camaraderie and develop a bond, leading to smoother transactions from the start.

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# Good Deeds with Good Deals? The Influence of Price Promotion on Consumers' Intention to Participate in Donations at Checkouts

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## EXTENDED ABSTRACT

"Would you like to donate \$1 to support the XYZ cause?" We frequently hear such request at store checkouts. More than \$354 million were raised by big corporations in 2012 through such donations (Johnsen 2013). Even small local stores are teaming up with local charities. While there has been considerable amount of research devoted to understanding consumer charity donations, checkout donations are unique in that the request is made right on the purchase spot and consumers have no time to contemplate a decision. Given the spontaneous nature of checkout donations, we propose that purchase-related factors may have a significant impact on consumers' decision to participate. We specifically examine the influence of price promotions, a context specific factor, on checkout donations.

We draw on research in behavioral pricing, particularly that focusing on perceptions of price promotions, to propose a model linking price discounts to consumers' willingness to donate at checkouts. Price is a double-edged sword which can signal benefits as well as sacrifice (Bornemann and Homburg 2011). We argue that characteristics of price promotions affect consumers' focus on either benefits or sacrifice and, hence, influence subsequent donation behaviors. More specifically, we propose that the *level* of price promotion influences consumers' intention to participate in checkout donations (Gupta and Cooper 1992). Compared to no price promotions, higher discount levels *enhance* consumers' intention to donate while lower discount levels *reduce* consumers' intention to donate. The qualitatively differential effect is due to the different feelings and perceptions experienced at high versus low discount levels. At high discount levels, price promotion induces a feeling of gratitude which enhances donation intention. At low discount levels, price promotion heightens perceived sacrifice to donate and reduces donation intention.

We used a scenario based approach to test the hypotheses. All participants were recruited on Amazon M-Turk. In Study 1, we asked participants to imagine that they are shopping for a camera (\$299) on BestBuy website. The camera happens to be on sale. As they check out, a screen pops up and asks them whether they would donate to a cause (local public schools for school supplies). We manipulated the level of price promotion using a wide range of discounts (0%, 5%, 10%, 20%, 40%, and 70%). We measured participants' perceived value of the purchase, general affect associated with the purchase, intention to donate, amount intended to donate, and perceived sacrifice of donation. While it is intuitive that a higher discount leads to higher intention to donate compared to no discount due to consumers' feelings of gratitude, interestingly, we find that a smaller discount (5% or 10%) actually produces a negative effect compared to no discount. Mediation analysis showed that, as hypothesized, the result is due to the heightened sense of sacrifice when the donation request follows a small price discount.

We also propose four factors that moderate the impact of discount level on donation intention through influencing either feelings of gratitude or perceptions of sacrifice. The moderating factors are consumer-brand connection with the retailer, consumer's effort level in obtaining the price promotion, price promotion presentation format, and retailer's matching of donation.

We argue that higher brand connection with the retailer will enhance the gratitude generated from the larger discount levels, where the benefit of the price promotion is further confirmed by the close

relationship between the consumer and the retailer. However, at the low discount levels, the close relationship with the retailer may not be emotionally strong enough to overcome the perceived sacrifice to donate, which is induced by the immediate purchase. Results showed main effect of brand connection, and a marginal interaction at high discount levels. Also as expected, at low discount levels, brand connection did not have a significant effect.

In Study 2, we test our hypothesis that shoppers who extend higher effort to find the price promotion will be less likely to donate at checkouts than those who extend lower effort and this effect is more prominent at higher discount levels than lower discount levels. We argue that feelings of gratitude will be lower in shoppers who extended more effort to get the promotion since they would attribute the promotion internally, i.e., to themselves.

Study 3 was designed to examine our hypothesis that the effect of low discount levels on likelihood to donate at checkouts (relative to no discount) is moderated by price promotion presentation format. We argue that when the discount is framed as dollar-off instead of percentage-off for relatively high-price items, perceived value is enhanced, i.e., the perceived sacrifice associated with the donation is reduced. A high perceived value helps overcome the negative effect of small discount on likelihood to donate when discount levels are low. ANOVA analyses supported our hypotheses.

Study 4 tests the hypothesis that retailer matching enhances the potential value of the donation and makes it a better deal and less of a sacrifice. We argue that this matching will offset, to some extent, the perceived sacrifice with the donation and erase the negative effect of small discount levels. Details regarding the study design and results are presented in Table 1.

This paper contributes to the pricing literature by examining the impact of price promotions, a common retail practice, on checkout donation, a growing market phenomenon. In this research, we identify the counterintuitive negative effects of low levels of price promotion on checkout donations. Theoretically, we advance understanding of price promotion and consumers' interpretations of promotions and the underlying feelings of gratitude and perceptions of sacrifice. We show that while the positive affect and feeling of gratitude gradually increase as discount size increases, a small discount actually makes consumers more sensitive to the sacrifice associated with the donation due to the heightened focus on price. Our research points to the important influence of purchase specific factors on participation in checkout donations and provides insightful managerial implications.

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# Beyond the Asterisk: The Effect of Referent Disclosure on Consumer Response to Incomplete Comparative Advertising

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## EXTENDED ABSTRACT

The use of comparative claims in advertising is ubiquitous to emphasize superior product offerings. Advertisers make comparisons with a variety of referents such as companies' previous products, competitors, and industry standards. Such referents, however, are often omitted from the focal claims. For example, an automobile manufacturer promotes a new model of passenger car as having "3 times less carbon emissions." A sports apparel brand advertises a new backpack as containing "50% more recyclable materials." Shimp (1978, p. 21) coined the term "incomplete comparative" to illustrate this type of advertising claim. Building upon Grice's (1975) theory of cooperative norms in communication, the present research investigates the effects of disclosing the referents in comparative claims on ad trustworthiness and perceived competence of the advertised companies.

In study 1 ( $n = 123$ ), participants were randomly assigned to one of two between-subject conditions (i.e., "referent disclosure" vs. "referent omission"). A fictitious print ad of an energy-efficient light bulb was created, mimicking magazine ads or online banner ads. The ad consisted of a light bulb picture and a catchphrase: "introducing the new CFL light bulb, 3 times more energy efficient." In the referent-disclosure condition, the ad contained an asterisk accompanying the focal claim "3 times more energy efficient." Below the claim, the referent was disclosed: "compared to traditional light bulbs." In the referent-omission condition, no asterisk was included and the referent was not disclosed, as in a typical incomplete comparative ad. The MANCOVA results suggest that referent disclosure increased perceived competence, but not ad trustworthiness. Further, when the referent was disclosed, participants tended to interpret it as a qualifier clarifying the meaning of the incomplete comparative claim. As a result, the ad became less ambiguous and the advertised company appeared to be more competent.

Study 2 ( $n = 303$ ) used a 2 (priming vs. control)  $\times$  2 (referent disclosure vs. referent omission) between-subject design. A fictitious print ad was created promoting an environmentally-friendly printer. The ad consisted of a simple picture of printer and a catchphrase: "introducing the new eco-friendly GL-300. 3X less ultrafine particle emissions." In the referent-disclosure condition, an asterisk accompanied the incomplete comparative claim "3X less ultrafine particle emissions." At the bottom of the ad, a note with an asterisk indicated that "compared to the previous model GL-200." In the referent-omission condition, no disclosure was provided. In the priming condition, participants first completed the ad skepticism scale (Obermiller and Spangenberg 1998). This scale consisted of nine statements about informativeness, motives, and truthfulness of advertising in general. Participants were then randomly assigned to the referent-disclosure or the referent-omission condition to read and to evaluate the ad. In the control condition, participants were randomly assigned to the

referent-disclosure or the referent-omission condition first. After rating the ad, they completed the ad skepticism scale. The MANCOVA results suggest that the positive effect of referent disclosure on perceived competence was attenuated when participants were primed to deliberate about the extent to which advertisers follow the cooperative communication norms.

In study 3 ( $n = 241$ ), a 2 (priming vs. control)  $\times$  2 (indirect disclosure vs. no disclosure) between-subject design was employed. The same ad in study 2 was used (i.e., the printer ad) except the disclosure statement. In the indirect-disclosure condition, the asterisk indicated an indirect disclosure at the bottom of the ad: "learn more at www.brandname.com." In the no-disclosure condition, participants read the same ad as the referent-omission ad in study 2. Consumer suspicion of advertisers' cooperativeness was manipulated by a priming task. In the priming condition, participants first read an example of referent omission: "An area rug is labeled '50% more recycled content than before.' The manufacture increased the recycled content of its rug from 2% recycled to 3%. Although the claim is technically true, it likely conveys the false impression that the manufacturer has increased significantly the use of recycled fiber." Participants were asked to type in any thoughts about this example. They then read and rated the ad. In the control condition, participants rated the ad without completing the priming task. The MANCOVA results suggest that indirect disclosure did not increase ad trustworthiness or perceived competence. This "null effect" was consistent in both priming and control conditions, which did not support the speculation that indirect disclosure had any positive effect on ad trustworthiness or perceived competence. That is, even if indirect disclosure may suggest the advertiser's attempt to clarify the meaning of an incomplete comparison, the effect may not be strong enough to affect consumers' perceptions or judgments at the moment of initial exposure to the ad.

Combined, three studies demonstrate the conditional effects of referent disclosure on consumer responses to incomplete comparative advertising claims. This research also reveals the underlying mechanisms based on consumers' inferences about advertising norms. The findings contribute to the literature on advertising disclosure, comparative advertising, and persuasion knowledge.

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# Social Tie Distance's Effect on Regulatory Focus When Buying for Others

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## EXTENDED ABSTRACT

Consider two baby showers Nancy went to recently. One was for a young colleague whom she was acquainted with. The other was for a beloved niece of hers. Nancy got a shiny, colorful toy for the colleague and a bottle sterilizer for the niece. This scenario illustrates how social relationships shape self-regulatory focus, which, in turn, influences purchase decisions. Regulatory focus theory (Higgins 1997) distinguishes between two categories of desired goals: those that relate to attaining positive outcomes (termed promotion goals), and those that relate to avoiding negative outcomes such as responsibilities, obligations, and security (termed prevention goals). In contrast to the abundantly studied link between self-regulatory focus and consumption, the antecedents of self-regulatory focus is seldom investigated in marketing literature (for exception, see Aaker and Lee 2001). Our research intends to show that self-regulatory foci can also be driven by purchase situations, in particular, interpersonal relationships. We frequently make buying decisions for others. The relationship between the decision maker and the receiver varies along closeness. We argue that a close tie (e.g., immediate family members) makes accessible the interdependent self-view, the view of oneself as intimately defined by others rather than distinguished from others (Singelis 1994). Losing a close tie usually feels like losing part of the self (Aron, Aron, Tudor, and Nelson 1991). A reminder of this high stake heightens a prevention approach that emphasizes security, obligations and responsibilities. A distant tie, on the other hand, doesn't elicit such an interdependent self-view. Zhou and Pham (2004) contend that consumers come to see different products as representatives of promotion versus prevention. We argue that consumers' self-regulatory focus is ultimately manifested in their product choices. Specifically, products that are perceived as representative of prevention would be chosen more when buying for a close tie, relative to when buying for a distant tie (H1). This premise would also manifest in espoused motives. Further, motives characterized by a certain self-regulatory focus would mediate relationship distance and product choices (H2). We conducted three experiments to examine the hypotheses.

Study 1 used baby-related products selection as the context. A respondent chose two products out of the randomly ordered product list for someone very close to him/her (e.g., a family member or a close friend), and two products (can be the same as the other set of choices) for someone not very close (e.g., a coworker or a distant relative). To avoid the order effect, the sequence of these two vignettes was counterbalanced. A paired sample *t*-test shows that prevention products are selected more often for the close tie than for the distant tie ( $M_{\text{close}} = .97$ ,  $M_{\text{distant}} = .54$ ;  $t(157) = 6.47$ ,  $p < .001$ ). H1 is thus supported.

With a between-subjects design, Study 2 shows a significant effect of tie distance on choice of prevention baby gifts ( $M_{\text{close}} = 1.25$ ,  $M_{\text{distant}} = .73$ ,  $F(1, 177) = 30.7$ ,  $p < .001$ ). The mediation hypothesis (H2) was supported by **bootstrap** analyses. A closer tie produces a stronger prevention motive ( $B = .85$ ,  $SE = .13$ ,  $p < .001$ ), which in turn leads to more prevention products chosen ( $B = .14$ ,  $SE = .05$ ,  $p < .01$ ).

Study 3a seeks to generalize the effect by employing a different choice context: car buying. We also refine the option classification by differentiating hedonic versus utilitarian product features within the

promotion category. A closer tie leads to a larger number of selected prevention car features ( $M_{\text{close}} = 3.36$ ,  $M_{\text{distant}} = 2.66$ ,  $F(1, 303) = 20.22$ ,  $p < .001$ ), and this increase primarily comes at the expense of hedonic features ( $M_{\text{close}} = 1.45$ ,  $M_{\text{distant}} = 2.10$ ,  $F(1, 303) = 17.81$ ,  $p < .001$ ). Again, **bootstrap** estimates indicated that prevention motive mediates tie distance's effect on the number of chosen prevention features.

Study 3b tested H1 in a new choice context (i.e., apartment) with the three categories of features. To examine the boundary conditions, perceived risk of apartment living was manipulated. The risk x tie distance interaction is significant on desired total spending on prevention features ( $F(1, 276) = 5.00$ ,  $p = .026$ ). The desired spending on prevention features for a close tie is larger than that for a distant tie (\$235 vs. \$198,  $F(1, 276) = 7.49$ ,  $p < .01$ ). Particularly, tie distance's proposed effect fares stronger at baseline (\$237 vs. \$169) than with risk elevation (\$234 vs. \$227). The increased spending for a closer tie mainly comes from reduced spending on non-prevention utilitarian features (\$160 vs. \$200).

In all three choice settings, tie distance's robust effect dwarfed that of dispositional self-regulatory focus which did not predict any choice. This effect is mediated through prevention motive or inclusion of other in the self, which is in line with the self-view explanation.

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# From Constrained Movement to Controlled Mind: The Effect of Space on Impulsive Behavior

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## EXTENDED ABSTRACT

As the world's continuing population explosion sharply reduces the physical space available to humans, identifying the behavioral consequences of spatial constraints becomes critical. Environments that are crowded or small, for example, not only increase regulation of physical movement to decrease negative consequences of hazard motion (Sommer, 1969) but also enhance regulation of social interactions to avoid unwanted stimulation (Baum & Valins, 1979). We suggest that these self-regulation effects may take place even when the space constraints are not directly related to the domain in which impulsive behaviors occur. Control may generalize from inhibiting physical movement and social interaction to inhibiting various inappropriate responses, such as unhealthy eating. The research reported here examined the relation between constraints in physical space and impulsivity.

Human beings are capable at adopting strategies to cope with constrained environments. When inadequate space limits physical movement, even children reduce their locomotion and gross motor activities (e.g., running and rough-and-tumble play; Loo & Smetana, 1978; Smith & Connelly, 1972). Inadequate space may also augment the frequency and intimacy of social interactions, leading to more careful regulation of behavior to avoid overstimulation. In addition to controlling social behavior, constrained physical environments may enhance control behaviors that are irrelevant to the physical environment (e.g., eating high-calorie foods). Consciously controlling motor and social behaviors in response to spatial constraints may establish automatic associations between these constraints and behavior regulation more generally, in turn enhancing control of other mental activities that are irrelevant to the physical environment.

Study 1 tested the relation between physical space and health and safety outcomes in which behavioral control plays a role. Country-level population density (i.e., population per kilometers of land area) was used as a proxy of the amount of physical space available to individuals. Indicators of behavioral control – prevalence of overweight and obesity and road traffic death rate – served as the dependent variables, and we controlled for country-level per capita GDP in the analysis. The results of multiple regression showed that density was negatively related to prevalence of overweight and obesity. In addition, density also negatively predicted traffic death rates. The second study tested the relation between state-level density and the same health and safety outcomes using data from 50 states and the District of Columbia. The results replicated the findings of study 1.

Subsequent lab experiments examined the causal effect of spatial constraints on behavioral control. Specifically, Study 3 focused on the influence of space constraints on the motivation to make a purchase. Strong control should be indicated by reduced desire to make

purchases, which should be more likely in small rather than large laboratory environments. Participants were randomly assigned into either a big research lab or a small research lab. They participated in a personal attitude survey and reported how much they wanted to a series of products (including both foods and non-foods). We found that participants reported a stronger desire to purchase the described products when they were in the large room than when they were in the small room.

Study 4 investigated the influence of spatial constraint on impulsive eating behavior. Participants took part in the study individually in either the small room or the large room. They participated in a blind taste test of chocolate balls that have a pleasant flavor but are high in calories and sugars. We found that participants ate a greater number of chocolate balls when the taste test was conducted in the large room than when it was conducted in the small room.

Study 5 employed a Go/No-Go task to determine if spatial constraints affected performance with a well-validated measure of impulsivity. We found that participants had better control and made fewer false alarms when they were in the small room than in the large room.

In sum, evidence from the lab and the field indicates that spatial constraints increase self-control in domains not directly affected by the space. These findings connect two areas of research. First, previous research demonstrates that perceptions of crowding motivate individuals to control their body movement and their interactions with others. Second, self-control becomes an important social phenomenon, and research in this area explored cognitive, affective, and motivational antecedents of self-control. Our studies connected these two areas of research by showing that spatial constraints can increase behavior controls in domains not directly relevant to physical space.

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# Hedonic Durability

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## EXTENDED ABSTRACT

The hedonic durability of an item refers to how fast or slowly one's happiness with the item fades over time, and is an important variable, because it influences how much happiness the item can bring to the person. Yet it is difficult for researchers to assess the hedonic durability of items, because it is difficult to track consumers' happiness with items over time. This paper introduces a simple survey method - the Hedonic Durability Questionnaire (HDQ) to estimate hedonic durability.

HDQ consists of only three questions: *How long have you had X [the item to be evaluated]? How do you feel about it now? How did you feel about it when you first acquired it?* In the HDQ, the first question assesses  $\eta$  (the duration from acquisition of the item till the present time, when the respondent answers the HDQ). The remaining two questions measure  $H_T$  (happiness with the item now) and  $H_0$  (the recalled happiness with the item right after acquisition). Because hedonic adaptation has been observed to follow a power function (Drew and Abbott 2006; Nicolao et al. 2009), the relationship between  $H_0$  and  $H_T$  of the item for a given respondent can be assumed as shown in equation 1. It is worth noting, however, that the proposed method could be easily adapted to accommodate a different declining function, such as a hyperbolic or an exponential function.

$$H_T = H_0 * (1+T)^\eta \quad (1)$$

In the equations above,  $\eta$  is the power constant of the item for a given respondent, and it determines how quickly happiness changes over time. In the current research, we call  $\eta$  the *hedonic durability index*.  $\eta < 0$  indicates that happiness fades over time,  $\eta = 0$  indicates that happiness does not change over time, and  $\eta > 0$  indicates that happiness increases over time.

Study 1 tested the validity of HDQ by comparing the results from the HDQ with real time measures in the short-term. Participants watched a single 30-second video of a cat playing a shell game 5 times in a row (i.e., 5 trials). Immediately afterwards, participants in the HDQ condition reported how they felt about it after the fifth trial and recalled how they felt about the video when they had first watched the video. Participants in the real-time measure condition did not receive the HDQ, but instead reported their real-time happiness with the video twice, once after the first trial and once after the fifth trial. Participants indicated their happiness on either a Likert scale (i.e., an 11-point scale, -5 = *Very Unhappy*, 5 = *Very Happy*) or a "sunny-day" scale (between-participants). Results showed that the HDQ produced remarkably similar  $\eta$  to real time measures, on both the Likert scale and the "sunny-day scale".

Study 2 tested whether the accuracy of recall and the resulting validity of HDQ hold over a longer span of time (months rather than minutes). This study consisted of two waves. During the first wave, undergraduate students completed a study and then received a gift. Right after participants received the gifts, they indicated their happiness with the gift. During the second wave that occurred 9 months later, participants indicated their current happiness ( $H_T$ ) with the gift, and recalled their happiness with the gift when they had first received it ( $H_0$ ) on 9-point scales. We compared the hedonic durability based on HDQ and real-time measures, and found that HDQ yielded similar results to real-time measures even over a 9-month period.

Studies 3 and 4 tested whether the HDQ is sensitive to factors that have been shown to influence hedonic adaptation. Previous research suggests that people adapt to high-variability stimuli more slowly than to low-variability stimuli (Epstein et al. 2009; Redden 2008; Temple et al. 2008), and adapt to high sentimental-value items more slowly than to low-sentimental value items (Yang and Galak 2014). To test whether the HDQ can pick up these differences, in Study 3, we asked participants to watch either one of the five video clips on each of the five days of the experiment (in the high-variability condition) or the same video clip five days in a row (in the low-variability condition). Finally, on Day 5, participants in both conditions completed the HDQ by recalling how they had felt about the video on Day 1 and how they had felt about the video on Day 5. Consistent with what the existing literature on hedonic adaption would predict,  $\eta$  in the high-variability condition was significantly greater than that in the low-variability condition.

In Study 4, we asked each participant to complete the HDQ for four items participants actually possessed in real life: a high-variability item (a pet), a low-variability item (a stuffed toy), a high-sentimental value item, and a low-sentimental value item on the "sunny-day scale". If the HDQ is a sensitive instrument, it would yield a greater  $\eta$  for pets than for stuffed toys, and a greater  $\eta$  for high-sentimental value items than for low-sentimental value items. It was indeed what we found. In addition, this study showed that HDQ had good test-retest reliability, that  $\eta$  is independent of time as assumed, and that people's recollections were not biased over a long period of time (i.e., months or years).

Study 5 applied the HDQ to measuring the hedonic durability of a broad sample of commonly-owned consumer products in real life. A list of 79 items was created based on Amazon.com and Consumer-Report.org. Each participant was asked to answer the HDQ using the sunny-day scale for around 20 items. Results showed that the  $\eta$ 's for most items were negative, suggesting that one's happiness with most items faded over time. Items with the highest hedonic durability indices included wedding and engagement rings, cats, religious jewelry, and dogs, presumably because they were of high sentimental value or of high variability.

To conclude, in this research, we have introduced and validated an easy-to-implement instrument to estimate the hedonic durability of an item by sampling individuals who own the item.

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# Instantaneously Hotter: The Dynamic Revision of Beauty Assessment Standards

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## EXTENDED ABSTRACT

Physical attractiveness can impact people's lives considerably. Physically attractive individuals have more successful careers and higher income (Hamermesh 2011), and are also judged and treated more favorably by others across myriad social domains (Eagly et al. 1991). In consumer research, perception of physical attractiveness has substantial influence on how consumers evaluate advertisements and hence products and brands (Hirschman 1987; Mazis et al. 1992).

Prior research suggests that the perception of physical attractiveness results from evolutionary processes and is thus 'hardwired,' with the ultimate goal being the perpetuation of genes (Rhodes 2006). That is, certain physical features are attractive because they are true biological signals of health and reproductive fitness, guiding mate selection and maximizing the quality of offspring. Further, aesthetic views (e.g., body shape) can also be driven by macro environmental factors such as differences in socioeconomic and cultural norms (Cunningham et al. 1995). At the societal level, aesthetic taste can also change over time. However, cultural differences and societal level shifts typically require extended periods of time to occur. In this research, we examine whether exposure to others' aesthetic views can alter one's beauty assessment standard instantaneously.

We propose that people assess a target individual's physical attractiveness based on the beauty assessment standards they hold at the time of judgment (cf. Said and Todorov 2011). This standard is constantly and automatically updated to align with the aesthetic views of others, shifting one's *subsequent* judgments of physical attractiveness toward the average taste. Unlike the classic conformity effects driven by social pressure (Asch 1955), this 'beauty convergence' occurs outside one's conscious awareness and when one's judgments of physical attractiveness are anonymous and unobserved by others.

We tested our proposition in both field and lab studies, where participants anonymously provided their personal assessment of the attractiveness of target individuals without knowing others' ratings of the targets a priori and without social pressure. In Study 1, we analyzed a large-scale field dataset of over 800,000 physical attractiveness evaluations by over 60,000 visitors to an online dating website. Visitors of the website are first shown a randomly selected photograph of another individual. Visitors then, anonymously, rate the attractiveness of the target on a ten-point scale (1 = *not*, 10 = *hot*). Thereafter, the average of the ratings from all prior visitors who have also evaluated that particular target is displayed. A new photo of a different target is then presented for evaluation. This process continues until visitors decide to leave the website.

We calculated the absolute difference between each visitor's rating of a target and the average evaluation by all prior raters of the target; this deviation score served as the dependent variable. Of central importance to this study is the independent variable *Nth exposure*: the  $N^{\text{th}}$  photo that a visitor evaluated in the data set. This variable also indicates that the visitor had already rated and subsequently seen the average rating for each of  $N-1$  other photos. The results of a series of random-effects regressions (controlling for gender) revealed that the  $N^{\text{th}}$  exposure had a significant negative effect on the dependent variable: the more prior exposure to others' ratings visitors had, the more their subsequent judgment of the physical attractiveness of a target individual shifted toward the average aesthetic taste, even though they were not provided with others' evaluations

of that target a priori and even though visitors' own evaluations were anonymous and unobserved by others.

Study 2 further examined the effect by comparing participants' judgments of physical attractiveness when they had prior exposure to others' aesthetic views versus not. Participants were randomly assigned to one of three conditions. Participants in the no-info condition evaluated a large set of target photos of either women or men in a random order. Participants in the info-before condition evaluated the same photos but were shown each photo along with the average-rating information (obtained from a pretest) before evaluation. By contrast, participants in the info-after condition were provided the average rating information on a separate page after they had evaluated each photo (but before they were shown the next target). Supporting our proposition, participants in the no-info condition deviated from the average aesthetic taste more as they evaluated more photos; that is, they refined their independent beauty assessment standards over time and the standards increasingly deviated from the average aesthetic taste. However, participants in the info-before and info-after conditions deviated from the average taste less as they rated more photos and were exposed to more average ratings. In the info-before condition, the greater convergence of participants' ratings toward the average taste over time suggests that these participants increasingly used the average ratings as reference points for their own judgments. Remarkably, however, in the info-after condition, although participants did not know the average rating of a target until after they had rated the target, their ratings converged toward the average over time similarly as participants who had the average-rating information during evaluation.

In Study 3, we directly manipulated the average aesthetic ratings presented to participants, examining whether people's beauty assessment standards and subsequent judgments of physical attractiveness can be altered arbitrarily. Participants were randomly assigned to two conditions (actual average vs. reduced average). All participants were shown the average rating of each photo only after rating the photo. Participants in the reduced-average condition were shown ratings that were lower than the actual average ratings obtained in a pretest, whereas participants in the actual-average condition were shown the original average ratings. Supporting our proposition, the more participants were exposed to reduced (vs. actual) average ratings, the more they deviated from the actual average in subsequent evaluations. Further, when asked, participants did not believe that their judgments were affected by prior exposures to others' aesthetic preferences, and were not conscious of the effect of the prior exposures on altering their beauty assessment standards.

Overall, our findings not only provide a micro-level explanation for how changes in aesthetic views occur at the macro, societal level, but also suggest that beauty should be regarded as a constantly shifting and instantaneously constructed notion.

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# Asymmetric Expectations of Firms Stereotyped as Warm Versus Competent

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## EXTENDED ABSTRACT

Prior research has noted that stereotypes applied to groups of people (Fiske, Cuddy, and Glick 2007) and those applied to groups of firms (Aaker, Vohs, and Mogilner 2010; Kervyn, Fiske, and Malone 2012) can be characterized by the two fundamental dimensions of warmth and competence. Warmth relates to a group's intentions and includes traits such as helpfulness and sincerity, whereas competence relates to a group's ability to carry out those intentions and taps into traits such as effectiveness and skill. We posit that firm size—small versus large—is associated with distinct stereotypes such that consumers expect small firms to be warmer than large firms but large firms to be more competent than their smaller counterparts.

Supporting this notion, a recent survey commissioned by the Public Affairs Council (2012) found that 52 percent of Americans thought small-business owners were honest and highly ethical, but only eight percent viewed the CEOs of major corporations as such. However, Americans also believe that major corporations do the “basics” of business well, such as providing useful products and services (73%) and serving their customers (66%). To confirm that a consensus does exist in terms of the traits closely associated with large and small firms, we used the diagnostic ratio method to assess firm size-based stereotypes (Martin 1987; McCauley and Stitt 1978), which compares the percentage of group members believed to possess particular traits with baseline ratings of the percentage of people in general believed to possess these traits. Consistent with our predictions, large and small firms activated stereotypical traits that fell along the warmth and competence dimensions (see table).

Given that stereotypes help people predict the behaviors of others, and guide their own behavior, violations of stereotypical expectations, especially negative violations, can be surprising and disruptive to people, signaling uncertainty and suggesting that they may have misjudged their ability to predict others' behaviors (Olson, Roese, and Zanna 1996). This suggests that if consumers hold stereotype-based expectations about small and large firms, firm transgressions that violate these expectations will elicit particularly negative responses from consumers. Although this prediction is intuitively appealing, it may not fully account for consumers' responses to stereotype violations.

We propose that the effect of size-based firm stereotypes is more nuanced. The impression-formation literature finds that transgressions in the warmth domain are perceived as more informative than transgressions in the competence domain (Reeder and Brewer 1979). This occurs because people have different expectations regarding the frequency with which warm relative to competent individuals engage in behaviors that are consistent versus inconsistent with their traits. This implies that people will find low warmth behavior (e.g., stealing) coming from a presumably warm individual (e.g., a nun) much more surprising than if it came from a low warmth individual (e.g., a politician). However, people will not find low competence behavior (e.g., driving erratically) as necessarily more unexpected if it came from a presumably competent (e.g., a racecar driver) relative to incompetent individual (e.g., a teenager) due to potential attenuating circumstances like road conditions or distractions. Thus, we propose the following:

*Hypothesis 1: Consumers will penalize small firms more than large firms for committing warmth transgressions, but they will not penalize large firms more than small firms for committing competence transgressions.*

We also predict that it is the unexpectedness of stereotype-inconsistent transgressions committed by a small firm in the warmth domain that leads to more negative responses.

*Hypothesis 2: Consumers will rate warmth transgressions committed by small firms as more unexpected than those committed by large firms, but they will not rate competence transgressions committed by large firms as more unexpected than those committed by small firms.*

This implies that perceptions of unexpectedness should mediate the effects of firm size and transgression type on consumers' willingness to purchase:

*Hypothesis 3: Unexpectedness will mediate the effect of firm size on consumers' purchase intentions, but only when warmth transgressions, not competence transgressions, are committed.*

We test our hypotheses in three laboratory studies. Study 1 was a 3 (transgression type: warmth vs. competence vs. no transgression)  $\times$  2 (size: small vs. large) between-subjects design ( $N=91$ ). Results showed that small relative to large firms are penalized more for warmth transgressions ( $M_{small} = 1.93$ ,  $M_{large} = 3.42$ ;  $F(1, 85) = 6.47$ ,  $p < .05$ ) but not for competence transgressions ( $M_{small} = 2.44$  vs.  $M_{large} = 1.83$ ;  $F(1, 85) = 1.13$ , NS). Study 2 replicates this asymmetric effect of stereotype-inconsistent transgressions in the context of nonprofit organizations ( $N=162$ ;  $M_{small} = 2.29$ ,  $M_{large} = 3.14$ ;  $F(1, 158) = 4.27$ ,  $p < .05$ ). Importantly, a moderated mediation analysis showed that unexpectedness fully mediated the effect of firm size on purchase intentions, with an indirect effect of .10 and a 95% CI exclusive of 0 (.01, .24).

Study 3 finds confirmatory evidence for the asymmetric expectations hypothesis by examining the effect of firm size-based stereotypes on internal versus external attribution of blame. A 2  $\times$  2 study ( $N=157$ ) with firm size (small vs. large) and transgression type (warmth vs. competence) showed that for competence transgressions, internal attributions for blame to the firm were lower when the firm was large ( $M = 0.84$ ) than when it was small ( $M = 1.91$ ;  $F(1, 156) = 11.96$ ,  $p < .001$ ). However for warmth transgressions, whether the firm was large ( $M = 1.32$ ) or small ( $M = 1.66$ ;  $F(1, 156) = 1.54$ , NS) did not influence participants' attributions of blame.

This research suggests that expectancies for small firms (stereotyped as warm) to behave in a stereotype-consistent manner are stronger than those for large firms (stereotyped as competent). Consequently, the low-warmth behaviors of small firms are more likely than the low-competence behaviors of large firms to violate stereotype-based expectancies and reduce purchase intentions. Our findings add to the growing stream of work on warmth and competence by suggesting that size-based stereotypes map fairly closely on to these two dimensions, and by showing that the content of these ste-

reotypes is important for understanding consumer responses to stereotype-inconsistent behavior. Furthermore, our results suggest that violations of warmth expectations may actually have a larger impact on purchase intentions than violations of competence expectations.

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# How Exposure to Romantic Stimuli Affects Consumer Preference for Sweet Food

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## EXTENDED ABSTRACT

Americans consume an astounding amount of sugar and a staggering variety of sweet foods, gulping down the equivalent of 22.2 teaspoons (or 355 calories) of sugars per day. Given the precipitous growth of sweet indulgence and its redoubtable social and health consequences, it is crucial to understand when consumers are likely to fall prey to or sustain the temptation of sweet foods. Unlike previous research, which has focused mostly on food consumption in general rather than the unique contributors of the consumption of foods featuring primarily one of the basic tastes, this article examines how exposure to romantic stimuli (e.g., watching a romantic ad), an activity seemingly unrelated to food consumption, influences consumers' subsequent sweet food decisions between sweet and less-sweet options. Drawing from conceptual metaphor research (Landau, Meier, and Keefer 2010) and work on assimilation and contrast effect (Martin 1986), we predict that romantic stimuli exposure may increase or decrease consumers' likelihood of choosing sweeter food options, dependent on their romantic status (romantically involved or uninvolved).

Our main thesis that exposure to romantic stimuli may influence consumers' subsequent sweet food decisions is derived from research on conceptual metaphor, which argues that people sometimes resort to metaphorical thinking and recruit knowledge from a seemingly unrelated category to help them comprehend and decipher certain abstract and complex social phenomena (e.g., love, justice, power; Lakoff and Johnson 1989; Landau et al. 2010). Consider the metaphorical expression that is at the core our thesis—love is sweet: people's knowledge about the target category (the gustatory state of taste), which is more concrete and closer to one's mundane life, transfers and affects their perceptions and understanding of the more elusive, abstract target category (love).

Ample research on conceptual metaphor has demonstrated the mundane target category (e.g., perceptual states) and the elusive social phenomenon in a conceptual metaphor can influence each other, casting important implications for judgment formation and decision making (Landau et al. 2010). Moreover, researchers have suggested semantic activation as a possible mechanism (Zhang and Li 2012). For example, to explain why consumers holding heavy objects judge the subject they are contemplating more important, Zhang and Li (2012) posit that perceptual systems (holding a heavy shopping bag) activate corresponding semantic concepts in the associate network (heavy, weight), which influence their judgments of the importance of the subject (an elusive social concept) through the metaphorical connection between weight and importance.

Though these insights suggest that exposure to romantic stimuli activates the concept of sweetness, which in turn makes consumers more likely to choose sweeter food options, work on assimilation and contrast predicts that the reverse can also be possible. According to the set/reset model of assimilation and contrast (Martin 1986; 1990), assimilation effect prevails when irrelevant contextual influence is incorporated into the judgments of the target while contrast effect occurs when people engage in an over-correction process to remove reactions produced by non-target, contextual stimuli from their target judgments. In this over-correction process, referred to as "resetting," consumers inhibit the formation of an inappropriate reaction

of the target and instead seek out an appropriate reaction (Martin 2009). Importantly, researchers find that this resetting process is not necessarily conscious (Martin 2009) and that obliviousness to the non-target, contextual influence produces an assimilation effect while awareness of the contextual source engenders a contrast effect (Forehand and Perkins 2005).

Exposure to romantic stimuli is likely to render the semantic concept of sweetness accessible among both romantically involved and uninvolved consumers. However, because the romantic stimuli elicit romantic experiences of various social distances between romantically involved and uninvolved consumers (Lieberman and Trope 1998), consumers are likely to exhibit different levels of awareness of the source of their experienced sweetness. On the one hand, exposing romantically involved consumers to romantic stimuli is likely to bring their own romantic experiences to the forefront of their attention. These romantic experiences are idiosyncratic and relatively concrete, and thus consumers are more likely to become cognizant of the source of their psychological sweetness and the sweetness they experience is more specific (i.e., psychological). On the other hand, though exposing romantically uninvolved consumers to romantic stimuli also activates sweetness, this psychological sweetness is based on other people's romantic experiences and thus is more generic and abstract. Thus, consumers are more likely to be oblivious to the source of their sweetness and the sweetness they experience is more generic. Consequently, after exposure to romantic stimuli, romantically involved (vs. uninvolved) consumers are more likely to become cognizant of the source of psychological sweetness.

Because of a more specific and concrete understanding of their experienced sweetness after exposure to romantic stimuli, romantically involved consumers are more likely to inhibit the use of psychological sweetness engendered by the romantic stimuli when they are make sweet consumption decisions, resulting in a reset process. Accordingly, these romantically involved consumers should be less likely to choose sweet foods after exposure to romantic stimuli (contrast effect). Conversely, romantically uninvolved consumers are more likely to remain obliviousness to the source of sweetness and thus their sweetness perceptions more ambiguous and these consumers are more likely to incorporate sweetness activated by the romantic stimuli when making subsequent food decisions. Hence, romantically uninvolved consumers should be more likely to choose sweet foods after romantic ad exposure (assimilation effect).

Three experiments supported our theorizing that exposure to romantic stimuli makes romantically uninvolved consumers more likely to choose sweeter foods while renders romantically involved consumers more likely to choose less-sweet foods. Our findings are robust as we used various manipulations of romantic stimuli exposure (watching romantic vs. non-romantic ads, reading romantic vs. non-romantic stories, etc.) and different operationalizations of sweet food decisions (choice of sweet vs. less sweet foods; the amount of actual sweet consumption). The findings contribute to the food consumption literature by examining predictors of food consumption involving one specific taste (sweet) and also contribute to the conceptual metaphor literature by further investigating the mechanism and direction of conceptual metaphor on decision making (conceptual metaphors can produce either an assimilation or a contrast effect on decision making).



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# Perceived Economic Mobility: Measurement, Validity, and Implication for Consumer Wellbeing and Materialism

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## EXTENDED ABSTRACT

Recent statistics have shown that the US is lagging in relative mobility, in that about half (50 percent) of parental earnings advantages are passed onto children (Corak 2013). However, surprisingly little attention has been paid to understanding how it influences consumers' decisions and lives. We suggest that perception about economic mobility has influence on a wide range of consumption decisions (e.g., status consumption, self-regulation) as well as consumer subjective wellbeing. This topic is just started to be investigated in economics, and broad range of inquiries are needed in marketing and consumer research. In this research, we developed Perceived Economic Mobility Scale (PEMS), and evaluated the validity of the scale. Using the PEMS, we also examined that perceived economic mobility affects consumer wellbeing as a predictor and a moderator which mitigates the negative impact of materialism.

## Scale Development and Validity Tests

The PEMS assesses individual perception about the extent to which society allows people to move up or down the economic ladder in a relative standing. We suggest that the PEMS encompasses two related dimensions: (1) how closely connected individual input to financial consequences (Meritocracy), and (2) how fair the system works especially between the advantaged and the disadvantaged (Fairness of the system).

In Study 1a (112 undergraduate students) and Study 1b (509 adults in MTurk), we conducted exploratory factor analysis with 48 potential items, and finalized the scale with eight items that all loaded on the two hypothesized dimensions. Table 1 depicts final eight items and their factor loadings. It explains 72% of the total variance. Confirmatory factor analysis also showed satisfactory model-fit ( $\chi^2(19) = 117.48$ ; NFI = .97, IFI = .98, CFI = .98, SRMR = .04). The PEMS was not correlated with age, gender, and education, but positively correlated with household income ( $r = .18, p < .01$ ). In Study 2 (46 undergraduate students), we also showed high test-retest reliability ( $r = .78, p < .01$ ).

In Study 3 (101 adults in MTurk), we tested nomological validity. The PEMS was higher among people who experienced intergenerational upward mobility (vs. downward mobility) and positive income change during the last 10 years (vs. negative income change, no change). The PEMS was also positively correlated with sense of control over financial outcomes. Furthermore, people with high PEMS believed that the income difference in the US is not too big, and they were less likely to support government's redistribution policies.

Study 4 (157 adults in MTurk) had two goals. First, we established discriminant validity of the PEMS by comparing the scale to Protestant Work Ethics (PWE; Mirels and Garrett 1971) and Dispositional Optimism (DO; Scheier, Carver, and Bridges 1994), both of which have some conceptual overlap. Second, we tested predictive validity of the PEMS by demonstrating that the PEMS predicts consumer subjective wellbeing. As expected, chi-square difference test and Comparison of AVE estimates with the squared correlation provided evidence of discriminant validity of the PEMS from these two scales. Furthermore, we also found the PEMS predicts consumer subjective wellbeing (life satisfaction, happiness, mental health) significantly. More importantly, it predicted subjective wellbeing even

when we controlled the PWE and the DO which also are highly related with subjective wellbeing. That is, PEMS predicts subjective wellbeing over-and-above the PWE and the DO. The predictive power of PEMS on subjective wellbeing was consistent across all income groups implying that perceived economic mobility heightens subjective wellbeing irrespective of individual current income level.

## The PEMS and Materialism

Materialism, an enduring belief in the desirability of acquiring and possessing things (Richins and Dawson 1992) has been criticized because it is inversely related to consumer subjective wellbeing (Belk 1985; Burroughs and Rindfleisch 2002). According to Sirgy (1998), materialists set standard-of-living goals that are abnormally high and unrealistic, so the greater gap between ideal and current status result in low subjective wellbeing. We predicted that people holding strong perception about economic mobility to be less affected by the negative impact of materialism on consumer wellbeing. That's because they consider that they are able to reach the ideal state, in turn, narrow the gap between the ideal and current status. That is, they will consider the gap as temporary and not insurmountable, in turn, will not necessarily experience lower subjective wellbeing. Thus, we predicted that perceived economic mobility will moderate the detrimental effect of materialism on consumer subjective wellbeing.

Study 5 aimed to test this hypothesis and we conducted a survey in MTurk (162 adults). Three separate regression analyses were conducted for three wellbeing measures (satisfaction with life, neuroticism, stress). The interaction terms between the Materialistic Value Scale (MVS; Richins and Dawson 1992) and the PEMS were significant in all of three models. Spotlight analysis (Aiken and West 1991) showed that people with high materialistic value experience lower life satisfaction and higher neuroticism and stress only when they have low PEMS scores but not when they have high PEMS scores, supporting the hypothesis.

Study 6 (129 Undergraduate students) which manipulated perceived economic mobility and measured materialistic value (Richins and Dawson 1992) and affect (PANAS; Mackinnon et al. 1999) confirmed the finding of Study 5 and excluded the alternative explanation of reverse causality. The results showed that highly materialistic people experienced significantly higher negative affect only when they are primed to perceive low economic mobility (vs. high economic mobility). In aggregate, materialism does not harm consumer subjective wellbeing when people believe upward mobility is possible.

This research has several contributions. First, it introduced a scale that measures individual perceived economic mobility, which will enable us to better understand how perceived economic mobility affects people's decision making and wellbeing. Second, we revealed that the positive perception about economic mobility promotes consumer wellbeing by mitigating the negative impact of materialism. Despite the commonly held criticism on materialism, this research suggest that material pursuits need not have adverse effects on individual wellbeing if he or she believes in the chance of upward economic mobility. Thus, promoting belief in economic mobility can be one of effective solutions to help consumers be happier in this material world. Especially given the fact that the perception was manipulated in Study 6, enhancing belief in economic mobility can be feasible strategy for policy makers.

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# Looking Ahead or Looking Back: Current Evaluations and the Psychological Connectedness to a Temporal Self

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Pankaj Aggarwal, University of Toronto, Canada

## EXTENDED ABSTRACT

A quick scan on Youtube shows that there are innumerable examples of ads where marketers use a conceptual “time machine” to transpose consumers to the past or future to sell their products in the present. The underlying idea seems to be that if consumers can see the relevance of the product or the brand to the self at the point of time when the experience occurs, they may also be positively influenced now and thus be more likely to buy it. An implicit assumption is that consumers’ self-concept is always continuous such that an experience for self in the past or future may spill over to influence one’s present judgment. Our paper challenges this assumption. We predict and find that consumers’ current evaluation of a product or a brand associated with them at a different point in time is a function of how connected they feel psychologically to this distant temporal self. When the degree of connectedness between the current self and the temporal self is high (low), the product and brand may seem more (less) connected to the self in the present, resulting in current evaluations being influenced accordingly.

A person can be viewed as a succession of overlapping yet different selves (Parfit, 1971; 1984). What really matters is the relative degree of connectedness among these different selves (as exemplified by continuity in, for example, temperament, values, goals, likes and dislikes). Past research suggests that consumers are more likely to behave impatiently (Bartels & Urminsky, 2011), save less for retirement (Hershfield et al., 2011), and engage in unethical decision-making (Hershfield, Cohen, & Thompson, 2012). The current paper draws on prior studies showing that people may perceive their future or past selves as a different individual. However, unlike prior work which has primarily focused on inter-temporal tradeoffs, we are interested in consumers’ current evaluations of products or brands that are associated with them at a different point of time. Further, we look at temporal perspectives that straddle the past and the future and find that the effects mirror each other in these two perspectives.

Our theory predicts that when consumers are strongly connected to the self who owned or will own the particular product at a different point in time, they would be more likely to treat this temporal self as their current self, and consequently their current evaluation of this product will be more favorable than when they are weakly connected to this temporal self. Study 1 employs a 2 (temporal self: past, future)  $\times$  2 (connectedness: high, low) design. 170 undergraduate students participated, and read a description about a life-changing scenario (e.g., converting to a new religion) occurring either four years or six years from now (in the past or the future). Subsequently, they saw a picture of a T-shirt and imagined owning it in five years (future condition) or five years ago (past condition), and evaluated it using three items (good, favorable, positive). As predicted, results showed that current evaluations were higher when the life-changing event occurred 6 (high connectedness to the current self) rather than 4 years (low connectedness to the current self) from the present moment for both future ( $M_{6\text{ years}} = 5.83$ ;  $M_{4\text{ years}} = 5.05$ ) and past conditions ( $M_{6\text{ years}} = 5.63$ ;  $M_{4\text{ years}} = 4.94$ ;  $p < .05$ ).

To enhance the applicability of our predictions, Study 2 measures rather than manipulates perceived connectedness to a future or past self. Furthermore, we utilize the context of a brand interaction rather than product ownership. As a potential moderator of the effect, two kinds of consumer-brand relationships were employed: exchange

versus communal. The study had a Connectedness (continuous)  $\times$  2 (temporal self: past, future)  $\times$  2 (brand relationship: exchange, communal) between-subjects design. 322 Amazon Mechanical Turk workers participated. Participants were presented with a description of their interactions with a hypothetical coffee shop brand (Mike’s Coffee Shop: “own brand”), either in the past or future, presented as a communal or an exchange relationship partner (Aggarwal, 2004). The participants then reported their current evaluation of this brand as well its key rival on the same three items as in Study 1.

We expected that when consumers have positive interactions with their own brand at a different temporal point, a high level of connectedness with that temporal self would result in greater preference for that brand in the present moment too – for both communal and exchange relationships. As expected, participants’ current evaluation of the focal brand was more (less) favorable when they perceived a high (vs. low) connectedness, irrespective of whether they had an exchange ( $\beta = .01$ ,  $t = 2.08$ ) or a communal relationship ( $\beta = .011$ ,  $t = 2.44$ ,  $p < .05$ ) with the brand. The story for the rival brand, however, is somewhat different. Prior work shows that people in a close relationship tend to devalue attractive alternatives if they are satisfied with their current relationship partner (Johnson & Rusbult, 1989). Given this, we posit that consumers in a communal but not the exchange relationship would be motivated to devalue the attractive alternative (the rival brand). Further, such a pattern should be more likely to occur when the perceived connectedness with the temporal self is high (vs. low). The results were as we expected. Specifically, a significant interaction of connectedness and relationship was observed ( $\beta = .02$ ,  $t = 2.83$ ,  $p < .01$ ) such that those in an exchange evaluated the rival brand more (less) favorably when perceived connectedness was high (low) ( $\beta = 1.16$ ,  $t = 2.74$ ,  $p < .01$ ), whereas those in communal condition evaluated it less (more) favorably when perceived connectedness was high (low) ( $\beta = -.01$ ,  $t = -1.84$ ,  $p = .07$ ).

This research shows that connectedness with one’s temporal self affects one’s current evaluations. We observe this effect for products as well as brands, and both when connectedness is manipulated and measured.

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# Do Older Consumers Change the Marketplace?: Investigating the Person–Environment Relationship in Food Shopping

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## EXTENDED ABSTRACT

Due to the increasing relevance of senior consumers, food retailers in particular must be aware of the trends, needs, and wants of older consumers to secure this increasing share of retail expenditure over the next several decades (Myers and Lumbers 2008). There is consensus within the gerontological literature that personal and environmental resources contribute to aging well and living a good life (Lawton 1983; Wahl and Weisman 2003). Consequently, store concepts for senior supermarkets based on previous marketing-related research efforts (see e.g., Angell et al. 2012; Hare 2003; Mason and Bearden 1979; Moschis, Curasi, and Bellenger 2004; Pettigrew, Mizerski, and Donovan 2005) represent an attempt to improve elderly food shoppers' quality of life. However, in the marketplace very few food shopping concepts cater successfully to the needs of the elderly.

The aim of the study at hand is to shed light on the discrepancy between the needs of the elderly, as proposed by recent research efforts, and the performance of stores tailored to the needs of the elderly in practice. Therefore, we investigate the person–environment relationship (Wahl and Weisman 2003) in food retailing from the perspective of environmental gerontology. In this context an environment has three basic functions—namely, maintenance, stimulation, and support (Lawton 1983). Maintenance represents the role of constancy and predictability of an environment. Stimulation describes the power of the environment to activate and influence behavior. Support is the environment's potential to compensate lost competencies. According to the concept of social–physical place over time (SPOT) developed by Wahl and Lang (2003) environmental functions of maintenance and support increase when people get older, and conversely, the environmental function of stimulation decreases. However, the concept has been used hitherto predominantly to investigate housing and has not been introduced in marketing research so far. The project at hand closes this research gap and investigates the “naturally” occurring interrelationship between aging consumers and the retailing environment by answering the following research question:

RQ: How does a chronologically old customer base influence the functions of a food-retailing environment?

We implemented an exploratory multiple-case study design to answer this question. The main phenomenon under investigation is the food shopping experience of elderly customers and the context in which the investigation is situated are different chronologically old social environments (U.S. college town (n=25); U.S. retirement community (n=20), metropolitan area in central Europe (n=24)). As a chronological age threshold, to separate young consumers from old consumers, the age of 55 years was chosen. Data was collected using focused interviews with consumers (n=69) on the three sites of the study. As a research technique within the focused interview, a sequential incident technique (SIT)—a variation of the critical incident technique (CIT)—was used. The interviews were audio-recorded and shortly after transcribed for further content analysis. Following the procedural recommendations of Gremler (2004), we applied a structuring content analysis approach defined by Mayring (2004) to analyze the data. After a first screening of the interviews, a coding guide was developed according to the aim of the study. The

retail marketing mix instruments and external environmental forces influencing retailing as defined by Dunne and Lusch (2008) were chosen as a theoretical fundament for the categorization. The final coding guide consisted of two dimensions. First, the type of incident was defined by coding the incident as negative or positive. In a second step, the retailing dimension of the incident was assessed using a coding guide with seven primary categories. To assess the intercoder reliability, we used the coefficient of agreement. With a coefficient of agreement of .99 (positive/negative) and .86 (retailing dimensions) the judge's coding decision can be interpreted as reliable.

All interviewed respondents in the United States and Europe (n = 69) mentioned a total of 698 incidents. More than half of these incidents were positive experiences (57.1%), whereas 42.9% can be seen as negative events. Looking at the two investigated age groups, the majority of positive incidents were stated by the elderly, independent of the region or site of the study, showing a general, more positive connotation of older consumers in experiencing the retailing environment. Comparing the distribution of positive and negative incidents in the main retailing mix categories, no substantial differences between the investigated groups of the retirement community and the college town can be noticed. A closer look at the associated sub-categories shows that qualitative discrepancies in the experience of assortment, customer service, and layout do exist. More specifically, consumers in the retirement community report positive incidents with smaller package sizes, no changes in arrangements of products and shelves, and competent baggers. Older consumers in the college town report the opposite. These differences are even more prevalent when comparing the experience of the investigated elderly in the retirement town in the United States and the metropolitan area in Europe.

Based on these results we conclude that besides all the factors of dissatisfaction of the elderly customers revealed by previous research, factors that are strongly associated with the environmental functions of support and maintenance in assortment (product sizes), layout (stable arrangement of products and shelves), and customer service (especially at the check-out) can be seen as valuable for elderly customers. This falls in line with the SPOT approach in environmental gerontology. According to the approach, the importance of the environmental functions of maintenance and support increase with age. The importance of stimulation decreases. The result can also be seen as an explanation for the aforementioned questionable success of senior supermarkets. Store concepts dedicated to the needs of older consumers may overshoot this goal by conducting too many adaptations in too many retail dimensions. This overload in adaptations can be seen as a negative age segmentation cue by older customers and may be the reason behind the questionable success of these stores.

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# Film Festival 2014

## **Coming to America: A Family Narrative of Things**

Joan Ball, St. John's University, USA  
Martin Dominguez Ball, Goddard College, USA

This film explores the life stories and immigration experience of a Uruguayan-American family through the lens of their possessions and acquisitions. The heterogeneity of the immigrant experience is evident in the participants' stories as is the deep relationship between personal artifacts and carrying forward a sense of home. <https://vimeo.com/92989101> Password: ACRFilms123

## **Meet the Robot: Nao's Chronicle**

Gaël Bonnin, Neoma Business School, France  
Alain Goudey, Neoma Business School, France  
Marat Bakpayev, Neoma Business School, France

Robots are no longer science-fiction characters. With the progresses in technology, they are now available to consumers. Specifically, firms target aging consumers with companion robots. In this video, we show how elderly react when facing a humanoid robot and highlight the tension between the imaginary and the real. Link: <https://vimeo.com/92965373> Password: MeetTheRobot

## **Dog Parks and Coffee Shops: Diversity Seeking in Changing Neighborhoods**

Sonya Grier, American University, USA  
Vanessa Perry, George Washington University, USA

This research explores diversity-seeking, community, and consumption in neighborhoods undergoing urban revitalization. In a study of three in Washington, DC, neighborhoods, we find that differences in resources, cultural norms and cultural preferences lead to tensions among some residents and perceived exclusion from consumption opportunities for others. VIMEO LINK: <https://vimeo.com/92837750> PASSWORD: dogparks

## **Consuming Journeys: Exploring Place in Motion**

Kathy Hamilton, University of Strathclyde, UK  
Matthew Alexander, University of Strathclyde, UK

In this film, we will take you on a journey through the Scottish Highlands on the world famous Jacobite steam train. We explore the motivations and experiences of passengers and reveal how a journey can be a multi-sensory consumption experience in its own right; a place in motion. <https://vimeo.com/92821602> jacobite2014

## **The Mask We Wear: Consumer Escapism Through Cosplay**

Jacob Hiler, Louisiana State University, USA  
Andrew Kuo, Louisiana State University, USA

This research explores the antecedents, process, and outcomes of consumer escapism in the context of cosplay and discusses escapism's place alongside other related constructs such as flow & fantasy. Videographic observations were made and 25 interviews were conducted with cosplayers at three different cons in early 2014. <https://vimeo.com/92981977> Password: ACR 2014

## **Capturing Online Fashion Shopping Experiences: A Screencast Videography**

Fatema Kawaf, Sheffield Hallam University, UK

Through the lens of videography researchers have captured the finest details of consumption experiences. Here, I present online videography to capture the online fashion shopping experiences. Using Critical Incident Analysis I highlight the process of the experience and the main incidents that influence approach-avoidance decisions within this process. <https://vimeo.com/92965442> proc22m

## **Follow Me on Dead Media: Analog Authenticities in Alternative Skateboarding Scene**

Joonas Rokka, NEOMA Business School, France  
Pekka Rousi, Finland  
Vessi Hämäläinen, Finland

While the digital media has become omnipresent in the contemporary society, this research takes a closer look on an unexpected trend: why some consumers and subcultures turn to analog media instead? Insights are offered from an unlikely context: alternative skateboarding scene in Helsinki. Link: <https://vimeo.com/92734527> Password: Tikari

## **Videogames: Diving in the Heart of Parallel Worlds**

Alice Sohier, University of Picardie Jules Verne France  
Romain Sohier, University of Caen-Basse Normandie France

This videography aims at improving the understanding of cultural practices by interviewing 35 gamers during the “Paris Games Week”. Results show that there are: a videogame’s appropriation through four motivations on a continuum reality-virtuality; a diving on parallel worlds; the experience to create a digital Self. Link : [vimeo.com/92926660](https://vimeo.com/92926660) Password : PGW2013ACR

## **Need for Narrative**

Tom van Laer, ESCP Europe Business School, UK  
Luca Visconti, ESCP Europe Business School, France  
Stephanie Feiereisen, City University London, UK

What is a useful story from the perspective of its consumer? Through semi-structured interviews with 55 Eurostar passengers from 14 countries, this film documents how consumers define stories, distinguish between different reasons to need narrative, and experience the effects of need for narrative. Link: <https://vimeo.com/91598490> Password: Need4Narrative

## **I’m Struggling: Men’s Stories of Mental Illness**

Ekant Veer, University of Canterbury, New Zealand

This film is part of wider Transformative Consumer Research on the stigma of mental illness amongst men. This film uses a monologue to share their experiences - by sharing, it is hoped that we can build empathy, understanding and break the stigma of mental illness. (Video: <https://vimeo.com/92599682>; Password: ACRBaltimore)

## **How Cooking as a Consumption Practice Resolves Value Conflicts**

Rajeshwari Victor, N/A

According to Schwartz, consumers across the world can be mapped into groups with similar cultural values. However while adhering to one type of value, its polar type may cause conflict. This film, through the example of a South Indian housewife, focuses on how cooking as a consumption practice helps resolve conflicting values of tradition and hedonism. <https://vimeo.com/93128751> Pwd:cooking

## **In Brutal Times**

Roel Wijland, University of Otago, New Zealand

This short film proposes poetic brutality as a methodological alternative that respects the consumer’s messy impressions of marketing’s artifacts. It aims to wrestle the poetic possibility from pomo’s deathly academic brand-embrace, and celebrates ancient premodern gathering and new digital post-romanticism. <https://vimeo.com/93273467>

## **Consumer Perceptions of UnderArmour Brand: A Semiotic Square Approach**

Yi-Chia Wu, Tarleton State University  
Paul Barretta, St. Bonaventure University  
Samaneh Torkzadeh, The University of Texas - Pan American  
Arash Hosseinzadeh, The University of Texas - Pan American  
Todd Palmer, St. Bonaventure University

Athletes see UnderArmour as equipment that allows them to focus on their sport; Fashion focused consumers appreciate colors and logo. Non-athletes feel more athletic, leading to contradictions in perception. A semiotic square is used to convey these perceptions and relationships supported by self-enhancement, self verification, and symbolic self completion theories. Vimeo link: <https://vimeo.com/92906730> Vimeo Password: ACR2014UnderArmour

# Roundtable Summaries

## ROUNDTABLE

### Is it Still Worth it? Exploring Contemporary Marketplace Diversity Research

#### Co-chairs:

David Crockett, University of South Carolina, USA  
Sylvia Long-Tolbert, Johns Hopkins University, USA  
Laurel Anderson, Arizona State University, USA

#### Participants:

Natalie Adkins, Drake University, USA  
Stacey Baker, University of Wyoming, USA  
Aronte Bennett, Villanova University, USA  
Samantha Cross, Iowa State University, USA  
Lenita Davis, University of Alabama, USA  
Benet DeBerry-Spence, University of Illinois at Chicago, USA  
Akon Ekpo, Western Michigan University, USA  
Nakeisha Ferguson, University of St. Thomas, USA  
Mary Gilly, University of California Irvine, USA  
Sonya Grier, American University, USA  
Robert Harrison, Western Michigan University, USA  
Geraldine Henderson, Rutgers University, USA  
Diogo Hildebrand, Grenoble Ecole de Management, France  
Elif Izberk-Bilgin, University of Michigan-Dearborn, USA  
J.P. James, Rutgers University, USA  
Guillame Johnson, University of Nottingham Ningbo, China  
Yuvay Meyers, Howard University, USA  
Carol Motley, University of Alabama-Birmingham, USA  
Gillian Oakenfull, Miami University, USA  
Julie Ozanne, University of Melbourne, Australia  
Felicia Miller, Marquette University, USA  
Breagin Riley, Syracuse  
Cristel Russell, American University, USA  
Bige Saatchioglu, Özyeğin University, Turkey  
Hope Schau, University of Arizona  
Kevin Thomas, University of Texas  
Jerome Williams, Rutgers University, USA  
Marie Yeh, Loyola University Maryland, USA  
Nicholas Pendarvis, University of South Carolina

The contemporary global marketplace facilitates consumers' ability to enact numerous identity positions. The continued importance of marketplace diversity in their lives consumers (and to the firms that serve them) is difficult to overstate. This roundtable assembles interested scholars to discuss steps forward in the study of marketplace diversity.

**ROUNDTABLE**  
**Close Relationships Theory in Consumer Behavior:**  
**Bridging Brand and Interpersonal Relationships Research**

**Chair:**

Danielle J. Brick, Duke University, USA

**Participants:**

Pankaj Aggarwal, University of Toronto, Canada  
Lisa Cavanaugh, University of Southern California, USA  
Jennifer Escalas, Vanderbilt University, USA  
Valerie Folkes, University of Southern California, USA  
Susan Fournier, Boston University, USA  
Deborah Roedder John, University of Minnesota, USA  
C Whan Park, University of Southern California, USA  
Scott Rick, University of Michigan, USA  
Vanitha Swaminathan, University of Pittsburgh, USA  
Kathleen Vohs, University of Minnesota, USA  
Peter Caprariello, Stonybrook University, USA  
Lalin Anik, Duke University, USA  
Jordan Etkin, Duke University, USA  
Nicole Mead, Erasmus University, Rotterdam  
Leigh Anne Donovan, University of Southern California, USA

Relationships permeate all aspects of human life. But what can close relationships theory teach us about consumer behavior? The goal of this session is to integrate perspectives from brand and interpersonal relationships research in order to better understand how close relationships theory can benefit consumer behavior research.

**ROUNDTABLE**

**Was Captain Kirk Wrong? Consumer Behavior Research and the “Prime Directive”**

**Chair:**

Meryl P. Gardner, University of Delaware, USA

**Participants:**

Lisa E. Bolton, Pennsylvania State University, USA  
Paul M. Connell, Stony Brook University, USA  
Sonya A. Grier, American University, USA  
Michael A. Kamins, Stony Brook University, USA  
Punam Anand Keller, Dartmouth University, USA  
Aparna A. Labroo, Northwestern University, USA  
Ingrid M. Martin, California State University Long Beach, USA  
Julie L. Ozanne, Virginia Tech, USA and University of Melbourne, Australia  
C. Whan Park, University of Southern California, USA  
Connie Pechmann, University of California Irvine, USA  
Vanessa G. Perry, The George Washington University  
Americus Reed, University of Pennsylvania  
Stewart Shapiro, University of Delaware, USA  
Clifford J. Shultz, II, Loyola University Chicago, USA  
Harish Sujjan, Tulane University, USA  
Beth Vallen, Villanova University, USA  
Jerome D. Williams, Rutgers Business School-Newark and New Brunswick  
Alicia D. Bonaparte, Pitzer College

This roundtable seeks to encourage open discussion of possible unintended negative consequences of well-intentioned consumer research. We seek to increase awareness of our assumptions about our ability to determine what enhances consumer well-being, and to promote a dialog toward assessing and minimizing any possible harm from our work.

**ROUNDTABLE**

**10 Years of Consumer Neuroscience: Progress, Challenges, and Promises**

**Co-chairs:**

Ming Hsu, University of California Berkeley, USA  
Uma Karmarkar, Harvard Business School, USA

**Participants:**

Moran Cerf, Northwestern University, USA  
Adam Craig, University of Kentucky, USA  
William Hedgcock, University of Iowa, USA  
Ming Hsu, University of California Berkeley, USA  
Uma Karmarkar, Harvard Business School, USA  
Milica Mormann, University of Miami, USA  
Hilke Plassmann, INSEAD, France  
Baba Shiv, Stanford University, USA  
Ale Smidts, Erasmus University Rotterdam, The Netherlands  
Vinod Venkatraman, Temple University  
Stacy Wood, North Carolina State  
Carolyn Yoon, University of Michigan, USA

Significant gains in knowledge have been achieved in the first decade of consumer neuroscience research. This roundtable aims to draw lessons from the past ten years and building on it to propose broad multi-method empirical approaches that can better advance our understanding of consumer behavior and its underlying processes.

**ROUNDTABLE**  
**Researching the Selfie**

**Chair:**

Jonathan Schroeder, Rochester Institute of Technology, USA

**Participants:**

Brett Robinson, University of Notre Dame, USA  
Shona Bettany, University of Westminster, UK  
Janet Ward, Hanken School of Economics, Finland  
Ekant Veer, University of Canterbury, New Zealand  
Toni Eagar, Australian National University, Australia  
Katherine Sredl, University of Notre Dame, USA  
Annie Blanchette, University of Exeter, UK  
Markus Giesler, York University, Canada  
Edward McQuarrie, Santa Clara University, USA  
Fleura Bardhi, City University London, UK  
Graham Austin, Montana State University, USA  
Barbara Phillips, University of Saskatchewan, Canada  
Stephen Gould, City University of New York, USA  
Catherine Coleman, Texas Christian University, USA  
Marie-Agnès Parmentier, HEC Montreal, Canada  
Linda Tuncay Zayer, Loyola University Chicago, USA  
Justin Angle, University of Montana, USA  
Aron Darmody, Suffolk University, USA  
Alladi Venkatesh, University of California-Irvine, USA

This roundtable gathers researchers interested in the phenomenon of the “selfie” – to explore current developments, research methods and interdisciplinary research into how consumer behavior, social media and the selfie interact. We will draw upon participants’ own research to generate insights into the selfie’s role in consumer behavior and consumer culture.





# Workshop Summaries

## J-ACR Discussion

**Chair:**

Joel Huber, Duke University, USA

This session will discuss ACR's new journal: J-ACR. The session will be led by Joel Huber and will also include the editors of the first four issues: "Behavioral Economics of Eating," Brian Wansink and Koert Van Ittersum (Jan 2016) "Consumer Ownership and Sharing," Russell Belk and Linda Price (April 2016) "Consumer Response to Regulations," David Stewart (July 2016) "The Science of Hedonic Consumption," Angela Lee and Kathleen Vohs (October 2016)

## WORKSHOP

### Mediation (Preacher-Hayes)

**Chair:**

Stephen A. Spiller, University of California, Los Angeles, USA

This workshop will provide a brief introduction to conducting mediation analyses using Hayes' (2013) PROCESS macro. In addition to walking through the mechanics of sample analyses and interpretation of output, we will discuss common extensions (e.g., three-level independent variables). Beyond the macro, this workshop will also attempt to demystify the mediation black box. Why might there be an indirect effect without a total effect? What does bootstrapping do? Where can mediation lead us astray? What alternatives do we have to the mediation triangle?

## WORKSHOP

### Data Collection, Analysis and Reporting

**Chairs:**

Leif Nelson, University of California Berkeley, USA  
Joe Simmons, University of Pennsylvania, USA  
Uri Simonsohn, University of Pennsylvania, USA

The practice of consumer research is changing to reflect broader changes in social science. Expectations for transparency in the reporting of measures, manipulations, and analyses have increased the validity of scientific practice, but have also created new challenges for the thoughtful and rigorous scientist. In our workshop we will give informed consideration of these challenges and offer detailed and relentlessly practical advice for consumer researchers. Topics for consideration: Preregistration, determination of sample size, evaluation of evidential value, interpretation of replication results, and broad implications for hiring and promotion.

**WORKSHOP**

**Computer-Assisted Content Analysis**

**Chair:**

Ashlee Humphreys, Northwestern University, USA

This workshop will introduce participants to computer-assisted content analysis, a method that can supplement many existing, commonly-used research methods such as coding thought protocols, qualitative analysis of interviews, or archival research of internet discussions or printed materials. Unlike traditional content analysis, automated content analysis allows for systematic and transparent coding of data, increased reliability, and an extension of datasets beyond previous practical limitations. We will discuss issues of construct and external validity and provide a case example to illustrate the method, using it to study consumer word-of-mouth response to a product launch.

**WORKSHOP**

**Questioning the Turk: Conducting High Quality Research with Amazon Mechanical Turk**

**Chairs:**

Joseph Goodman, Washington University in St. Louis, USA  
Gabriele Paolacci, Erasmus University, Netherlands

The use of Mechanical Turk (aka, Mturk) by behavioral researchers continues to increase. Despite the evidence on the benefits (and drawbacks) of Mturk, many researchers, reviewers, and editors intuitively distrust the reliability and validity of online labor markets. In this Back to Fun interactive workshop, we will answer and debate questions from the ACR community regarding Mturk, and raise some new questions. We will discuss the current issues that arise from Mturk's use, as well as some of the solutions and replications. Questions can be submitted via Twitter (@aconsres) or Facebook (ACR page) using the hashtag #mturkacr, and via email to mturkacr@gmail.com.

**WORKSHOP**

**How to Write a Great Review: Reviewing and Advancement Advice from JCR**

**Chairs:**

Rebecca Hamilton, University of Maryland, USA  
Rob Kozinets, York University, USA

Open to all conference attendees who review for, or are interested in reviewing for JCR. The Editors and Associate Editors of the Journal of Consumer Research (JCR) are conducting a workshop to train new and advanced reviewers and discuss the review process in general. They will explain what makes a great review, discuss the trainee program, and answer any questions.

# Perspectives Sessions Summaries

## PERSPECTIVES SESSION

### Choice Architecture

#### Chairs:

Eric Johnson, Columbia University, USA  
Daniel Goldstein, London Business School, UK  
Jonathan Levav, Stanford University, USA

This perspective session will introduce people to a broader set of choice architecture tools beyond those that first come to mind, such as defaults. Our goal will be present a taste of some of these tools and their effects and to emphasize the role of theories about decision process in designing choice environments. Johnson will open with a brief overview of the purposes of choice architecture. Levav will talk about the interplay between depletion and other factors in affecting order effects in choice. Goldstein will talk about the role of choice architecture in measuring and communicating uncertainty. Johnson will close by talking about public policy applications that have had impact.

## PERSPECTIVES SESSION

### Hedonic Consumption

#### Chairs:

Carey Morewedge, Boston University, USA  
Ravi Dhar, Yale University, USA  
Aradhna Krishna, University of Michigan, USA

This panel serves as an introduction to and overview of the study of hedonic consumption. We define hedonic consumption and distinguish it from other forms of consumption, examining questions such as “Is all consumption hedonic in some way?” We present an overview of the time course and dynamics of pleasure, the history of its study, as well as the relationship between hedonic consumption and utility. We discuss distinctions and interactions between pleasures of the mind (e.g., anticipation, imagination, and memory) and pleasures of the body. Finally, we outline potentially fertile topics for future research.

## PERSPECTIVES SESSION

### Morality in the Marketplace

#### Chairs:

A. Pete McGraw, University of Colorado, USA  
Dan Bartels, University of Chicago, USA  
Russell Belk, York University, Canada  
Janet Schwartz, Tulane University, USA

Morality underlies the fundamental expectations consumers have about how they and others should be treated. Moral principles guide how people make sense of the world, and serve as a basis for important consumer decisions. Consumer researchers seeking to comprehend moral actions—good and bad, everyday and extraordinary—must understand the decision making processes that guide them. Our “crash course” in marketplace morality covers several related topics including: 1) a post-ownership society that increasingly relies on sharing, collaborative consumption, and digital possessions, 2) consumer decisions at the intersection of sacred and secular values, and 3) consumers’ “flexibility” in forming associations between their moral values, context-specific attitudes and, ultimately, their marketplace behaviors.

**PERSPECTIVES SESSION**

**Word of Mouth and Consumer Research**

**Chairs:**

Rob Kozinets, York University, Canada  
Peter Reingen, Arizona State University, USA  
Sarah G. Moore, University of Alberta, Canada

Word of mouth theory has been important since the 1940s, but has been made even more visible and salient by the rise of social media. In this session, we collectively overview the fundamental principles and research trajectories of consumer research into WOM. We provide three different but overlapping orientations to the topic: the micro-psychological, the meso-structural, and the meso-cultural. We present findings and example research from each orientation and associated research approaches--experimental, social network analytic, and ethnographic. We conclude with discussion about potential areas of opportunity with emphasis on the complementarity and power that arise from combining approaches.

**PERSPECTIVES SESSION**

**Assemblage Theory and Consumer Research**

**Chairs:**

Amber Epp, University of Wisconsin, USA  
Robin Canniford, University of Melbourne, Australia  
Eileen Fischer, York University, Canada

This perspectives session offers a primer on assemblage theories. Recent consumer research investigates assemblages as both a theoretical foundation and analytic tool. Assemblage theories attend to the complexity of socio-material collectivities made up of heterogeneous consumption resources that interact in contingent and fluid ways. We trace the history/intellectual origins, key tenets, uses (applications from within and outside the field that might inform future research), and limitations of assemblage theories. Participants in this interactive session will gain a general understanding of how researchers might employ assemblage thinking to disrupt established concepts through ongoing discussion, opportunities to ask questions, and group brainstorming.

**PERSPECTIVES SESSION**

**Neuroscience and Consumer Research**

**Chairs:**

Hilke Plassman, INSEAD, France  
Eric Johnson, Columbia University, USA  
Drazen Prelec, MIT, USA

The goal of this session is to discuss the progress that has been made in the nascent field of consumer neuroscience. We will first review what has been accomplished in the last decade of decision neuroscience work and outline what the potential of using brain imaging for future judgment and decision-making research is. We will then focus on how consumer researchers can use other methods from the neuroscience toolkit and how they can be used to study choice architecture and inter-temporal choice. We will conclude the session by discussing how neuroscience can be used to study social and moral decision making – a topic that has recently received increasing attention in consumer research.

# Working Papers

## **Gaze Direction in Print Ads Modulates Product And Brand Memorization**

Safaa Adil, University of Rennes 1, France  
Olivier Droulers, University of Rennes 1, France

Several studies in neuroscience and psychology demonstrate the role of gaze direction in orienting and modulating perceiver's attention. In marketing, little is known about gaze direction effect on consumer attention toward ads. The current research investigates the influence of perceived gaze direction in ad on product and brand memorization.

## **Consumption Related Language Brokering: It's not all Fun and Games**

Natalie Ross Adkins, College of Business and Public Administration, Drake University, USA

In the U.S. marketplace, consumers of immigrant origin often find themselves in the role of language broker for family and friends with limited English skills. The act of interpreting, translating, and mediating interactions within consumption-related contexts has its rewards, but it also carries consequences for the language broker.

## **Skin Lightening Practices and Local, Regional and Global Structures of Beauty**

Melissa Akaka, University of Denver, USA  
Dan Baack, University of Denver, USA  
Susan Mudambi, Temple University, USA  
Angeline Nariswari, University of Hawaii, USA

This research explores co-creation of meaning and value across cultures. We compare beauty practices across Taiwan and Indonesia. Our initial findings suggest that consumers' perceptions of "whiteness" are influenced by embedded local, regional and global structures. Because of this, skin lightening practices create unique meanings of beauty within each culture.

## **How Self-Construal and Social Presence Influence Information Processing**

Utku Akkoc, University of Alberta, Canada  
Jennifer Argo, University of Alberta, Canada

We test and show how the social context moderates the effects of self-construal on information processing. By demonstrating how non-interactive social presence influences the type of processing by individuals with independent and interdependent self-construal, our research advances the literature that examines the effects of self-construal on information processing.

## **Exploring Consumptive Behavior Under Perceived Threat: The Case of Domsday Preppers**

Abdullah A. Aldousari, Rutgers University, USA

The recent natural and man-made disasters made a growing proportion of the populace reevaluate their preparedness for future emergencies. This group of people is collectively known as preppers. Different themes emerged from the data that map on to the theoretical lenses of Belief in Just-World and Terror Management theories.

## **Shopocalypse! A Religion Movement Fighting Consumption**

Renata Andreoni Barboza, FGV-EAESP, Brazil  
Carolina Pereira Rezende, UNINOVE, Brazil

Analyzing The Church of Stop Shopping as a new kind of consumer resistance movement our aim is to show how consumers are moving towards via their religion acts of resistance, fighting the consumer culture and the marketer's practices in a fun and different way.

## **To Deliberate or Not? The Role of Regret Salience and Deliberation on Valuation**

Dionysius Ang, INSEAD, France  
Enrico Diecidue, INSEAD, France

In the face of highly consequential decisions with difficult trade-offs, common sense suggests that careful deliberation is essential. Our studies show that while deliberation reduces self-reported regret, it also causes overvaluation of the preferred option. Thus, by deliberating, consumers might be paying a price for reduced feelings of regret.

## **Customers' Responses to Service Failures: The Interactive Effects of Self-Congruence and Coping Strategy**

Tyson Ang, Southern Illinois University  
Shuqin Wei, Texas A&M University - Central Texas

We investigate the interactive role of self-congruence and customer coping in service failure encounters. We found that, when using problem-focused coping, customers having actual self-congruence with the service perceive lower levels of service failure severity. However, customers with actual or ideal self-congruence perceive failure severity similarly when using emotion-focused coping.

## **Coping with Genetic Risks: Effects of Individual Differences in Decision Making for Genetic Testing**

Makbule Eda Anlamlier, University of Illinois at Chicago, USA  
Tarcan Kumkale, Koc University, Turkey

Genetic testing, as being promising health product, informs about vulnerabilities regarding certain illnesses including cancer before emergence, but individuals may refrain from learning their risks. Despite negative effects of high anxiety, cancer anxiety is detected as a motivational factor on taking genetic test, whereas health information avoidance impedes its influence.

## **Power and Status in Consumer Communities: Some Insights from a Netnographic Study of Luxury Timepiece Collectors**

Navdeep Athwal, Warwick Business School, University of Warwick, UK  
David Arnott, Warwick Business School, University of Warwick, UK

This research explores a novel function of collecting behaviour, revealing that collecting high-end timepieces plays an important role in signalling power, status, and rank in this internationally renowned, hybrid (online and offline), luxury timepiece enthusiast community.

## **The Effect of Anticipated Firm Interaction on Consumer Evaluations of the Firm**

Sumitra Auschaitrakul, McGill University, Canada  
Ashesh Mukherjee, McGill University, Canada

We show that consumers with prior negative evaluations adjust their final evaluations upward when anticipated firm interaction is high. The mechanism underlying for positivity effect is perceived threat. In contrast, past research has shown a negativity effect when consumers expected to discuss with others whose views contradict to their view.

## **Online Advertising: The Effect of Website Type on Attitude towards the Ad**

Sumitra Auschaitrakul, McGill University, Canada  
Ashesh Mukherjee, McGill University, Canada

We show that consumers reported lower (higher) advertising attitude when seeing ads displayed on social website, compared to commercial website. The mechanism underlying for this negative reaction is perceived incongruence. This research makes a contribution by investigating the effect of website type on attitude towards the ad.

## **“Against the Grain”: A Study of Social Identity Reconstruction in Online ‘Gluten-Free Living’ Communities**

Ana Babic, HEC Paris, France  
Kristine de Valck, HEC Paris, France  
Tina Lowrey, HEC Paris, France

This research investigates the social identity of consumers who deviate from the norm. By means of a netnography, we analyze consumer narratives and discussions across different platforms arising from consumption practices associated with the gluten-free lifestyle. We find that consumers spotlight their deviance to signal expertise and recategorize in-group membership.

## **Knowing Your Place: How Status Presentation Affects Participation Intentions in an Online Community**

Sara Bahnson, University of Oregon, USA  
Lan Jiang, City University of Hong Kong, China  
Darren Dahl, University of British Columbia, Canada

This research explores how status presentation (points vs. titles) affects participation intentions in an online community. Titles generate greater participation intentions than points, mediated by community connectedness. Role clarity drives the impact of community connectedness on participation intentions. Degree of community virtuality and level of user engagement moderate the effect.

## **When Do Political Ideologies Affect Brand Extension Evaluation? The Role of Mindsets**

Cristobal Barra, University of South Carolina, USA  
Alokparna (Sonia) Monga, Rutgers University, USA

We find that political ideologies affect brand extension evaluations. In a holistic mindset, liberals respond more favorably to dissimilar brand extensions than conservatives. However, in an analytic mindset, there are no differences between liberals and conservatives. These effects dissipate when political ideologies are less central to one's self-concept.

## **“Looking Good”: The Visual Power of Packaging on Gustatory Perceptions**

Sara Baskentli, Baruch College, City University of New York  
Stephen Gould, Baruch College, City University of New York

This study attempts to bring some clarity to cross-modal interactions of visual and gustatory senses, specifically, how taste perceptions are affected from the aesthetics of packaging. Overall, the results indicate that attractive packaging creates an implicit bias in taste perceptions that should ostensibly have nothing to do with the package itself.

## **I'm Happy to Listen to You. But Tell Me about Your Experiences, Not Your Objects**

Wilson Bastos, Catholic University of Portugal, Portugal

We often tell people about our material and experiential purchases; but we also commonly find ourselves in the position of listeners. This work demonstrates that listening about others' experiences versus objects is a better source of happiness, an effect mediated by the listener's feeling of social connection with the teller.

## **Communicating Responsible Behaviour in Tourism through Online Videos: A Cross-Cultural Perspective**

Wided Batat, University of Lyon 2  
Sonja Prentovic, University of Lyon 2

This research aims to discuss the approaches of tourism professionals to communication on responsible behaviour through sustainable tourism video contents shared on social media indicating cross-cultural differences in three European countries: UK, France and Serbia. The visual method analysis revealed two main approaches: (1) environmental and (2) socio-cultural responsible behaviour.

## **“What Is It? How Does It Work?” Why and How Consider the Curiosity as a Main Concept for Research on Interactive Consumer Decision Aids. Application with a Virtual Fitting Room**

Marie Beck, IAE School of Management, University of Lille North France.  
Dominique Crié, IAE School of Management, University of Lille North France.

This research highlights the relevance of the curiosity concept in Interactive Consumer Decision Aids research. Results show that specific curiosity about the product is increased by the presence of a Virtual Fitting Room and by the diversive curiosity. The latter effect is mediated by the specific curiosity about the VFR.

## **How Causal Locus Affects Consumers' Emotions When Co-Production Results are Unsatisfactory?**

Larissa Becker, Faculdade Meridional/Federal University of Rio Grande do Sul (UFRGS), Brazil  
Natalia Pacheco, PhD Candidate at at Federal University of Rio Grande do Sul (UFRGS), Brazil  
Vinicius Brei, Professor of Marketing (Chair Tramontina Eletrik) at Federal University of Rio Grande do Sul (UFRGS), Brazil

Consumer participation in the production process has many positive consequences, but what happens when the co-produced service turns out to be unsatisfactory? This working paper shows that co-production may reduce the self-serving bias by making consumers feel responsible for negative outcomes even when the failure causal locus is uncertain.

## **Consumer Behavior in Crowding Situation**

Norchène Ben Dahmane Mouelhi, Assistant Professor, Tunisia  
Hamida Skandrani, Professor, Tunisia  
Faten Malek, Assistant Professor, France  
Ons Belaid, IHEC

This article deals with the effect of crowding on consumers' behavior. The authors try to determine with a qualitative study the variables causing the sensation of crowding (Antecedents), and to understand the reactions of consumers in retail crowding. Our study aims to a better understanding of customer responses to crowded density in a retail store. It tries to identify how people in a high contact culture react to different levels of crowd density in a clothing sales store. A qualitative study using a semi-structured interview guide was conducted with 40 women, aged between 18 and 65 years old, had been interviewed in different ready-to-wear stores. Data analysis revealed that crowd density yields to negative attitudinal and behavioral responses (malaise, loss of control ...). Besides, the study findings prove evidence to the inverse U shaped relationship between human density and individual's satisfaction. Extremely crowded and extremely un-crowded conditions generate the undesirable states of over and under arousal (Eroglu et al., 2005) even in a high contact culture.

## **Memory Protection Now Versus Memory Refreshment Later: The Effect of Time on Memory Goals**

Kara Bentley, University of South Carolina, USA  
Priyali Rajagopal, University of South Carolina, USA  
Katina Kulow, University of South Carolina, USA

Research has shown that people avoid repeating special experiences in an attempt to protect their memories of these experiences. We propose that time moderates this effect, such that special experiences are protected in the short term, but are repeated as a means to refresh memories in the long term.

## **Baby Hacking: The Trend of Surveillant Seduction in Child Consumer Socialisation**

Shona Bettany, University of Westminster, UK  
Ben Kerrane, Manchester Business School, UK

This paper seeks to understand, and theorise the development of the self as seeking surveillance through engagement with hacking technologies using the case of a range of new, highly commodified mass market technologies aimed at new, and aspiring parents.



## **All Actants on Deck! New Insights for Sustainable Consumption Through a Systemic Investigation of Boating Consumption Practices in the Baltic Sea**

Hedon Blakaj, Aalto University School of Business, Department of Marketing, Helsinki Finland  
Henri Weijo, Bentley University, Department of Marketing, Boston USA  
Diane Martin, Aalto University School of Business, Department of Marketing, Helsinki Finland

This working paper argues for a more systemic analyses of sustainable consumption practices, for both clarity of view and opportunity for change. We draw from a multi-method research project that investigates the currently environmentally toxic consumption practices of boat owners in the Baltic Sea area.

## **The Impact of Materialism on Feeling Financially Inadequate: An Exploratory Study**

Dora Bock, Georgia Southern University, USA  
Lindsay Larson, Georgia Southern University, USA  
Jackie Eastman, Georgia Southern University, USA

This study suggests that those individuals with higher levels of materialism express higher levels of financial inadequacy. While the relationship between income and financial inadequacy is negative, materialism maintained a significant positive effect on perceptions of financial inadequacy, suggesting that materialistic people may be more likely to feel financially insecure.

## **Inspirational Personalization: Abstract and Concrete Levels of Personalization**

Tim Boettger, University of St. Gallen, Switzerland  
Oliver Emrich, University of St. Gallen, Switzerland  
Leonard Lee, National University of Singapore, Singapore  
Thomas Rudolph, University of St. Gallen, Switzerland

Using an extensive field study in furniture retailing, we compare the effectiveness of abstract and concrete messages for active and passive personalization in stimulating consumer response. Results suggest that abstract messages are more effective for active than passive personalization. This effect is qualified by the message's fit to consumers' preferences.

## **Monetary Participation in New Product Development**

Benjamin Boeuf, HEC Montreal, Canada  
François Durivage, Université de Montréal, Canada

Crowdfunding refers to the monetary side of consumer participation in new product development. To offer a better understanding of why and how consumers involve into the co-production of products, this research develops a categorization of crowdfunders. Based on the analysis of 26 interviews, three profiles have been drawn.

## **Increasing Brand Equity Through Competition**

Benjamin Boeuf, HEC Montreal, Canada

This paper focuses on a simple yet unstudied technique of leveraging a sponsorship: the mention of competition. This is the first attempt to measure the combined effects of sponsorship and the mention of competition on attitude. How sponsorship may positively link two competitive brands in increasing equity transfer is considered.

## **The Undercover Altruist – How the Fear for Social Sanction may Discourage Moral Behavior**

Jan Willem Bolderdijk, University of Groningen, The Netherlands  
Gert Cornelissen, Universitat Pompeu Fabra, Spain

Rather than being celebrated, in certain cases moral behavior is met with social sanctions, when perceived as threatening to the observers' moral self-image. We provide evidence of people anticipating this effect, and avoiding to engage in moral behavior when observed by others.

## **To Share or Not to Share? Antecedents of Brand Content Sharing in Social Media**

Adriana M. Boveda-Lambie, Saunders College of Business, Rochester Institute of Technology, USA  
Tracy Tuten, College of Business, East Carolina University, USA  
Victor Perotti, Saunders College of Business, Rochester Institute of Technology, USA

We look at source and content of a brand's tweets as antecedents of a customer's decision to share that tweet among his/her followers. Our data shows that both source and content interact to effect the customer's decision with differences across source. Implications and future research is discussed.

## **What's My Age Again? Subjective Versus Physical Age Feedback Moderates Consumer Health-Related Behavior**

Daniel Brannon, Arizona State University, USA  
Chadwick J. Miller, Arizona State University, USA  
Adriana Samper, Arizona State University, USA

How do changes in a consumer's subjective age influence their health-related behaviors? Giving people feedback that they are subjectively young, as opposed to old, increases their likelihood of engaging in healthy behaviors. Interestingly, this effect does not exist when given feedback that they are physically young, as opposed to old.

## **Using Contested Heritage to Reproduce Ideology in Cyprus: The Museum of Barbarism and Vulnerable Consumers**

Yalkin Cagri, Kadir Has University, Turkey  
Ekant Veer, University of Canterbury, New Zealand

Sites of violence may be used to sustain conflict and reproduce ideology. This study focuses on a dark heritage site, Museum of Barbarism, in the divided island Cyprus and how captive young consumers become vulnerable through visiting the museum. Results suggest that vulnerability is a by-product of sustaining dominant ideology through state apparatuses such as schools and museums by creating and sustaining myths around events that took place.

## **Achievement Mindsets and Comparative Advertising**

Efe Camurdan, Koc University, Turkey  
Zeynep Gurhan Canli, Koc University, Turkey  
Nilufer Z. Aydinoglu, Koc University, Turkey

Research on comparative advertising has been broad, but research on the distinction between direct and indirect comparative advertising has been limited and yielded mixed findings. In this essay, we show that the activation of different achievement mindsets through priming moderates the effectiveness of direct and indirect advertising claims.

## **Urban Reconfiguration, Heterogeneous Community Collaboration and the Co-Construction of Shopping Experiences.**

Flavia Cardoso, Universidad de San Andres - ESCP Europe  
Florence Pinot, ESCP Europe - CERALE  
Olivier Badot, ESCP Europe

The concentration of diverse minority groups in urban areas is becoming frequent yet the phenomenon of heterogeneous community interaction has been given relatively little attention as research has privileged the homogeneity of groups (Thomas et al, 2013). This work analyses how heterogeneous groups interact and co-produce shopping experiences.

## **Feeling Affiliated vs. Feeling Relegated: The Impact of Gender and Interpersonal Touch on Emotions and Product Evaluations**

Iana Castro, San Diego State, USA  
Andrea Morales, Arizona State University, USA  
Stephen Nowlis, Washington University, USA

This research explores how gender differences influence emotions and preferences for products evaluated after being touched by a stranger and shows that consumer responses to interpersonal touch depend on the gender of the person touching, the gender of the person being touched, and the type of touch (intentional vs. unintentional).

## **Parasocial Memory: Consumers' Symbolic Narratives and Cultural Distinctions of Celebrities' Intimate Familiarity**

Dave Centeno, Department of Marketing, City University of Hong Kong; & CEA Virata School of Business, University of the Philippines  
Jeff Jianfeng Wang, City University of Hong Kong

This research explores on celebrity 'parasocial memory' among Filipino consumer groups and describes how the concept operates through their symbolic narratives. It delineates celebrities like referent others; themed with identities of friends, family members, and significant others. Implications on socially-constructed memory, consumer identity, and political marketing celebrity persuasion are discussed.

## **Discrimination Against the Rich**

Boyoun (Grace) Chae, Temple University, USA  
Rui (Juliet) Zhu, Cheung Kong Graduate School of Business, China  
Katherine White, University of British Columbia, Canada  
Darren Dahl, University of British Columbia, Canada

Do people punish rich individuals more harshly than middle class individuals? Across four complete studies, we investigate whether and how people discriminate against the rich by punishing a small-time offender more severely when that offender is perceived to be wealthy rather than non-wealthy.

## **The Effect of Caffeine Consumption on Performance in Group Decision-Making**

King Fung Chan, The Ohio State University  
Amit Surendra Singh, The Ohio State University  
H. Rao Unnava, The Ohio State University  
Vasu Unnava, The Ohio State University

While caffeine is shown to increase an individual's systematic processing, prior research has not considered how it affects group decision-making. This issue is particularly relevant given that coffee is often served at meetings and discussions. We find that caffeine prompts more positive evaluations of, and greater agreement with, group members.

## **The Dominance of Moral Character in Endorser Perception: Perceiver Effects of Dispositional Tendency, Moral Intuitions, and Self-Location**

Joseph W. Chang, Vancouver Island University, Canada  
Jiayun (Gavin) Wu, Savannah State University, USA  
Yung-Chien Lou, National Chengchi University, Taiwan

Moral character dominates warmth on endorser, advertising, and brand evaluations. Specifically, advertising endorsed by warm-immoral (vs. moral-cold) celebrities is less favored and instigate more negative impact on the endorsed brand. Moreover, perceivers' innate moral intuitions and self-location moderate the impact of advertising endorsed by immoral celebrities on brand evaluations.

## **“Go Green” for Now or Future? The Effect of Message Framing, Construal Level, and Environmental Concern**

Hua Chang, Philadelphia University, USA  
Lingling Zhang, Towson University, USA  
Guang-Xin Xie, University of Massachusetts Boston, USA

Building on message framing and construal level theory, this research finds, from two studies, that the congruency between message framing (i.e. gain/loss) and construal level (i.e. now/future) increases message effectiveness in green advertising. Furthermore, salience of the congruency effect varies in line with the level of consumer environmental concern.

## **Modelling Loyalty Intention for Mobile-Apps: Impact of Social Diffusion and Ease-Of-Use**

Swagato Chatterjee, Indian Institute of Management Bangalore, India  
Arpita Ghatak, Indian Institute of Social Welfare and Business Management Kolkata, India

With very high churning rate, customer loyalty is one of the major concerns for fast moving technology products like mobile-apps. The current study develops and validates an integrated structural model of loyalty intentions of mobile-apps from the theories of TAM, planned behaviour, social diffusion and satisfaction-loyalty links.

## **Fostering Advocacy: The Unexpected Role of Source Expertise in Intentions to Persuade Others**

Lauren Cheatham, Stanford University, USA  
Zakary Tormala, Stanford University, USA

The present research suggests that when consumers are exposed to arguments with low (versus high) source expertise they are more (less) likely to advocate. In two studies we show that low source expertise paradoxically predicts an increased likelihood to advocate and that this finding is mediated by argument efficacy.

## **Digital Literacy, Flow Experiences, and Elderly Gamers' Mobile Application Usage Behavior**

Annie Chen, University of Westminster  
Norman Peng, University of Westminster

The purpose of this research is to explore what factors contribute to elderly consumers' internet connection-abled mobile devices game playing behavior. “Digital literacy” is incorporated into a modified flow model as a moderating factor. 102 elderly mobile users filled out the survey. Findings' implications to literature and practices are discussed.

## **Friends or Non-Friends? How do WOM Senders' Relations Backfire Message Persuasiveness**

Yu-Jen Chen, Lingnan University, Hong Kong  
Amna Kirmani, University of Maryland, USA

We examine the impact of perceived relation among multiple WOM senders on persuasiveness of message simultaneously transmitted by them. We suggest that when the relationship closeness is low (non-friends), compared to high (friends), message is more persuasive because of high perceived credibility.

## **Do Different Motives Underlying Gift-giving Behavior Influence Self-indulgence Differently?**

Ning Chen, European School of Management and Technology, Germany  
Francine Espinoza Petersen, European School of Management and Technology, Germany

This research suggests that different gift-giving motivations influence a gift-giver's self-indulgence differently. Gift-givers with an altruistic motivation tend to be more self-indulgent than gift-givers with a self-interested or a compliance-with-social-norm motive. We find that this effect is mediated by happiness and moderated by the perceived appropriateness of self-indulgence.

## **Teasing out Need for Affiliation and Need for Control in Preference for Anthropomorphized Products**

Shirley Y. Y. Cheng, Hong Kong Baptist University  
Sau Lai Lee, Hong Kong Baptist University

Prior research showed that social exclusion increases preference for anthropomorphized products. Yet, the exact motivation is unclear because social exclusion can heighten both affiliation need and control need. Using a new manipulation, we add to the literature by showing need for affiliation alone can drive preference for anthropomorphized products.

## **The Protestant Work Ethic and Its Role in Outcome Prediction Based on Cost of Means**

Yimin Cheng, Hong Kong University of Science and Technology  
Anirban Mukhopadhyay, Hong Kong University of Science and Technology  
Rom Schrift, University of Pennsylvania, USA

The Protestant Work Ethic (PWE) is one of the few concepts that spans most social sciences but has been ignored by consumer researchers. Four studies found high (vs. low) PWE consumers prefer costlier options across different types of cost, because they use costs in means to predict benefits in outcomes.

## **The Influence of Confirmatory Reasoning on Extremeness Aversion**

Yin-Hui Cheng, National Taichung University of Education, Taiwan  
Chia-Wen Hsu, National Chung Cheng University, Taiwan  
Chao-Feng Lee, National Chung Cheng University, Taiwan  
Lun-Chuan Lin, National Chung Cheng University, Taiwan

Attractive confirmation increases self-confidence, provides reassurance and reduces sense of uncertainty. This confirmatory reasoning aimed to reach a consistent and readily justifiable decision. We predict that confirmation can either enhance self-confidence or decrease the sense of uncertainty in decision making. Moreover, low self-confidence and uncertainty would result in extremeness aversion.

## **Consumer Misinformation: The Anti-Consumption of Green Products**

Pepukayi Chitakunye, University of the Witwatersrand, South Africa  
Fanny Saruchera, University of KwaZulu-Natal, South Africa  
Maxwell Phiri, University of KwaZulu-Natal, South Africa  
Amandeep Takhar-Lail, University of Bedfordshire, United Kingdom  
Evelyn Derera, University of KwaZulu-Natal, South Africa

This study contributes to an understanding of how consumer misinformation can encourage the anti-consumption of some green products. Multiple methods were used to gather data, with the intention of bringing multiple points of view to the emerging misinformation surrounding the consumption of E10 fuel.

## **Does Helping Help You Feel Good? The Answer Depends on Cultural Orientation**

Hyewon Cho, University of Illinois at Urbana-Champaign, USA  
Sharon Shavitt, University of Illinois at Urbana-Champaign, USA

Building on culturally distinct conceptualizations of helping (obligation vs. choice), this research focuses on the emotional consequences of helping others. We demonstrate that whether helping provides an emotional boost depends on cultural orientation, which determines whether people attribute helping to personal choice and, thus, to one's personal character.

## **The Moderating Effect of Temporal Distance on Partitioned vs. Combined Pricing**

Jungsil Choi, Cleveland State University, USA  
Dorcia Bolton, Cleveland State University, USA  
Kevin Flynn, Cleveland State University, USA

This study assesses the effect of the situational factor temporal distance on the attractiveness of partitioned pricing relative to combined pricing. The results suggest that partitioned pricing was more attractive than combined pricing in the distant condition because people engage in more global (vs. local) processing.

## **Does Corporate Nationality Matter for Consumer's Sense-Making of CSR? The Roles of Consumer Attribution, Cultural Orientation, and CSR Duration**

Jungsil Choi, Cleveland State University, USA  
Young Chang, University of Wisconsin - Whitewater, USA  
Myoung Gyun Jang, Sogang University, South Korea

This work deals with how consumers develop their attribution of the firm's CSR motives in terms of firm nationality and how the attribution and subsequent attitudes toward the firm are moderated by cultural orientation (collectivism and individualism).

## **Savoring and Preferences for Improving Sequences**

Charlene K. Chu, UCLA Anderson School of Management  
Suzanne B. Shu, UCLA Anderson School of Management  
Stephen A. Spiller, UCLA Anderson School of Management

This research examines the widely proposed, yet previously untested idea that savoring underlies preferences for improving sequences. By weakening preferences for improving sequences using experimental and natural manipulations of savoring, we provide support for a savoring account of preferences for improving sequences.

## **The Influence of Sharing versus Self-use on the Preference for Different Types of Promotional Offers**

Shih-Chieh Chuang, National Chung Cheng University, Taiwan  
Yin-Hui Cheng, National Taichung University Of Education, Taiwan  
Chao-Feng Lee, National Chung Cheng University, Taiwan  
Sun-Pan Chen, National Chung Cheng University, Taiwan

Much of the existing work on preference in promotional offers focuses on self-use purchases rather than those made to share with others. Three studies demonstrate that consumers are likely to choose a price discount for self-use, but a significant preference for a bonus pack when purchasing to share with others.

## **Spirituality on Creative Cognition: The Roles of Feelings of Freedom and Unconscious Thought**

Eunyoung Chun, Hongik University  
Nara Youn, Hongik University

This research empirically examines how spirituality affects creativity and unveils the underlying cognitive mechanism. The results from three experiments verify that spirituality enhances creativity and this effect is mediated by feelings of freedom. Spirituality boosts creativity by inducing feelings of freedom especially when people are engaged with unconscious thought.

## **The Role of Fluency on Mental Accounting**

Jen-Chieh Chung, Chaoyang University of Technology, Taiwan  
Wei-Ting Hsu, Chaoyang University of Technology, Taiwan  
Chia-Jung Chang, National Taiwan Normal University, Taiwan  
Ning-Hsin Hsieh, Chaoyang University of Technology, Taiwan

Study 1 demonstrates that consumers may make additional purchasing decisions more easily when they are under the conditions of high fluency. Study 2 shows that the strength of the fluency is greater than the effect of hedonic avoidance. The mediating role of affect aroused by fluency was also supported.

## **Developing Versus Maximizing Expertise: The Impact of Implicit Theories on Consumers' Knowledge Preferences**

Joshua J. Clarkson, University of Cincinnati, USA  
Ruth Pogacar, University of Cincinnati, USA  
Mary C. Murphy, Indiana University, USA

Three experiments document the differential knowledge preferences of incremental and entity theorists. Specifically, incremental theorists prefer knowledge breadth to develop their learning potential, whereas entity theorists prefer knowledge depth to maximize their performance potential. Implications for marketing strategies, including segmentation and positioning based on implicit theories, are discussed.

## **Don't I Know You? Self-disclosure Increases as Nearness in Proximity Becomes Salient**

Paul Connell, SUNY Stony Brook, USA  
Stacey Finkelstein, Baruch College, USA  
Lauren Mayor, Baruch College, CUNY Graduate Center, USA

We propose that increased salience of physical proximity activates concepts related to close interpersonal relationships and increases disclosure of sensitive information. This effect is driven by cues for physical distance which impact disclosure rates because cues for distance act as a conceptual metaphor that activate constructs related to interpersonal relationships.

## **A Weighty Problem: An Exploration of the Role Identity and Status Play in Weight Loss Effort, Success and Failure**

Denise Conroy, The University of Auckland New Zealand  
Christina Lee, Monash University Kuala Lumpur  
Rachel Wolfgramm, The University of Auckland New Zealand

Obesity is now a pandemic which clearly needs to be arrested to ensure a more sustainable future for all nations. We explore the role identity and status play in weight loss effort, success, and failure; and suggest new ways of promoting sustained weight loss and maintenance.

## **The Effectiveness of Advertising Disclaimers on Digitally Enhanced Images for Men and Women: The Role of Emotional Granularity**

Erlinde Cornelis, San Diego State University  
Paula Peter, San Diego State, USA

In three experiments, this research tests the effectiveness of advertising disclaimers concerning digitally enhanced images on self-satisfaction and mood. More specifically, it adds to previous literature by considering the effects of advertising disclaimers on both genders, and by establishing emotional granularity as an important moderator of advertising disclaimers' effects.

## **When and Why You Should Leave Your Romantic Partner at Home When Going Shopping**

Maryse Côté-Hamel, Concordia University, Canada  
Onur H. Bodur, Concordia University, Canada  
Bianca Grohmann, Concordia University, Canada

Our results demonstrate that shopping companions affect the likelihood of making impulsive purchases through impulsive urges. However, their effect varies depending on the type of companions (romantic partner, friends or family members) and is moderated by the number of companions, shopping motives (experiential vs. instrumental) and susceptibility to informational influence.

## **On Pachelbel and Prices: How Musical Time Signature and Tonal Pattern Impacts Number Predilection**

Keith Coulter, Clark University, USA  
Rajneesh Suri, Drexel University, USA

In this paper we examine how characteristics of the music accompanying an advertisement impact consumers' liking of a product price contained in that advertisement. In the context of four studies, we find that consumers prefer prices that correspond to: a) meter or time signature, and b) tonal pitch pattern (melody).

## **Online Frustration: A Threat to Efficient Communication**

David Crete, University of Quebec, Trois-Rivieres

Can all organizations ensure that their Web site is frustration free? The purpose of this paper is to explore antecedents and effects of on-line frustration. A multimethod approach is presented. The current investigation showed that frustration has an impact. A frustrated consumer is prone to judge the site more severely.

## **The Choice Effect – How a Free Alternative Influences Consumers' Responses to Free-to-Fee Switches**

Gerrit Cziehso, TU Dortmund University, Germany  
Tobias Schaefers, TU Dortmund University, Germany

Unexpected forced free-to-fee switches often negatively influence consumers' attitudes and usage. Our study reveals that additionally offering a reduced ("light") alternative for free attenuates these negative consequences. Among highly involved consumers, this choice even increases the intention to use the fee-based alternative.

## **Extending Product Lines to Increase Sales of Original Products**

Brittney Dalton, Washington University, USA  
Steve Nowlis, Washington University, USA

Line extensions are often considered a threat to preexisting products in the line, as their introduction may cannibalize sales of the original products. In four studies, we demonstrate that introducing highly innovative items to a line actually increases purchase incidence of the original products, reversing the effect of cannibalization.



## **Integrated Marketing Communications (IMC) as a Critical Component to Building Customer Based Brand Equity**

Belinda Dapi, Durban University of Technology, South Africa  
Pepukayi Chitakunye, University of the Witwatersrand, South Africa  
Maxwell Phiri, University of KwaZulu-Natal, South Africa  
Amandeep Takhar-Lail, University of Bedfordshire, United Kingdom

This paper contributes to an understanding of customer based brand equity. Drawing insights from a survey of the Coca-Cola brand in South Africa, our results reveal that the majority of study participants did not have the attitudinal attachment, active involvement and sense of community that are necessary for brand resonance.

## **The Unspectacular Irish Pub: The Themed Retail Environment as a Mise-en-Scene**

Aron Darmody, Suffolk University, Boston, USA

I introduce the notion of the mise-en-scene as a means to analyze subtle, allusive and non-spectacular themed retail environments. Through a three-year ethnographic study of five Irish themed pubs I show how a mise-en-scene is created by 1) "Using What we Have;" 2) "Whispered Stories;" 3) Leveraging Consumer Cultural Resources.

## **Consumer Neuroscience: Testing Effectual Advertising Using Dense-Array Electroencephalography**

Terry Daugherty, University of Akron, USA  
Ernest Hoffman, University of Akron, USA  
Kathleen Kennedy, Suarez Applied Marketing Research Laboratories, USA  
Megan Nolan, University of Akron

Consumer neuroscience methodologies are typically positioned as valuable to advertising firms during a pre-campaign evaluation phase, where neurological responses are used to predict ad effectiveness. We propose that an equally valuable application consists of diagnosing advertising post-campaign and support this claim with preliminary results from a dense-array EEG experiment.

## **Consumer Patternicity: Investigating the Influence of Abstract Mindsets on Personal Need for Structure**

Alexander Davidson, Concordia University, Canada  
Michel Laroche, Concordia University, Canada

Patternicity is a tendency to recognize patterns, even when none exist. Abstract as opposed to concrete mindsets are found to reveal false perceptions about a product's performance pattern as their personal need for structure increases. This research is the first to explore patternicity through the lens of consumer decision-making.

## **Goal Commitment and Consistency in Avoiding Temptations**

Svetlana Davis, Queens University, Canada

This study proposes that under approach and avoidance motivation, commitment to pursue a goal and avoid temptations are relatively the same at different stages of goal attainment. However, when participants experience goal regress, those primed with avoidance/approach motivation are significantly more likely to pursue the goal/temptations.

## **Schadenfreude in Sport: The Emotional Consequences of Affiliating Oneself With a Sport Team**

Elizabeth Delia, Department of Sport Management, Florida State University, United States

Numerous scholars have examined BIRGing in regard to sport, however they have not endeavored to understand the influence of such behaviors on individuals' well-being. The purpose of this study is to understand how fans' emotions are influenced by the success of a sport team that they publicly affiliate themselves with.

## **Get Excited to Pay More! The Role of Arousal in Reference Price Selection**

Alexander DePaoli, Stanford University, USA  
Jonathan Levav, Stanford University, USA

We propose that consumers in a state of high affective arousal will be more likely to rely on environmental rather than internal cues to price. Using a novel approach to evaluating consumers' selection of reference prices, we demonstrate that this is true vis-à-vis arousal inhibiting the use of memory-based information.

## **Brand Mythology and Communication of a Hero Identity: A Case Study of Player's Cigarette Marketing**

Timothy Dewhirst, University of Guelph, Canada

In the spirit of transformative consumer research that aims to inform policy and improve well-being, this study provides an interpretive analysis of the tobacco industry's consumer research to examine the communication of a hero identity for Player's, which is Canada's leading cigarette brand, and raises a number of ethical issues.

## **The Stereotype Content Model Applied to Country-of-Origin Stereotypes: Model Validation and Prediction of Purchase Intentions**

Adamantios Diamantopoulos, University of Vienna, Austria  
Arnd Florack, University of Vienna, Austria  
Benjamin Serfas, University of Vienna, Austria

The present study validates the Stereotype Content Model as a measurement model in a country-of-origin research context by means of structural equation modeling. Further, we applied the Stereotype Content Model to predict consumers' brand evaluations and purchase intentions by perceived warmth and competence of the country the brand originates from.

## **To Wait or Not? Why Creating Curiosity May Increase Patience**

Claudiu Dimofte, San Diego State University, USA  
Kyra Wiggin, University of Washington, USA  
Richard Yalch, University of Washington, USA

Waiting is difficult and curious individuals are generally thought to be inherently impatient. Two experiments suggest that curiosity causes individuals to focus on reward benefits more than delay costs. Individuals whose curiosity was unsatisfied evidenced greater patience than non-curious or curiosity-satisfied individuals when reward was delayed.

## **Resist His Temptation vs. Reject His Generosity: Luxury Gifts in Romantic Relationships**

Shibiao Ding, Ghent University, Belgium  
Mario Pandelaere, Ghent University, Belgium  
Hendrik Slabbinck, Ghent University, Belgium

Gift-giving in romantic relationships is an important topic in consumer research, but surprisingly, women's attitude towards luxury gifts is still not well understood. We explore two framings of luxury, temptation versus generosity, and highlight the conditions under which those framings result in accepting or rejecting luxury gifts.

## **Naïve Theories of Monetary and Nonmonetary Prices for Mobile Applications**

John Dinsmore, Wright State University, USA  
Riley Dugan, University of Dayton, USA  
Scott Wright, Providence College, USA

The following study investigates how naïve pricing theories for monetary and non monetary prices, within the domain of mobile applications, affects perceived product novelty and trial intentions. We further examine the moderating effects of the value consumers place on money as a means of success.

## **Pralines From a Smaller Gift Box Taste Better**

Michael Dorn, University of Bern, Switzerland  
Claude Messner, University of Bern, Switzerland

This study shows that taste ratings of repeatedly chosen pralines decrease more when the gift box is large compared to small. Within their first choices consumers select the most preferred praline less often from the large assortment. These results are discussed in the light of variety seeking and dysfunctional choice.

## **Is Persuasive Power of Typography Real? The Influence of Attitude Toward the Typography on Advertising Evaluation**

Olivier Droulers, University of Rennes 1 France  
Jennifer Amar, University of South Brittany France

In consumer psychology, recent academic works suggest that the way typography affects the reader can play an important role. However little is known about the influence of typography on persuasion in an advertising context. In this research we investigate the role of "attitude toward the typography" on advertising evaluation.

## **The Weibo of Desire: Accelerating Consumerism in the Social Media Era**

Jingyi Duan, University of Rhode Island

This study explores the role of Weibo, the Chinese Twitter, in constructing consumers' desires and promoting consumerism. Content analysis is applied to over 250 consumption related Weibo postings. Findings show that through idealizing and fantasizing, consumers construct and project their desires by social media which significantly boosts consumerism.

## **Two Types of Negativity Biases in Comparative Evaluations**

Selin Erguncu, Koc University  
Serdar Sayman, Koc University

We examine the effect of attribute framing on product comparisons and find that perceived difference between products changes with framing. We first identify two types of attribute frames (valence and complementary framing), which lead to two different negativity biases: negativity potency and negativity dominance. In line with our theorizing, our experiments show that, in 'valence framing', evaluations of two products differ more when attribute is negatively (vs. positively) framed. For 'complementary framing', however, we observe the opposite: perceived difference is larger in positive (vs. negative) frame. Our results also indicate that negative information actually goes through two diverse evaluation processes.

## **Challenging The Superiority of Phonological Fluency: The Role of Product Context and Competing Fluency in Brand Name Recognition**

Antonia Erz, Copenhagen Business School  
Bo T. Christensen, Copenhagen Business School

The results of three laboratory experiments contribute to our understanding of effects of phonological fluency on correct recognition and recall of novel brand names, being relevant to the areas of information processing, memory, and branding. Employing the full range of fluency, the results offer a fine-grained idea of fluency effects.

## **Ethical Plates are Smaller Plates**

Hajar Fatemi, McGill University, Canada  
Laurette Dube, McGill University, Canada

Contrary to existing belief that healthy food is less filling, we propose that presenting food as an ethical product will make it to be perceived as both healthier and more filling. In particular, our results show that individuals perceive to need fewer servings of a product with CSR attribute to make them feel full compared to food with no CSR attribute.

## **Sunk Search Costs and the Perceived Value of Information**

Nathan Fong, Temple University, USA  
SangSuk Yoon, Temple University, USA

How does the cost of acquiring information affect the degree to which a decision maker relies on the associated information? We demonstrate the existence of a sunk search cost effect, by which decision makers put more weight on costly information, even when the costs are transparently arbitrary.

## **Negative Information and Self-Referencing: Reviving the Sleeper Effect**

Adrienne Foos, University of Manchester, United Kingdom  
Kathleen Keeling, University of Manchester, United Kingdom  
Debbie Isobel Keeling, Loughboroug University, United Kingdom

This research examines the potential for negative information and self-referencing to influence persuasion. It is predicted that the order of positive/negative message presentation and self-referencing impact the sleeper effect. The first experiment supports the significance of ordering, and the second suggests the importance of further research of self structures.

## **When We See the Forest: Value-for-Money Contrast in Cross Category Referencing**

Weixing Ford, University of Houston, USA  
Parthasarathy Krishnamurthy, University of Houston, USA

This research explores whether thinking about something from a different and unrelated product category, i.e. cross category referencing (CCR), can influence consumers' decision-making. A mediation analysis shows that the value for money contrast between the focal product and the cross category referent mediated the observed CCR impact on choice.

## **Treasure Hunting in a Mess! The Positive Un-categorization Effect on Choice Evaluation**

Leilei Gao, The Chinese University of Hong Kong, China  
Tao Tao, The Chinese University of Hong Kong, China

This research identifies the treasure hunting effect induced by un-categorized choice sets. In two studies, we demonstrate that un-categorized choice sets would increase the enjoyment of shopping experience, which in turn increase choice evaluation. Further, ideal point availability moderates the valence of this un-categorization effect.

## **Reinventing the Wheel: An Investigation of Social Equity in Bike Share Programs**

Kristin Gavin, Villanova University, USA  
Aronte Bennett, Villanova University, USA  
Anna Katena, Drexel University

Often subsidized with public funds, it is expected that bike share programs be socially equitable; this expectation has yet to be examined empirically. We suggest social equity indicators that can be used to evaluate bike share programs. The indicators are then applied to assess programs in 3 U.S. cities.

## **A Model of Source Similarity Impact on Purchase Intention for Online Reviews**

Charles Gengler, American University of Sharjah  
Daniel Howard, Southern Methodist University, USA  
Liwei He, Baruch College, USA

Online reviews are a major form of consumer-to-consumer communication. We develop and demonstrate a model of how perceived similarity with a consumer posting a review online will drive the persuasiveness of that review. The model is tested using the names of reviewers as stimulus to manipulate similarity.

## **Conspicuous Consumption and Perceived Risk**

Matteo Giorda, ESCP Europe - Paris Campus  
Marcelo Vinhal Nepomuceno, ESCP Europe - Paris Campus  
Minas Kastanakis, ESCP Europe - London Campus

This paper investigates the relationship between conspicuous consumption and perceived risk. The study explores whether perceived risk increases when individuals hear negative comments from an unknown source. The findings demonstrate that the Veblen and Bandwagon dimensions of conspicuous consumption relate strongly with social risk, though in quite opposite fashion.

## **Sustainability Marketing Strategies: How Self-Efficacy and Controllability Can Stimulate Pro-Environmental Behaviors for Individuals**

Marilyn Giroux, Concordia University, Canada  
Frank Pons, Université Laval, Canada  
Lionel Maltese, Euromed Management, France

The authors investigate what motivates consumers to express sustainable goals. The results demonstrate that pro-environmental attitude directly impacted such low-cost behaviors as turning off lights. However, the authors find that perceived social support, self-identity and perceptions of control positively influence more difficult behaviors, such as buying products with less packaging.

## **Taste the Waste – Biography of Food Items**

Johanna Gollnhofer, University of St. Gallen, Switzerland

The activity of dumpster diving prolongs the life span of food items. By developing biographies of objects and tying those to biographies of humans, the paper contributes by revealing important insights into the shifting value and meanings of marketplace resources, and the roles certain institutions and social norms can play in those biographies.

## **Should Strong Brands Invest in Ecolabels? An Accessibility-Diagnosticity Account of Perceptions of Brand Sustainability**

Dilney Gonçalves, IE University - IE Business School, Spain  
Patricia Rossi, NEOMA Business School, France  
Márcia Herter, NEOMA Business School, France  
Diego Costa Pinto, ESPM Business School, France

This research shows that brand strength (“strong” vs. “weak”) change the impact of ecolabels on brand sustainability. The findings indicate that not all brands benefit equally from sustainability efforts. Specifically, weak brands using ecolabels gain in perceptions of sustainability and purchase intentions, whereas ecolabels have no effect on strong brands.

## **How Pinning Nordstorm Means Buying Macys: The Relationship of Social Media, Self-Concept, and Consumption Behavior**

Lauren Grewal, University of Pittsburgh, USA  
Andrew Stephen, University of Pittsburgh, USA  
Nicole Verrochi Coleman, University of Pittsburgh, USA

Social media provides an easy, accessible, outlet for self-expression. Two studies compare lay beliefs and actual behavior of individuals portraying themselves in social media, and demonstrates that the more “ideally” we portray ourselves, the less likely we are to endorse luxury goods—in opposition to both expectations and prior research.

## **Consumers' Perceptions of Celebrity Values**

Eda Gurel-Atay, Independent Scholar, USA  
Lynn Kahle, Lundquist College of Business, University of Oregon, USA

Congruity between celebrity and product values is essential for effective endorsements. However, to select a celebrity who has congruent values with their products, companies need to know which values are associated with which celebrities. This study seeks to understand consumers' perceptions of celebrity values and the implications of these perceptions.

## **Less Choosing, More Doing! Desire For Choice is Eliminated by Procedural Control in the Consumption Process**

Linda Hagen, Ross School of Business, University of Michigan, USA

Abundant literature reports a preference for large over small assortments. This paper reveals that this preference for more choice is driven by a desire for control, and as a result, granting consumers procedural control (through co-production) eliminates the lure of large assortments. This interactive effect is mediated by perceived control.

## **Knowing What You Need When You Need It Most: The Impact of Relative Progress Feedback during the Middle Stage of Goal Pursuit**

Mariam Hambarchyan, Stanford University, USA  
Szu-chi Huang, Stanford University, USA

People mis-predicted that relative (vs. objective) progress feedback would be less helpful/valuable during the middle stage of goal pursuit (vs. initial or advanced stages), but conversely found it to be the most motivating in the middle stage. We found supportive evidence in both individual performance goal and prosocial goal contexts.

## **The Healthy = Expensive Intuition: Why Perceptions that Healthy Eating Costs More Can Be So Costly**

Kelly Haws, Vanderbilt University, USA  
Kevin Sample, University of Georgia, USA  
Rebecca Walker Reczek, The Ohio State University, USA

A variety of considerations impact food decision making. We examine consumer intuitions about the relationship between healthiness and the price of food items, demonstrating the nature, strength, and implications of the healthy = expensive intuition in a series of studies.

## **The Effect of Situational Factors on Cross-Cultural Consumer Risk-Taking**

Hosei Hemat, University of Sydney Business School, University of Sydney, Australia  
Ulku Yuksel, University of Sydney Business School, University of Sydney, Australia

Using experiments, we investigate cultural differences in consumer risk-taking to identify previously unknown cultural paradoxes and boundary conditions. We adopt a context dependent view of the effect of culture on risk-taking exploring different different risk types and decision-maker perspectives as moderators.

## **When do Sensory Stimuli Affect Brand Extension Evaluations?**

Hosei Hemat, University of Sydney Business School, University of Sydney, Australia  
Ulku Yuksel, University of Sydney Business School, University of Sydney, Australia

Despite the common belief that sensory stimuli matter, little research has explored how such specific shapes can affect consumers' evaluations of brand extension fit. Using experiments, this research shows that specific geometric shapes can affect consumer perceptions for dissimilar brand extensions.

## **Consumer Participation in Cause-Related Marketing**

Katharine Howie, University of Mississippi, USA  
Lifeng Yang, University of Mississippi, USA

This paper explores the effects of cause-related marketing campaigns that require participation and effort from the consumer, a campaign element that has received little research attention. We examine the effects of effort on perceived cause importance, perceived personal role in helping the cause, purchase intentions and participation intentions.

## **Disgust and Defense: How Emotions Towards Morally Dirty Money Influence Spending Behavior**

Bingyan Hu, Fudan University, China  
Liyin Jin, Fudan University, China

Understanding how consumers spending morally tainted money is important because their choices ultimately influence their happiness and well-being. This research find that morally disgust will lead people less willing to use morally dirty money to buy products which are highly attached with themselves,i.e., to buy a backpack seen as the accompaniment of one's life. .

## **If You May Remember It, I Can Forget It: Social Identity Preservation by Motivated Forgetting**

Li Huang, University of South Carolina, USA  
Priyali Rajagopal, University of South Carolina, USA

How are consumer memories about consumption episodes affected when these experiences are shared with others? We suggest that consumers preserve their social identities either by remembering identity-linked memories or by transacting such memories to a collective memory system (sharing with close others), thereby resulting in motivated forgetting.

## **Politically Charged: What is the Effect of a Brand Taking a Decisive Political Stance?**

Christopher Hydock, Georgetown University, USA  
Anne Wilson, Georgetown University, USA

Beyond expressing their sentiment, consumers often vow to take action following brands' announcements of a political stance. Four studies document the effect of taking a political stance on consumer attitude toward a business, and willingness to sacrifice monetary value. Attitude was mediated by perceived extremeness of a stance and willingness to sacrifice value was moderated by the extent of the sacrifice.

## **The Effect of Overlapping Price Ranges on Price Perception**

Saravana Jaikumar, Indian Institute of Management, Ahmedabad, India

The author extends the range theory by examining the effect of multiple price ranges with overlapping anchors on consumer price perception. Three studies provide empirical evidence for the hypothesis that the psychological scale and evoked range for a price range are shortened in the presence of overlapping anchors.

## **Ordering Effect of Alphabets and Numbers in Alphanumeric Brand Names**

Saravana Jaikumar, Indian Institute of Management, Ahmedabad, India  
Sanjeev Tripathi, Indian Institute of Management, Ahmedabad, India

The authors explore the differences in consumer perception of alphanumeric brand names when the alphanumeric part begins with a number as opposed to an alphabet. Three studies provide evidence that while traditional alphabet-first names provide a clear sense of hierarchy, number-first names can yield higher premiums.

## **U.S. Multicultural Marketing: Towards an Ethnic Identity Scale**

J.P. James, Rutgers University, USA

Segmentation by ethnic identity presents an emic and subjective method to examine U.S. multicultural consumer behavior relative to targeted marketing communications. This study proposes a scale of ethnic identity - inspired by Hofstede's Dimension of Culture but draws on Self-Identity Theory, tested against the Theories of Intercultural Accommodation and Social Class.

## **Surprise! Purchase Type Determines Whether Expectation Disconfirmation is Fun or Upsetting.**

Lily Jampol, Cornell University, USA  
Tom Gilovich, Cornell University, USA

We argue through 5 different studies, that surprises can be fun or upsetting depending on the purchase context. Specifically, we argue that purchase 'surprises' (deviations from expectations) are better tolerated, interpreted more positively, and actually preferred by consumers in the context of experiential purchases rather than material purchases.

## **Why "Reward Both" (vs. "Reward Me") Referral Schemes are More Likely to Succeed for Experiential vs. Material Purchases**

Hyunkyu (Sean) Jang, University of Texas at Austin, USA  
Raj Raghunathan, University of Texas at Austin, USA  
Julie Irwin, University of Texas at Austin, USA

Purchase type (material vs. experiential) moderates effects of reward schemes (Reward Me: reward only recommenders; Reward Both: rewards recommender and recipient) on the referral likelihood. For material purchases, referral likelihood does not differ between the two schemes; for experiential purchase, referral likelihood is greater under Reward Both (vs. Reward Me).

## **The Role of Brand Prominence on Consumer Perceptions of Responsible Luxury**

Catherine Janssen, IESEG School of Management, France  
Joëlle Vanhamme, EDHEC Business School, France

Recent literature suggests that consumers do not necessarily perceive luxury and CSR as compatible. This research investigates the effect of brand prominence on consumers' attitudes toward responsible luxury brands and evidences a dual mediation process through consumers' CSR beliefs and perceived congruity between consumers' personality and that of the brand.

## **The Ron Burgundy Effect: Exploring Differences Between Actors and Characters on Endorsement Effectiveness**

Jennifer Jeffrey, Western University, Canada  
Matthew Thomson, Western University, Canada  
Allison R. Johnson, Western University, Canada

Advertisers have revived the practice of using fictional characters as product endorsers. In this research we argue that consumers feel more intimately connected to their favoured characters than they do favoured actors, which results in less updating when presented with new information. Potential benefits of character endorsement are discussed.

## **The Influence of Category Frame on Budgeting**

Miaolei Jia, National University of Singapore, Singapore  
Xiuping Li, National University of Singapore, Singapore  
Leonard Lee, National University of Singapore

The budgets consumers set for consumption domains are important to their decision. In this research we find that if consumers set budgets directly for an overall category, the budget will be smaller than if they budget for subcategories first. The moderator such as category complexity is also tested.



## **Rich and Square: Effects of Financial Resources on Product Shape Preference**

Yuwei Jiang, Hong Kong Polytechnic University  
Lei Su, Hong Kong Baptist University  
Rui (Juliet) Zhu, Cheung Kong Graduation School of Business

Three experiments showed that participants who perceived themselves having more financial resources exhibit higher preferences towards angular-shaped products, compared with participants with less perceived financial resources. This effect is mediated by a heightened desire for competence among more resourceful participants, and moderated by product usage occasion.

## **Throw It All Away? The Effects of Activated Self-Change Concept on Product Disposal**

Yuwei Jiang, Hong Kong Polytechnic University  
Leilei Gao, The Chinese University of Hong Kong

We show that consumers are more likely to dispose their current possessions when the concept of self-change is made salient. This is because thinking about self-changes elicits a action tendency, which in turn results in more product disposal. This effect is eliminated when the disposal decision is made for others.

## **Pay if You Miss: a Self-Control Mechanism**

Yun Jie, University of California Riverside, USA  
Boris Maciejovsky, University of California Riverside, USA

We propose a new self-control mechanism, “pay if you miss”, in which participants enjoy services/goods for free as long as they meet their pre-committed goals. We identify the main drivers of the appeal of the “pay if you miss” model and discuss the underlying psychological mechanisms.

## **Sounds Convey Metaphorical Meaning of Environmentally Friendly Products**

Pradnya Joshi, Michigan State University, USA  
Ann Kronrod, Michigan State University, USA  
Tina Lowrey, HEC Paris, France

Linking research in sound symbolism and metaphor cognition, the current research suggests that silent consonants in brand names (e.g. Tichapee) convey environmental attributes of brands via associations with metaphorical attributes such as trustworthiness or purity.

## **Dichotomizing Data Changes Perceptions of Covariation**

Schiro Julie, University of Colorado, USA  
de Langhe Bart, University of Colorado, USA  
Fernbach Philip M., University of Colorado, USA

Technology has made it increasingly easy for managers to collect and visualize data. Few papers examine the effect of graphical representation on covariation assessment. We show that when data is presented in a continuous format, individuals judge covariation by focusing on certain graphical regions over others.

## **Malicious Desire towards the Envied Product: Effect of Outcome-focused Mindset on Malicious Envy**

Sunghee Jun, Seoul National University, Korea  
Y. Jin Youn, Northwestern University, USA  
Kiwon Park, Seoul National University, Korea

The present research examines that consumers want to possess not only benignly-envied products but also maliciously-envied products. Furthermore, when people focus on outcome, malicious envy might result in higher ‘envy premium’ (with regard to both WTP and choice) than benign envy in certain situations.

## **We are Where We Live: The Country-Image Congruency Effect on Brand Attitude**

Pang Jun, Department of Marketing School of Business, Renmin University of China  
Sheng Bi, Department of Marketing School of Business, Renmin University of China

This research demonstrates a country-image congruency effect on brand attitude. We show that the congruency between brand image and country-of-origin image increases conceptual processing fluency, which leads to favorable brand attitude. In addition, this effect is more likely to occur for consumers with a holistic than an analytic thinking style.

## **Celebrities Go Sustainable! The Effects of Source Credibility and Ethicality Fit on Brand Perception, Attitude, and Purchase Intention**

Jiyun Kang, Texas State University, San Marcos  
Woo Jin Choi, University of Seoul

Although these days sustainable products are more popular, sales remain low. We investigate how to select celebrities who will effectively market these sustainable products. The results show that source trustworthiness and source ethicality fit affect brand credibility and brand ethicality and in turn, positively influence consumer attitudes toward sustainable products.

## **Differential Reliance on Superstitions Across Two Distinct Implicit Self Theories**

Jungyun Kang, Sungkyunkwan University, Korea  
Ji Kyung Park, University of Delaware, USA  
Hakkyun Kim, Sungkyunkwan University, Korea

This research shows that entity theorists are more likely to assume a causal link between superstitious cues and outcomes, compared to incremental theorists. We find that such different tendencies in attributing outcomes to superstitions are due to the perceived controllability of situations, which differs between entity and incremental theorists.

## **I am not Eligible to Control my Boyfriend's Fashion? The Power of Fashionability**

Jinwon Kang, Korea University, Republic of Korea  
Young Shin Sung, Korea University, Republic of Korea  
Jungsuk Kang, Korea University, Republic of Korea  
Bohye Park, Korea University, Republic of Korea  
Hayeon Park, Korea University, Republic of Korea

The purpose of this study is to examine whether (also how) single female's perceived legitimacy and fashionability affect the control over their romantic partners through interfering their partners' fashion items (i.e., fashion control). The result indicated that perceived levels of the two had an interaction effect on the fashion control.

## **Bigger Than Life: How Power Biases Product Size Perception**

Jessica Keech, Temple University, USA  
Maureen Morrin, Temple University, USA

A series of experiments shows that luxury brands are perceived to be physically larger after another luxury product has been recently consumed and when the consumer's need for power is high.

## **Do You See the Imitation? Examining the Impact of Psychological Distance on Shopping Ease**

Katie Kelting, University of Arkansas, USA  
Christopher Berry, University of Arkansas, USA

Copy-cat private-label brands (CCPLBs) are criticized for confusing consumers. However, drawing from processing fluency and construal level theory, we find that when a category contains CCPLBs, consumers who shop the category with an abstract (versus concrete) mental construal experience shopping ease.

## **Tilt Your Head and You'll See Why: The Influence of Deliberating Bodily Movements on Consumer Resolution of Conflicting Information**

Hakkyun Kim, Sungkyunkwan University, Korea  
Jongsei Yi, Seoul National University, Korea  
Jungyun Kang, Sungkyunkwan University, Korea

Experiments show that participants with their head tilted become more favorable toward companies with conflicting ad messages or companies engaging in a controversial business practice. A mediational analysis confirms that tilting one's head induces deliberation and cognitive flexibility, thereby rendering one supportive of firms making contradictory arguments and running sweatshops.

## **Stock in Motion**

Junghan Kim, State University of New York at Buffalo, USA  
Arun Lakshmanan, State University of New York at Buffalo, USA

We propose that dynamic data presentations can bias how consumers perceive risk and value. Specifically, we demonstrate that a dynamic (vs. static) presentation of a stock price trajectory enhances risk and value perceptions of a stock. This effect might be driven by perceived movement from dynamic presentations.

## **Consumer Evaluations of Hybrid Products: The Role of Active Goals**

Moon-Yong Kim, Hankuk University of Foreign Studies, South Korea  
Sehoon Park, Sogang University, South Korea

This research examines whether (1) the active goal relevant to the hybrid product can influence consumers' inferences of a hybrid product generating multiple-category inference; and (2) the active goal can increase the preference for the hybrid product.

## **Two Different Paths to Savings: How Money Views and Self-Construals Influence Saving Behavior**

Min Jung Kim, Texas A&M University, USA  
Haipeng (Allan) Chen, Texas A&M University, USA

We propose and find that interdependent (vs. independent) individuals tend to save more when they view money as a means (vs. an end in itself) since both their money view and self-construal lead them to take the vigilance (vs. the eager) strategy in financial decision making.

## **Resistance is Frugal: When Ignoring Nonconscious Goals Affects Psychological Ownership of Investment Decisions**

Colleen Kirk, Mount Saint Mary College (New York), USA  
Bernard McSherry, New Jersey City University, USA  
Scott Swain, Clemson University, USA

Results of two experiments suggest that feelings of psychological ownership are greater when investment choices are incongruent with nonconsciously-activated goals, and that psychological ownership enhances subsequent word-of-mouth intentions. However, instructing investors to make decisions in the "right way" (versus instructing them to make the "best choices") attenuates the effect.

## **Putting the Fun in Functionality: Appropriation, Ownership, and Pride**

Colleen Kirk, Mount Saint Mary College (New York), USA  
Scott Swain, Clemson University, USA  
James Gaskin, Brigham Young University, USA

We propose that authentic pride mediates the relationship between consumer technology appropriation and psychological ownership, while hubristic pride strengthens the effect of psychological ownership on economic valuation and word-of-mouth. We further examine consumption context (public versus private) and situation strength (strong versus weak behavioral constraints) as moderators.

## **Acculturation Experiences of Turkish Immigrants in Netherlands**

Hatice Kizgin, PhD student, the Netherlands  
Andrew Robson, Newcastle Business School, Northumbria University  
Ahmad Jamal, Cardiff Business School, Cardiff University  
Nigel Coates, Newcastle Business School, Northumbria University

Immigrants' consumer behaviour and their generational acculturation trends have increasing importance for marketers. There is value in assessing mature immigrant communities outside the USA where such research is established. This study extends this work into the Non-Western Turkish community in the Netherlands, assessing cultural and consumer values and behaviours.

## **The Nordic Street Food Evolution: One Food Truck at a Time**

Marcus Klasson, Lund University, Sweden

How do markets change? Adding insights to market formation theory, initial findings from a participant ethnography in the Nordic street food movement suggest that market systems evolves incrementally in a co-produced coalition with consumers, firms/brands, media and state.

## **“I Want to Buy It” Does Not Mean “I Want to Use It”: Revisiting The Effect of Status on Early Adoption Intention of New Products And Brands**

Kuan-Chou Ko, University of Illinois at Chicago, USA

Our research purpose is to investigate how high status consumers evaluate new products. This research combines social identity theory and regulatory focus theory to explain why high status (vs. low status) consumers have greater new product purchase than use intentions in some cases, and under which conditions their use intentions are increased.

## **Beyond Giving Product Advice: Exploring Credibility Mechanisms of Technology Discourse in Electronic Word of Mouth Communication**

Benjamin Koeck, PhD Candidate, University of Edinburgh Business School, Scotland, UK  
David Marshall, Professor in Marketing, University of Edinburgh Business School, Scotland, UK

This paper looks at how “Tech-Bloggers” promote and build their reputation within their blogs and SNS as part of eWOM by examining their communication process. Commitment as part of co-shaping and co-customization of channels and messages has been found as a key factor in establishing a presence among their audience.

## **Perceived Store Brand's Trustworthiness as Signals During Consumers' Decision-Making: An Experimental Investigation**

Isabella Kopton, Zeppelin University, Germany  
Susanne Beck, Zeppelin University, Germany  
Inga Wobker, Zeppelin University, Germany  
Peter Kenning, Zeppelin University, Germany

Today, consumers are exposed to an increasing amount of products and brands. The brands-as-signals-theory suggests that strong brands can reduce uncertainty arising from this decision complexity. Our results contribute to the understanding of this phenomenon by showing that store brand's perceived trustworthiness also serves as uncertainty-reducing signal during consumer's decision-making.

## **Putting Environmental Awareness into Consumer Attitudes and Behavior**

Umut Kubat, Koç University  
Zeynep Gurhan Canli, Koç University

We investigated the role of identity, specifically global-local identity in different types of energy saving behavior (curtailment or investment). We also examined the mediating roles of subjective and personal norms on the relations between global (local identity) and energy saving types.

## **Prosocial Co-Creation: How Cause-Related Marketing with Choice Strengthens Consumer-Brand Relationships**

Alexander J. Kull, University of South Florida, USA  
Timothy B. Heath, University of South Florida, USA

Letting consumers choose the cause in cause-related marketing strengthens consumer-brand relationships, especially with unrestricted (choose any cause) rather than restricted (select from a list) choice. The effects are mediated by a consumer empowerment to engagement pathway but can backfire for disliked brands. Increasing the number of cause options neither helps nor hurts.

## **The Asymmetric Effects of Communicating Experiential Brand Benefits**

Alexander J. Kull, University of South Florida, USA  
Marisabel Romero, University of South Florida, USA

Three studies show that experiential claims, compared to functional claims, for utilitarian (hedonic) products favorably influence consumer perceptions of (feelings of connection to) the brand. Preliminary process evidence suggests that these effects are driven by experiential claims for utilitarian (hedonic) products eliciting primarily object-centered (self-centered) consumer engagement with the brand.

## **Perspective Taking and Affective Responses: The Effect of Sympathy and Empathy on Post-Tragedy Attitude**

Canice M. C. Kwan, The Chinese University of Hong Kong  
Robert S. Wyer, The Chinese University of Hong Kong

This paper probes into three perspectives of understanding a tragedy – the victims, the other party involved and a disinterested observer. We investigated their effect on affective reactions, showing that taking the perspective of either victims or involved observers elicits intense empathy, but only the latter one leads to high sympathy.

## **Time-Space Association: How Spatial Constraint Affects Temporal Perception and Decision**

Canice M. C. Kwan, The Chinese University of Hong Kong  
Kao Si, The Chinese University of Hong Kong  
Xianchi Dai, The Chinese University of Hong Kong

This paper investigates the effect of spatial constraint on perceived time pressure. We show that a decrease in ambient or visual space evokes a sense of time urgency/pressure, which in turn increases task completion speed. Across three studies, we find support for this proposition.

## **When He Takes the Product, I Take the Product: Importance of Mirror Neurons in Television Commercials Context**

Sophie Lacoste-Badie, University of Rennes 1, France  
Olivier Droulers, University of Rennes 1, France

The discovery of “mirror neurons” allows hypothesize that food TV commercials in which the character grabs the product and brings it to his mouth to eat (or drink) are more effective. In an experimental study, we show that this type of commercial is better memorized.

## **The Peculiarly Persistent Pleasantness of Bizarre Experiences**

Robert Latimer, New York University, USA

Six studies examine retrospective enjoyment of mundane and bizarre experiences. Mundane experiences were less enjoyable in retrospect than they were initially, while bizarre experiences remained equally enjoyable or improved in retrospect. The pattern remains robust across several types of experiences and for positive and negative experiences.

## **Economic Versus Social Influence Tactics in a Retail Setting**

Ray Lavoie, University of Manitoba, Canada  
Kelley Main, University of Manitoba, Canada  
Wenxia Guo, City University of Hong Kong

This research explores the nature of money by juxtaposing the effectiveness of tipping with social influence tactics. We suggest that consumers can manage the level of service they receive and their relationship with a server. Moreover, the effectiveness of the two influence tactics is moderated by the timing of delivery.

## **The Interplay of Form Design and Innovativeness on New Product Evaluation**

Sangwon Lee, Ball State University

This paper examines the moderating roles of form design and innovativeness on new product evaluations. Results from the three experiments demonstrate that form design and innovativeness jointly determine the customer assessments of the new products and form design of an innovative product matters more to the experts than novices.

## **Your Fake Smile Hurts My Heart: The Effect of Employee Authenticity and Manipulative Intent on Customer Perceived Value and Satisfaction**

Juyon Lee, Seoul National University, Korea  
Jongsei Yi, Seoul National University, Korea  
Kiwon Park, Seoul National University, Korea  
Youjae Yi, Seoul National University, Korea

Employee authenticity enhances customer perceptions of economic value, whereas employee manipulative intent can damage relational and economic value. Customer satisfaction depends equally on relational and economic value. These findings suggest that relationships do matter, highlighting the importance of relational value and authenticity in interactions with customers.

## **Forgiving Celebrities with Ethical Transgressions: The Role of Parasocial Relationships, Ethical Motivation and Regulatory Focus Mindset**

Seung Hwan (Mark) Lee, Colorado State University, USA  
Travis Simkins, University of Wyoming, USA  
Sean Luster, Colorado State University, USA

People with a strong (vs. weak) parasocial relationship with a celebrity were more forgiving after a protective-intent motivated transgression. Promotion-focused individuals with a strong parasocial relationship in AI condition were more forgiving than prevention-focused individuals. In negative parasocial relationships, promotion-focused (vs. prevention) individuals were more forgiving towards a PI-motivated transgression.

## **Detecting and Comparing the Hidden Information and the Hidden Action Problems: Decision Difficulty in Asymmetric Information Markets**

Jennifer J. Lee, Binghamton University  
Subimal Chatterjee, Binghamton University

We investigate decision difficulty in markets with asymmetric information where sellers hide information (a product's true quality) or actions (how much quality they provide). We find that, although the hidden action problem is recognized to be less controllable than hidden information, it is found to be an easier decision.

## **Impact of Retail Color Combinations on Luxury Brand Perception: The Roles of Category Knowledge and Centrality of Visual Product Aesthetics**

Eun-Jung Lee, Kookmin University, South Korea  
JiYoung Cho, Kent State University, USA

3D-simulated renderings were developed as experimental stimuli, reflecting two in-store color combinations for distinct luxury levels (high versus low). The perceived luxury level of in-store color combinations significantly affected brand luxury images, while the effect partially varied by the levels of category knowledge and centrality of visual product aesthetics.

## **The Differential Effectiveness of Scarcity Message in On-line Advertising**

Eun Mi Lee, Pukyong National University, South Korea  
Jung Ok Jeon, Pukyong National University, South Korea  
Qin Li, Liaoning Normal University, China  
Hyun Hee Park, Kyungpook National University, South Korea

This study aims to explore the relative effectiveness of scarcity message types on consumers' impulse purchases online in Korea and China. Moreover, it attempts to examine the moderating roles of message framing and the need for cognitive closure, within which the impact of scarcity message type on impulse buying operates.

## **Consumers' Self-Persuasion and Brand Transgression**

Wonkyong Beth Lee, Western University, Canada  
Yang Ye, Western University, Canada

We examine self-persuasion that consumers may adopt to maintain consumer-brand relationships when facing brand transgressions. If consumers have strong brand relationships, they use self-directed, intentional persuasion such as reinterpreting undesired elements of, and suppressing undesired elements of the brands. Consumers' negative emotions may explain consumers' self-persuasion.

## **The Positive Effect of Guilt: Construal Level, Fit, and Fluency**

Yun Lee, Virginia State University, USA

This research investigates the relationship between guilt and construal level. The findings indicate that guilt-laden individuals are more likely to construe information at abstract, high levels (experiments 1 and 2). Further, such fit between guilty feelings and high-level construals leads to more favorable brand attitudes (experiments 3) via enhanced processing fluency.

## **Consumer Online Information Sharing: Consumer Psychographics and Relational Benefits**

Kyungwon Lee, Rutgers University, USA

The purpose is to propose a comprehensive understanding of antecedents and consequences of consumer online information sharing. This research contributes to consumer behavior literature by (a) providing an eclectic perspective by introducing consumer psychographics towards technology in understanding online information sharing; (b) addressing the effects of relational benefits as consequences to online information sharing.

## **Thanks for What I've Got and Thanks for What I've Not: The Effects of Two Types of Gratitude on Prosocial Spending for Close and Distant Others**

Hyunjung Lee, University of Texas at Austin, USA  
Andrew Gershoff, University of Texas at Austin, USA

Across three studies, we distinguish two types of gratitude: 'gratitude for what one has' versus 'gratitude for what one does not have.' By investigating the qualitative differences between the two, we empirically show that the former promotes spending for close others while the latter promotes spending for distant others.

## **Just For Fun? Constructing Self Through Selfies**

Eric Li, University of British Columbia - Okanagan Campus, Canada  
Sayantani Mukherjee, Central Washington University, USA  
Thuc-Doan Nguyen, California State University Long Beach, USA

This research examines the interrelationship between self-construction and the culture of Selfie. We show that through Selfies, consumers construct an ideal self, extended self, authentic self, and reaffirm sense of self. Selfies are a new form of self-identification and expression that reflects the growing democratization of self-construction in social media.

## **Upward Intergenerational Influences on Parents' Innovativeness and Innovative Behavior in Single-Child and Non-Single-Child Families**

Jianping Liang, Sun Yat-sen Business School, Sun Yat-sen University, China  
Hongyan Jiang, School of Management, China University of Mining & Technology, China  
June Cotte, Ivey Business School, Western University, Canada

This paper found the upward intergenerational influences, even controlling for the peer and spousal influences. Parents' innovativeness mediated the influences of young adult children, spouses and friends, and had a positive impact on innovation tendency and behavior. However, single- vs. non-single-child families had totally different patterns of upward intergenerational influences.

## **An Eye Tracking Study of Actual and Lay Theories of Gender Differences in Form and Function Trade-off**

Jianping Liang, Sun Yat-sen Business School, Sun Yat-sen University, China  
Chen Yang, Sun Yat-sen Business School, Sun Yat-sen University, China

Using advanced eye-tracking equipment, we found that shopping in private makes males to pay more attention to both product form and function than females. Interestingly, shopping for friends makes males (female) focus more on form (function) for friends of females (males) than friends of males (females).

## **Strategic Alliances in CRM: When and With Whom to Ally? The Effects of CRM Alliances on Consumer and Financial Markets**

Chien-Wei (Wilson) Lin, Hartwick College, USA  
Qi Wang, SUNY Binghamton, USA

Three studies investigate the impact of two types of strategic alliances in CRM: within- and cross-industry CRM alliances. Findings discover differential impacts of two types of CRM alliances on consumer and financial markets, and reveal the conditions under which within-industry alliances are more effective than cross-industry alliances and vice versa.

## **Waste in Consumption—Who Does It?**

Ying-Ching Lin, National Sun Yat-sen University, Taiwan  
Chiu-chi Angela Chang, Simmons College, USA  
Siao-Ting Huang, National Dong Hwa University, Taiwan

This research examines what types of consumers are more likely to waste resources and the circumstances in which waste in consumption is more pronounced. The empirical findings show that environmental consciousness, as well as the purchase of green products, is associated with waste in consumption.



## **The Avoidance of Moral Obligation**

Stephanie Lin, Stanford University, USA  
Rebecca Schaumberg, New York University, USA

We show that people avoid moral obligation by taking a prosocial option out of their choice set, thereby making it unavailable to them. Furthermore, this occurs whether or not they would have chosen the prosocial option had it been available to them, implying that some avoid being “guilt-tripped.”

## **Can Being Healthy Be Sexy? - An Exploration of ‘Health Edutainment’ and Its Impact On Attitudes and Behaviors**

Tyrha M Lindsey, Rutgers University, USA  
Christine Ringler, Rutgers University, USA

As rates of obesity, hypertension and heart disease continue to rise, how do you make preventive health issues sexy so people will take notice and act? We gathered data from 155 millennials to examine the effects of “health edu-tainment” on intentions to get more health information.

## **Five-Finger-Discount for the Rejected: The Interactive Effect of Social Exclusion and Product Type on Shoplifting Behavior**

Christopher Ling, University of South Carolina, USA  
Thomas Kramer, University of South Carolina, USA

We introduce shoplifting as a coping mechanism to social exclusion to the consumer behavior literature, and examine its facilitating and attenuating contexts. Results show that excluded consumers who have stolen before, are more likely to shoplift hedonic (vs. utilitarian) products, whereas product type does not impact shoplifting for included consumers.

## **You Can Frustrate “me” But Not “us”: The Moderate Effect of Self-Construal on Response to Luxury Brand Exclusion**

Xian Liu, Shanghai Jiaotong University, China; University of Minnesota, USA  
Barbara Loken, University of Minnesota, USA  
Liangyan Wang, Shanghai Jiaotong University, China  
Fei Xu, Shanghai Jiaotong University, China

This research examines how consumers with different self-construals respond to luxury brand exclusion. Results of two studies show that Independents (vs. interdependents) tend to disassociate (vs. associate) with a luxury brand that rejects them, and even transfer preference to its competitor brands; whereas both independents and interdependents continue to associate with a luxury brand which ignores them.

## **The Impact of Parental Divorce on Consumers’ Moral Judgment Processes**

Mengmeng Liu, Temple University, USA  
Maureen Morrin, Temple University, USA

Divorce is commonly associated with having several negative psychological effects on offspring’s well-being. The present research proposes that adult consumers who grew up in divorced (versus intact) households render harsher moral judgments against companies and brands who engage in unethical behaviors, compared with consumers who grew up in intact families.

## **Effect of Language Style in Virtual Community on Consumer Purchase Intentions**

Maggie Wenjing Liu, Tsinghua University  
Yuhong Guan, Tsinghua University  
Yuhuang Zheng, Tsinghua University

This paper examines impact of language style on consumers' purchase intention in virtual community and its underlying process. Through one field study and two experiments, we demonstrate that comparing to formal language style, informal style leads consumers to perceive closer psychological distance, which elicits more trust, subsequently increasing purchase intention.

## **I Don't Know You Anymore: Effects of Identity-Based Motivation on Responses to Rebranding**

Richie Liu, Washington State University, USA  
Jeff Joireman, Washington State University, USA  
David Sprott, Washington State University, USA  
Eric Spangenberg, Washington State University, USA

Previous research on consumer responses to rebranding has not drawn much attention in the marketing domain. We extend prior work in this area by considering the identity-based motivation model to further our theoretical understanding of rebranding's (e.g., brand logo change) impact on brand attitudes and purchase intention.

## **Having Fun with Candy Crush: Second-Screen Media Multitasking Offers Gratifications and (Possible) Benefits For Advertising**

Xin Lu, UIUC, USA  
Yilin Ren, UIUC, USA  
Shili Xiong, UIUC  
Jiachen Yao, UIUC USA  
Anlan Zheng, UIUC, USA  
Michelle Nelson, UIUC, USA

Previous research has shown that media multitasking can harm advertising effectiveness when audiences avoid commercials. However, interviews with multitaskers revealed psychological needs to feel productive, connected and entertained. Findings show that engaging with a second screen is habitual. It can reduce mind-wandering and enhance fun; thus, possibly increasing exposure to advertising.

## **Beyond Shopping Orientations: Toward an Intra-individual, Multidimensional Perspective on Shopping Personality Profiles**

Elaine MacNeil, Shannon School of Business, Cape Breton University  
Peter MacIntyre, Cape Breton University

This research introduces shopping personality profiles as a new conceptualization of intra-individual variation in shopping orientations. Informed by in-depth interview data, we argue that working toward a multidimensional approach to collections of shopping orientations, shopping personality profiles, will improve both understanding of shopping behaviour and retailers' market segmentation efforts.

## **Exploring Psychographic Differences between Preference-Based Segments in a Food Choice Situation**

Natalia Maehle, Centre for applied research at NHH (SNF), Norway  
Nina Iversen, BI Norwegian Business School/Centre for applied research at NHH (SNF), Norway  
Leif Hem, Norwegian School of Economics, Norway  
Cornelia C. Otnes, University of Illinois at Urbana-Champaign, USA

Food choice often involves contradictory goals, and therefore consumers tend to express different preferences for various product attributes. Previous research shows that individual characteristics influence these preferences. The current study aims to reveal the preference-based consumer segments in a food choice situation and explore psychographic differences between these segments.

## **The Mere Presence of a Photo on a Product Label Can Change Taste Perception**

Antonia Mantonakis, Goodman School of Business, Brock University, Canada  
Brittany Cardwell, Victoria University, New Zealand  
Randi Beckett, Psychology, Brock University, Canada  
Eryn Newman, Victoria University, New Zealand  
Maryanne Garry, Victoria University, New Zealand

Do photos on product labels affect the perceived taste of the product? With a photo, consumers were more likely to think a wine was better quality, and report it tasted better. These findings fit with the idea that consumers use conceptual fluency as a metacognitive cue to evaluate taste.

## **The Influence of Visual Art and Regulatory (Non) Fit on Product and Advertisement Evaluation**

Danielle Mantovani, Federal University of Parana  
Deborah Iuri Tazima, Federal University of Parana  
Paulo Prado, Federal University of Parana

We investigate the impact of a visual artwork on product and advertisement attitude in regulatory (non) fit conditions. Results of two experiments indicate that using art in a promotion fit condition is recommended, but for consumers in prevention fit the use of artwork in advertising might cause a negative effect.

## **Effects of Social Distance on Consumers' Responses to Company Transgression**

Danielle Mantovani, Federal University of Parana  
José Carlos Korelo, Federal University of Parana  
Jenny Gonzáles Ibarra, Federal University of Parana  
Paulo Prado, Federal University of Parana

Based on theory of psychological distance, the authors examined how social distance and the severity of transgression influence the relationship between a transgressing company and other (close and distant) consumers. The authors showed that close (vs. distant) consumers could behave more (vs. less) similarly to the victim of the transgression.

## **The Applicability of Self-Nature Connection Measures in Consumer Research**

Christian Martin, University of Lausanne  
Sandor Czellar, University of Lausanne

Environmental psychologists have developed explicit and implicit measures to assess self-nature identity. Our work-in-progress aims to integrate and extend extant measures, with the goal of assessing their value for consumer research. An aspect of it focuses on an implicit measure, the Self-Nature IAT, and we report our first results.

## **Seeing Green and Going Green: The Effects of Priming on Environmentally Friendly Behavior**

Chrissy Martins, Hagan School of Business, Iona College  
Fredrica Rudell, Hagan School of Business, Iona College

This research examines how priming the color green leads individuals to act "green." Across three studies, we examine how priming individuals with the color green leads to an increase in environmentally friendly behaviors. We discuss potential explanations for these results, as well as suggest routes for future research to examine.

## **Purchasing Happiness: The Effect of Authentic Consumer Behaviour**

Justin McManus, Schulich School of Business  
Theodore Noseworthy, Schulich School of Business

Across three experiments, we test whether authentic purchases impact the experience recommendation – the idea that purchasing life experiences results in a greater degree of happiness than material possession. Our findings demonstrate that material purchases can bring equivalent amounts of happiness when they are undertaken in an authentic manner.

## **That Which We Call a Rose by Any Other Name...Would it Smell as Sweet? How Slight Spelling Variations of Brand Names Alter Consumers' Sensory Perceptions**

Ann E. McNeel, Baruch College, City University of New York (CUNY), USA  
Stephen J. Gould, Baruch College, City University of New York (CUNY), USA

Introducing the importance of brand name spelling to sensory marketing, this research has found that a unique spelling of a brand name leads consumers to report differences in familiarity with the brand name, affects the sensory evaluation of the product, and has a downstream effect on willingness to pay.

## **Understanding the Decision Making Processes of Indecisive Consumers**

Hillary Mellema, Kent State University, USA  
Jennifer Wiggins Johnson, Kent State University, USA

Indecisiveness is a chronic, domain-general difficulty making decisions. The goal of this research is to understand the consumption choice processes of indecisive individuals. Preliminary results reveal that indecisive individuals spend more time evaluating alternatives, are more distressed by time limitations, and are overly concerned with how others perceive their choices.

## **Follow Their Nose: Scented Product Development Using Consumer Preferences and Web Data**

Hua Meng, Kent State University, USA  
César Zamudio, Kent State University, USA  
Robert Jewell, Kent State University, USA

This study examines scented product development by proposing a scented product typology, and by empirically assessing whether firms' scented product assortments match consumers' expectations and preferences. We find that extant scented product assortments are heterogeneous and that consumers' scented product assortment expectations match firms' assortments, but consumer preferences do not.

## **Free Does Not Equal Free: The Differential Effects of “Freebie” Methods**

Linda Milano, Stony Brook University, USA  
Denise Buhrau, Stony Brook University, USA  
Ethan Pew, Stony Brook University, USA

We test the effects of different “freebie” methods (e.g., “free,” 100% off) on valuation and intentions. Offers framed as “free” lead to devaluation due to negative inferences about motives. Offers framed as “100% off” are not devalued because of increased judgmental difficulty, which reduces the impact of inferences about motives.

## **Efficiency Bias in Expected Value Assessment**

H. Lauren Min, Leeds School of Business, University of Colorado, Boulder  
Bart de Langhe, Leeds School of Business, University of Colorado, Boulder  
Stefano Puntoni, Rotterdam School of Management, Erasmus University Rotterdam

Decision-makers often fail to maximize expected value. Although this is typically attributed to psychological reactions to outcomes (e.g., loss aversion) and uncertainty (e.g., probability weighting), we trace this to people's misunderstanding of the notion of expected value. In three studies we find people conflate expected value with efficiency (gain/loss ratio).

## **“Don’t Buy” or “Do Not Buy”? : Negation Styles and Product Evaluations**

Sarah Moore, University of Alberta, Canada  
Soyoung Kim, University of Alberta, Canada  
Kyle Murray, University of Alberta, Canada

This research investigates how the use of negations—that is, contractions (“isn’t”) versus two-word negations (“is not”)—differentially influences product evaluations in online consumer reviews. Our findings show that in the contraction condition, people evaluate the target product more positively than in the two-word negation condition.

## **Clarifying Convergent Validity Issues in Prevention Focus Scales: The Relation of Constraint to Prevention Focus**

Scott Motyka, Babson College, USA  
Raymond Knight, Brandeis University, USA  
Dhruv Grewal, Babson College, USA  
Joseph Cunningham, Brandeis University, USA

This paper helps explain convergent validity issues in two major scales of prevention focus (RFQ, Lockwood). We demonstrate that these differences are partially explained by their differential relationship to components of Tellegen’s personality model (traditionalism, control, harm avoidance). We suggest re-conceptualization of prevention focus into expectation- and behavior-related prevention focus.

## **Health, Wealth, or Beauty? How Consequence Type Influences Temporal Proximity and Vulnerability to Negative Health Outcomes**

Mitchel Murdock, University of South Carolina, USA  
Priyali Rajagopal, University of South Carolina, USA

Two studies illustrate that highlighting the social and financial consequences of negative health behaviors (e.g. smoking, not flossing) in addition to health consequences increases the perceived temporal proximity of negative health outcomes and amplifies perceived vulnerability.

## **Can Materialists Reduce Consumption? The Impact of Self-control and Time Orientation**

Marcelo Vinhal Nepomuceno, ESCP Europe, France  
Michel Laroche, Concordia University, Canada

This study investigates whether high-materialism individuals reduce consumption while still endorsing materialistic values. After conducting two studies and a pre-test, this paper demonstrates that participants who score high in the happiness dimension of materialism have their consumption propensity reduced when their self-control and long-term orientation are artificially increased through priming.

## **Would Materialists Buy a Counterfeit Even When Most People Know it is Not Legit?**

Marcelo Vinhal Nepomuceno, ESCP Europe, France

This study demonstrates that high-materialism individuals are more inclined to acquire a counterfeit when most people cannot identify it as fake versus when half of people would not identify it as fake. However, this finding is obtained with inconspicuous items (e.g. perfumes), but not with conspicuous ones (e.g. bags).

## **Self-Brand Image Congruence Measurement: A New Method**

Piya Ngamcharoenmongkol, NIDA Business School, Thailand  
Margaret Hogg, Lancaster University Management School, UK

This exploratory research examines the congruencies between different aspects of self-image and different brand image perceptions. A newly developed method using a direct with a non-dimension-based approach (Marker Placement tasks using Dartboards) is proposed and used to measure the degree of self-brand image congruence directly, holistically, and graphically.

## **Following the Best Team or Being the Best Fan? Implications of Maximizing Tendency for Fan Identification and Sport Marketing Strategy**

Ian Norris, Berea College  
Dan Wann, Murray State University  
Ryan Zapalac, Sam Houston State University

Maximizing may promote being the best fan, not following the best team. In Study 1, maximizers identified more strongly with their favorite NFL teams when they were historically unsuccessful. In Study 2, they identified more strongly with their college basketball team after reading a negative preview of the upcoming season.

## **The Influence of Belief-Consistent Nutrition Information on Food Consumption**

Ga-Eun (Grace) Oh, Hong Kong University of Science and Technology  
Young Eun Huh, Hong Kong University of Science and Technology  
Anirban Mukhopadhyay, Hong Kong University of Science and Technology

This research examines the effect of nutrition information that is consistent with consumers' category-based beliefs. Consumption decisions, for either healthy or unhealthy foods, are not materially influenced by belief-consistent nutrition information (Study 1). However, after having chosen either a healthy or an unhealthy item, a subsequent decision regarding indulgent food is indeed affected by the prior presence of belief-consistent nutrition information (Study 2). Specifically, people who had made a healthy [unhealthy] choice in the presence of calorie information were less [more] likely to want to indulge afterwards.

## **When Moral Identity Gets Threatened: Shifting Between Personal and Social Identities**

A. Deniz Oktem, Koc University  
Amna Kirmani, University of Maryland

The authors show that the type of experienced moral identity threat can vary with respect to abstract versus concrete thinking and when threat occurs as a result of comparison with others. Two experiments indicate that different levels of moral identity threat influences preferences for honest and sincere brands.

## **Your Time or Your Money? How Fear of Failure Affects Charitable Contributions of Time versus Money**

Lale Okyay-Ata, Koc University, Turkey  
Zeynep Gürhan-Canli, Koc University, Turkey

The present research investigates the effect of fear of failure as a self-threat on consumers' charitable giving tendencies. It is shown that whether the salient identity threat component of fear of failure is personal versus social differentially affects the type of charitable contribution made. The underlying mechanism for the effect is discussed.

## **Why Believing in Either More or Less Willpower Capacity can Increase Self-Control Performance: A Fluency Perspective**

Ashley Otto, University of Cincinnati, USA  
Joshua Clarkson, University of Cincinnati, USA  
Patrick Egan, Indiana University, USA  
Edward Hirt, Indiana University, USA

This work demonstrates the flexibility of willpower beliefs from a fluency perspective. Though individuals who believe in an unlimited (versus limited) willpower are more immune to resource depletion, three experiments outline the process and conditions under which believing in a limited (versus unlimited) willpower results in greater self-regulatory performance.

## **Sex Tourism in Transnational Contexts**

Nacima Ourahmoune, Neoma Business School

The material and discursive conditions in which affective sexual practices occur in transnational touristic contexts call for an understanding of tourism as a process of extraction and transference of eroticized capital. Unlike previous studies the findings focus on how participants in transnational liaisons negotiate power, sex, solidarity, and monetary exchanges.

## **Determinants of Mobile Consumer Engagement: Moderating Role of Mobile Literacy**

Sung-hee Paik, School of Business, Yonsei University  
Moonkyu Lee, School of Business, Yonsei University

We provide guidelines to promote adoption of mobile information and mobile consumer engagement behavior. We found that the impact of facilitators and inhibitors on intention to adopt mobile information were different for a low versus high product involvement in mobile advertising. Also, we consider moderating effect of mobile literacy.

## **Attraction and Repulsion to Violent Media: The Role of Justice and Empathy in the Appeal of Violent Media Depictions**

Ethan Pancer, Saint Mary's University, Canada  
Martin Pyle, Ryerson University, Canada  
Laurence Ashworth, Queen's University, Canada

People often choose to consume violent media, but research suggests that violence does little to enhance media enjoyment, and often decreases enjoyment. In this research, we investigate the impact of empathy and perceptions of justice to determine conditions under which violent media might appeal to consumers.

## **Dark Side of Brand Salience in Memory: Spillover to the #1 Brand**

Jihye Park, Hankuk University of Foreign Studies  
Rao Unnava, The Ohio State University  
Jiyoung Ha, Hankuk University of Foreign Studies

This research examined if brand salience in memory is not always beneficial. The market leader brand is blamed or falsely implicated by scandals caused by other competing brands. Brand similarity or typicality had no bearing on these results.

## **Exploring Possible Causes for a Gender Difference in the Effect of Heaviness on Consumer Evaluation**

Jaewoo Park, Chiba University of Commerce, Japan  
Hiroaki Ishii, Chiba University of Commerce, Japan  
Taku Togawa, Chiba University of Commerce, Japan

This study explores possible causes of why heaviness enhances men's evaluations, but not women's. We hypothesize that heaviness is metaphorically linked to the concept of power, and that experiencing heaviness activates the power concept more prominently in men than in women. The results of the Stroop test were as expected.

## **Effect of Paradoxical Advertising on Negativity Bias**

Jihye Park, Hankuk University of Foreign Studies

We examined a) if a paradoxical ad produces more positive evaluations as compared to the promotional ad, b) if product negativity with social value influences the evaluation of a paradoxical ad vs. promotional ad, and c) if attitude negativity toward the product induces a boomerang effect of a paradoxical ad.

## **The Influence of Vertical Product Positions on Consumer Judgment**

Jooyoung Park, Peking University HSBC Business School, China  
William Hedgcock, University of Iowa, USA

The present research investigates the influence of vertical product position on consumers' metacognitive experiences and judgments. Three studies showed that people felt right and thus became more certain about their judgments when product locations matched their internal judgments (i.e., more preferred products were located at a higher space).

## **The Influence of Reward Progress Rates, Program Magnitudes, and Step Sizes of Reward Programs on Consumer Choice**

Sehoon Park, Sogang University, South Korea  
Moon-Yong Kim, Hankuk University of Foreign Studies, South Korea  
Jane Park, University of South Carolina, USA

We examine whether (1) the effect of program magnitude on choice between utilitarian and hedonic rewards varies depending on the presence or absence of unambiguous step sizes; and (2) the interactive effects of program magnitude and the presence or absence of step sizes on choice differ according to the reward progress.

## **Impact of Intrinsic Value of Customer Co-creation in Service Recovery**

Joohyung Park, University of South Carolina, USA  
Sejin Ha, University of Tennessee

Impact of intrinsic value of co-creation of recovery on satisfaction with service recovery was examined. An online scenario-based experiment indicated consumers who found the co-creation experience enjoyable are more satisfied. Also, intrinsic value of co-creation has stronger effects when resulting outcome was not favorable and when compensation was offered.

## **Lay Theories of Time**

Vanessa Patrick, University of Houston, USA  
Melanie Rudd, University of Houston, USA  
Mahdi Ebrahimi, University of Houston, USA

People have lay theories of time which guides their behaviors and feelings. We found that some people believe that busyness makes their lives more meaningful, busy people achieve more, and they shouldn't volunteer if they are busy. We also found that such theories have negative consequences for behaviors and feelings.

## **The Unwritten Rules About Breaking the Rules: “Cheating” and the Emergence of Competing Practices in Consumer Collectives**

Nicholas Pendarvis, University of South Carolina, USA  
David Crockett, University of South Carolina, USA

This research explores the emergence of competing practices the context of a popular online gaming community. The contested role of User-created/ modified game accessories in community status competition is explored using both practice theory and netnographic data collection techniques. The social consequences for the emergent competitive practices are discussed.

## **Examining Chinese Consumers' Intention to Purchase Luxury Group Package Tours**

Norman Peng, University of Westminster  
Annie Chen, University of Westminster

The top 3% of travelers in the world represent 20% of the total tourism expenditure. The purpose of this paper is to examine tourist' intention to participate in luxury group package tours (LGPTs) and its marketing implications to tourism product providers through a modified value-attitude-behavior model.



## **Attendees' Intention to Revisit Tourism Trade Shows: The Effect of Environmental Stimuli, Visitors' Emotions, and Product Knowledge**

Norman Peng, University of Westminster  
Annie Chen, University of Westminster  
Jehn-yih Wong, Ming Chuan University  
Tzu-hui Li, Ming Chuan University

This paper examines the factors that influence 296 trade visitors' emotion and revisit intention through a modified Mehrabian-Russell model. It also tests product knowledge's moderating effect. Findings reveal service quality, interaction with other visitors, information rate, and atmospherics affect visitors' emotions and then revisit intentions. Moreover, product knowledge moderates environmental stimuli's influences on visitors.

## **Dissimilar Extensions Effect on Prestige Brand Image**

Theodoro Agostinho Peters, Fei Ignatian Educational Foundation University

The impact of dissimilar extensions on prestige brands via experiment 2x4 – two brands of clothing and four extensions which varies in similarity from intermediate to weak – tests the dilution effect on parent brand image. Results show stronger brand suffers greater dilution effect, and confirm limits for prestige brands' extensions.

## **Positive Affect at the Intersection of Two Cognitive Processes Magnifies the Second Process**

Nguyen Pham, Arizona State University, USA  
Naomi Mandel, Arizona State University, USA

This research investigates the role of positive affect (pride vs. happiness) at the intersection of two cognitive processes. We demonstrate that when a goal of local or global processing is accessible, positive affect will increase the likelihood that individuals adopt the accessible goal in subsequent behaviors.

## **SociaLab: A Living Laboratory for Social Entrepreneurship and Social Change**

Meghan Pierce, La Salle University, USA  
Sebastián Gatica, Pontificia Universidad Católica de Chile, Chile

A case study of SociaLab provides an extended example of how the principles of social entrepreneurship can lead to community development and change through the implementation of a living laboratory where proactive consumers (or prosumers) engage in value co-creation for innovative product design and delivery for impoverished and marginalized consumers.

## **Effects of Product Location and Trait Self-Control on Healthy Snack Choices: When High Self-Control Individuals Buy More Healthy Snacks.**

Kunalai Ploydanai, Wageningen University, the Netherlands  
Erica van Herpen, Wageningen University, the Netherlands  
Hans van Trijp, Wageningen University, the Netherlands

This study examines the interplay of product location and trait self-control on healthy snack choices. Results show that when consumers make more product choices before reaching the snack category, this increases ego-depletion and enhances the number of healthy food items chosen by high self-control consumers.

## **Do Defaults Work When They're Disclosed? Effectiveness and Perceived Ethicality of Disclosed Defaults**

Ruth Pogacar, University of Cincinnati, USA  
Mary Steffel, University of Cincinnati, USA  
Elanor Williams, University of California San Diego, USA  
Ana Figueras, University of Florida

Defaults nudging people toward desired choices are increasingly common. Critics argue that undisclosed nudges are unethical, but proponents caution disclosure could render defaults ineffective. We show that nudges are effective when disclosed. Additionally, despite seeming less ethical when benefitting business versus society, disclosed defaults are equally effective regardless of beneficiary.

## **Guilt versus Shame Appeals: The Role of Regulatory Focus and Efficacy in the Understanding the Effectiveness of Distracted Driving Messages**

Kathrynn Ponders, University of Texas at Austin, USA  
Seungae Lee, University of Texas at Austin, USA  
Arnold DongWoo Chung, University of Texas at Austin, USA

The purpose of this study is to integrate regulatory focus theory and efficacy to better understand the effectiveness of guilt and shame appeals in distracted driving advertising campaigns. The study predicts that the fit between emotional appeals and regulatory foci will increase persuasion and it occurs through different efficacy salience.

## **Is All Fair in War-themed Video Games? Promotional Premiums and Achievement-Based Hierarchies**

Martin A. Pyle, Ryerson University, Canada  
Ethan Pancer, Saint Mary's University, Canada  
Laurence Ashworth, Queens University, Canada

This research explores the fairness implications of promotional campaigns that offer participants rewards to improve their status in achievement-based hierarchies. The catalyst for this examination is a recent Pepsico promotion that offered experience points redeemable in popular video games to help those who purchase to rise in the game's rankings.

## **Understanding the Consumer Culture of Self-Help: Fun, Play and Prayers**

Kaleel Rahman, RMIT University, Australia

In this research, using a mixed-method qualitative approach, we investigate the consumer culture of self-help. Although self-help has been studied from a number of disciplinary perspectives, the area has been largely neglected by consumer researchers. Our research reveals four distinct types of self-help values: destination, gratification, therapeutic and spirituality.

## **Topping it Down: Reversing the Unit Bias in Mixed Indulgences**

Suresh Ramanathan, Texas A&M University, USA  
Nina Belei, Radboud University, Netherlands  
Scott W. Davis, Texas A&M University, USA

Two studies examine whether consumers' tendency to eat more of large versus small food portions extend to bundles of vices and virtues and show that the bias is attenuated for perceptually integrated vice-virtue combinations but that it remains robust when the virtue and vice are perceptually separable.

## **I Get by With a Little Help From my Friends: The Impact of Stress and Spending Self-Control on Social Connectedness Products**

Tracy Rank-Christman, Rutgers University, USA  
Christine Ringle, Rutgers University, USA

Consumers experience fluctuating levels of stress in their daily lives, which may influence their product evaluations. We demonstrate that stress increases attraction toward products symbolic of social connectedness- specifically, for consumers with high levels of spending self-control.

## **Ethical Mindsets and Moral Transgression Classification: When Cleansing Licenses Consumer Indulgence**

Tracy Rank-Christman, Rutgers University, USA  
Maureen Morrin, Temple University, USA  
May O. Lwin, Nanyang Technological University, Singapore  
Nguyen Pham, Arizona State University, USA

This research explores boundary conditions for the impact cleansing has on indulgent consumer choices. We show that cleansing's ability to license indulgence is contingent upon both the type of moral transgression as well as the consumer's ethical mindset.

## **Buy Less, Buy Better: Consumer Response to Green Demarketing Strategies**

Brandon Reich, University of Oregon, USA  
Catherine Armstrong Soule, University of Oregon, USA

The research explores consumer response to a new type of demarketing, green demarketing (GD). GD refers to a message strategy whereby a firm encourages consumers to buy less at the category level through purchase of the firm's brand. Positive consumer response may depend on the firm's perceived motive to demarket.

## **From Stress to Fun - How Life Transitions Predict the Likelihood of Choosing Novel Food Brands and Changing Preferences**

Martina E. Reitmeier, TUM School of Management, Technische Universitaet Muenchen  
Claudia M. Haase, School of Education and Social Policy, Northwestern University  
Jutta Roosen, TUM School of Management, Technische Universitaet Muenchen

Older consumers are often neglected as target group because they are considered brand loyal. Findings from an online survey of older consumers show that life transitions predict a higher likelihood to choose novel brands (using a real product-choice paradigm), especially if these transitions are considered positive.

## **Auditory Feedback and the Online Shopping Experience**

Ryann Reynolds-McInay, Temple University, USA

The present research proposes that the presence of auditory feedback increases satisfaction with the shopping experience, confidence in the retailer, and the likelihood to return to the retailer and make a purchase in the online shopping context. The effect is moderated by the amount of feedback and pitch.

## **Taking a Gamble on Life: Consumer Risk Seeking for Experiences**

Sarah Roche, University of Texas at San Antonio, USA  
Sommer Kapitan, University of Texas at San Antonio, USA  
David H. Silvera, University of Texas at San Antonio, USA

Previous literature has found general risk aversion for positive outcomes. But the current work examines how consumers are risk seeking for experiential purchases, and the ideas of Prospect Theory seem to only apply to material objects. This effect is explained through a focus on time versus money across purchase types.

## **Brand Sacredness and Its Cultural Underpinnings**

Maria Rodas, University of Minnesota, USA  
Carlos Torelli, University of Minnesota, USA

This research contributes to prior literature by experimentally investigating brand sacredness and uncovering its cultural underpinnings. Our findings demonstrate that salience of cultural concepts can increase the sacredness of iconic brands. Furthermore, individuals who value the ideas that traditional culture provides are more likely to ascribe sacredness to brands.

## **Reacting to Marketplace Claims: Consumer Moral Skepticism**

Jeff Rotman, Ivey Business School, Western University  
Gail Leizerovici, Ivey Business School, Western University  
June Cotte, Ivey Business School, Western University

Why do some consumers buy the more socially conscious product while others do not? This research examines a unique personality trait: consumer moral skepticism (CMS). Through 3 studies and a pretest, we validate and demonstrate its predictive ability for consumer reactions and behavior to marketplace claims.

## **You Drive a Porsche: Women (Men) Think You Must Be Tall (Short), Intelligent and Ambitious**

Gad Saad, Concordia University, Canada  
Tripat Gill, Wilfrid Laurier University, Canada

We show that high-status products (e.g., Porsche) are an effective signal of desirable traits in men (e.g., intelligence, ambition). Interestingly, these products have opposing inferences about owner's height: women perceive a male owning a high-status car to be relatively taller (shorter) than if the same male owned a low-status car.

## **Does Decision Making Have a Genetic Basis? A Twins Study Analysis**

Gad Saad, John Molson School of Business, Concordia University  
Richard Sejean, John Molson School of Business, Concordia University  
Gil Greengross, John Molson School of Business, Concordia University  
Lynn Cherkas, King's College London

Two studies examined whether decision making styles possess a genetic component. Using a twin study paradigm, we show that identical twins tend to have smaller intra-twin variability when making decisions, compared to dizygotic twins. The results suggest biological factors may play an important role in consumer and decision making research.

## **Prime Me if You Can: The Effect of Motivated Tuning on Susceptibility to Priming Procedures.**

Sebastian Sadowski, University of Groningen, The Netherlands  
Bob Fennis, University of Groningen, The Netherlands  
Koert van Ittersum, University of Groningen, The Netherlands

This research examines whether a motivated tuning process (attentional tuning as a function of experiencing or anticipating losses or gains) influences the effectiveness of priming. The results demonstrate that experienced vs. anticipated losses (vs. gains) influence consumers' attentional scope and as such moderate the effect of goal-relevant priming procedures.

## **I'm Not Telling: How Self-Brand Connected Consumers' Need for Uniqueness Affects Word of Mouth to Different Reference Groups**

Christina Saenger, Youngstown State University, USA  
Veronica Thomas, Towson University, USA

This study examines the effect of consumers' self-brand connection on their intentions to spread word of mouth, and how this effect is moderated by a consumer's need for uniqueness and the reference group receiving the communication. NFU weakens the SBC-WOM relationship, but perhaps only when recipients represent an aspirational group.

## **Are Emotions More Persuasive Than Facts? A Qualitative Study in the Context of Pro-Environmental Communication**

Dorothea Schaffner, Lucerne University of Applied Sciences and Arts, Switzerland  
Sascha Demarmels, Lucerne University of Applied Sciences and Arts, Switzerland

This study uses a qualitative approach exploring consumers' responses to emotional and normative pro-environmental communication in comparison with informational campaigns. Results indicate that informational strategies seem to be effective when they tap on procedural knowledge while the effectiveness of emotional strategies seems to depend on people's attitudes towards the environment.

## **Familial Practice of Recycling**

Marie Schill, University of Reims, France  
Marie-Hélène Fosse-Gomez, University of Lille 2, France

Recycling has become a matter of great concern, both in everyday life and in sustainability literature. Families, not only individuals, have to take up the often challenging task of changing their mundane practices. Using social practice theory, this research addresses the question of building recycling practice at a familial level.

## **Consumer Political Identity and Moral Judgments of Corporate Social Responsibility**

Adina Schoeneman, State University of New York, Brockport  
Joon Yong Seo, State University of New York, Brockport  
James Cordeiro, State University of New York, Brockport

We investigate whether and how consumers' political identities drive their judgments of a firm's social responsibility. We demonstrate that corporate social responsibility appeals that align with the underlying moral foundations of a consumer's political identity have a positive impact on the consumers' ethical judgments of and attitudes towards the firm.

## **Engaging Garbage: An ANT/CCT Study of Municipal Food Scrap Composting**

John Schouten, Aalto University, Finland  
Diane Martin, Aalto University, Finland  
Jack Tillotson, Aalto University, Finland

This ethnographic actor-network and translation-theoretic study explores the creation and implementation of a municipal program for the curbside collection and composting of household food waste. Implications of the study include the need to recognize and manage the agency of non-human actors in efforts to bring about a more sustainable society.

## **Impact of Consumption Related Bragging of Others on Consumers' Self-Presentation and Self-Perception**

Tejvir Sekhon, Boston University, USA  
Barbara Bickart, Boston University, USA  
Remi Trudel, Boston University, USA

As consumption related bragging is becoming more pervasive, it is important to understand its effects. We show that consumers exposed to high status (as compared to low status) consumption experience posts of others mention higher status brands they own in a given product category and subsequently infer that this product category is more important to them.

### **When the Worst is Not so Bad: Unhelpful Reviews Enhance Positive Impressions**

Meyrav Shoham, William Davidson Faculty of Industrial Engineering and Management, Technion - Israel Institute of Technology  
Yael Steinhart, Recanati Graduate School of Business, Tel-Aviv University, Israel  
Sarit Moldovan, William Davidson Faculty of Industrial Engineering and Management, Technion - Israel Institute of Technology, Israel

The addition of a negatively framed unhelpful user review to a set of positive reviews can enhance product appeal. We argue that such reviews increase the positive reviews' perceived value, bolstering their impact. Three studies demonstrate this effect compared to when the unhelpful review is framed positively or not included.

### **Bidirectional Context Effects between Taste Perception and Simulation**

Kao Si, The Chinese University of Hong Kong, Hong Kong  
Yuwei Jiang, The Hong Kong Polytechnic University, Hong Kong

Results from three experiments show that bidirectional context effects exist between taste perception and mental simulation of taste. Specifically, tasting (mentally simulating the taste of) a salty food item makes consumers judge a subsequent simulated (actually tasted) sweet food item to be sweeter.

### **Looking Forward to Looking Back: How Future Replicability Affects Perceived Temporal Distance to a Past Event**

Kao Si, The Chinese University of Hong Kong, Hong Kong  
Xianchi Dai, The Chinese University of Hong Kong, Hong Kong

We propose and demonstrate that the less feasible a past event can be replicated (doing it again) in the future, the more distant people feel to that past event. Three experiments examined this proposition and its underlying mechanism.

### **Rock of Aging: Compensatory Technology and the Sustainability of Fun**

Travis Simkins, University of Wyoming, USA  
Kent Drummond, University of Wyoming, USA

For the fans who attend them, rock concerts are fun. But bands age, sustaining the fun can be challenging. Our research shows that compensatory technology, coupled with nostalgia, enable bands and fans to "Rock On".

### **Emotional Work, Rationality, and the Co-Construction of Hope in the Field of Consumer Investment**

Andrew Smith, York University, Canada

Building on previous intra-psychic and socio-cultural perspectives on hope, this research investigates how hope is co-created and tempered in a context – financial investment – in which emotion is disparaged. This study explores the ways in which hope is collectively shaped, and it contributes to literature on the social construction of emotion.

## **Fuelling Anger: How Craving Can Cause You to Lash Out**

Aaron Snyder, Stanford University, USA  
Baba Shiv, Stanford University, USA

Anger is a unique negative emotion in the sense that it is driven by approach, not avoidance. Approach tendencies—such as motivation to pursue rewards—often bleed across domains. Our work provides initial evidence that craving is easily transformed into a magnified expression of anger.

## **Does WOM Timing Matter? The Impact of Timing of Message on the Effectiveness of Word-of-Mouth**

Cansu Sogut, Boston University, USA  
Barbara Bickart, Boston University, USA  
Frederic Brunel, Boston University, USA

We conceptualize two types of sharing based on the timing of a source's message: simultaneous (during consumption) and retrospective (after consumption). We examine why and how timing might influence the persuasive impact of WOM. We demonstrate how the timing of online posting impacts the readers' perceptions about the mentioned brand.

## **Does Exposure to Counterfeits Influence Quality Perceptions and Satisfaction of Carried Luxury Brands? A Cross-Cultural Comparison**

Lei Song, LeBow College of Business, Drexel University, USA  
Yan Meng, Baruch College, Graduate Center, the City University of New York (CUNY) USA  
Rajneesh Suri, LeBow College of Business, Drexel University

Two studies show that brand evaluation towards consumers' carried luxury brands is negatively affected by exposure to counterfeits of the same products for consumers of independent culture but not interdependent culture. The perceived quality moderated mediates the effect of counterfeits on consumers' brand evaluation, overall satisfaction, and future purchase intention.

## **Sit or Stand to Save: Posture and Retail Price Perceptions**

Lei Song, Drexel University, USA  
Keith Coulter, Clark University, USA  
Rajneesh Suri, Drexel University, USA

Though different technologies are increasingly adding to bottom lines for firms, little is known about differences in consumers' expectation of savings when they sit or stand while making purchase decisions. Three studies show that consumers' expectation of savings depends upon their posture when evaluating offers at different storefronts.

## **The Implications Of Mother Nature: Experimentally Induced Gender Brand Personality Predicts Green Brand Image**

Matthias Spörrle, University of Applied Management, Germany  
Magdalena Bekk, University of Cologne, Germany  
Christoph Hohenberger, Technical University of Munich - School of Management, Germany

What influences consumers' judgments of a brand in terms of its green image? Experimental data show that people perceive brands with female attributes as having a more pro-environmental image compared to brands with male attributes offering the same products.

## **Unaided vs. Aided Pick-Any Brand Image Data Elicitation**

Lara Stocchi, Loughborough University, United Kingdom  
Tamara Ansons, Warwick Business School, United Kingdom

We compare conventional unaided brand image measurement against an alternative, where consumers are aided in the elicitation process with prompts that facilitate the recollection of episodic information. Initial findings reveal purchase intention was higher after the alternative approach was used for those that reported using the brand in the past.

## **Effects of Harmony in Color on Perceived Variety and Consumption Estimates**

Aparna Sundar, University of Cincinnati  
Frank Kardes, University of Cincinnati  
Karen Machleit, University of Cincinnati  
Lauren Flanigan, University of Cincinnati

Past research shows that perceived variety influences form-based organization of assortment. The research presented in this paper demonstrates that harmony in color has the same impact on consumption that a lack of structure or organization has.

## **Art Infusion: Popularity Does Matter**

Young Shin Sung, Korea University, Republic of Korea  
Yuhosua Ryoo, Korea University, Republic of Korea  
Yongjun Sung, Korea University, Republic of Korea  
Eun Ji Lee, Korea University, Republic of Korea

There's been a growing interest in art infusion phenomena among marketing scholars and practitioners. As part of a research examining the effectiveness of art infusion, this study provides a preliminary understanding of this phenomenon. Overall findings suggest that art popularity plays an important role in determining the positive product evaluation.

## **Do Response Time Measures of Gambling-Related Cognitions Predict Gambling Behaviour?**

Yi Sunghwan, University of Guelph, Canada  
Stewart Melissa, Dalhousie University, Canada  
Pamela Collins, Dalhousie University, Canada  
Sherry H. Stewart, Dalhousie University, Canada

Implicit measures of cognition are most useful for predicting addictive consumption behaviors that are hard to resist. In this study, we assessed the extent to which response time measures of reward and relief outcome expectancies associated with gambling predict gambling behavior.

## **When Interdependents do not Donate: The Effect of Fear on Charitable Giving**

Satoko Suzuki, Kyoto University, Japan  
Satoshi Akutsu, Hitotsubashi University, Japan  
Florian Kohlbacher, German Institute for Japanese Studies (DIJ) Tokyo, Japan & International Business School Suzhou (IBSS), Xi'an Jiaotong-Liverpool University, PR China

Many studies have found positive correlations between interdependent self-construal and charitable behavior. However, Japanese (high interdependents) donate little. In two experiments, this paper examines the impact of fear on interdependents' charitable giving. The results show that the higher the level of fear, the higher the tendency not to donate.



## **A Process Based Approach to Individual Level Durable Goods Replacement Intentions**

Aruna Divya T., Indian Institute of Management, Bangalore, India  
Kanchan Mukherjee, Indian Institute of Management, Bangalore, India

A positive usage experience will lead to higher likelihood to accept a replacement offer for durable goods as the mental book value is high. We differ from this perspective and argue that when usage experiences are seen as a justification, the intention to replace reduces.

## **Constructing Identity through the ‘Selfie’: the Case of Instagram**

Amandeep Takhar, University of Bedfordshire, UK  
Pepukayi Chitakunye, University of the Witwatersrand, South Africa

This study contributes to an understanding of how social networking websites such as Instagram impact on identity construction processes. Insights were drawn from multiple data sets generated from university students within the United Kingdom, who used pictures of themselves (selfie’s) to convey and construct an identity that reflected their identities.

## **Trixy Eyes: Eye-Contact on Packaging Increases Trust and Choice**

Aner Tal, Cornell University, USA  
Aviva Musicus, Yale University, USA  
Brian Wansink, Cornell University, USA

Eye contact established by cereal spokes-characters increases feelings of trust and connection to the brand, as well as ultimate choice of the brand over competitors. We demonstrate this across two studies where graphic manipulation of a character to create eye contact increases liking, trust, and choice.

## **Creating the Unthinkable: Hard to Imagine, Easy to Act**

Chenyng (Claire) Tang, Arizona State University, USA  
Adriana Samper, Arizona State University, USA  
Keisha M. Cutright, University of Pennsylvania, USA  
Kelly B. Herd, Indiana University, USA

We examine creativity in sacred domains (e.g., religion, patriotism). Three studies reveal that while people find it uncomfortable and difficult to imagine being creative in sacred (vs. secular) domains, they actually become more creative, and feel more comfort and ease taking on creative tasks in sacred (vs. secular) domains.

## **Fragile Products and Their Conscientious Owners**

Derek Taylor, College of Business and Economics, University of Guelph, Canada  
Sean Hingston, Schulich School of Business, York University, Canada  
Theodore J. Noseworthy, Schulich School of Business, York University, Canada

Evidence from two experiments suggests consumers value fragile products as a means of signaling conscientiousness. However, this relationship only holds when the product has high aesthetic value as this improves its ability to signal. This work ultimately challenges the widely held belief that durability is a universally valued product attribute.

## **Who Should Tell the Story? Source Effects in Brand Biographies**

Ali Tezer, Concordia University, Canada  
H. Onur Bodur, Concordia University, Canada  
Bianca Grohmann, Concordia University, Canada

This research shows that underdog brand biography, compared to topdog brand biography, increases purchase intentions when the brand is the source of information. Positive effect of the underdog brand biography disappears when an independent third-party is the source of information. The narrative transportation model of persuasion explains this source effect.

## **A Two-Way Street: Examining the Impact of Brand Transgressions on Consumers' Perceptions of Celebrity Endorsers**

Veronica Thomas, Towson University, USA  
Kendra Fowler, Youngstown State University, USA

The purpose of this study is to examine the impact that a brand transgression has on consumers' perceptions of the celebrity that is endorsing the brand and how this effect is impacted by a consumer's pre-existing connection to the celebrity.

## **The Influence of Next-Step Reference Point: A Carrot to Help Getting out of Middle-Stuck**

Dandan Tong, Chinese University of Hong Kong, China

People often quit in the middle of a goal pursuit because they become discouraged by their distance from the goal. When they focus on the next step rather than focusing on how much they have done or how much they have to do, their motivation to persist increases.

## **Consumer Need Recognition: The Influence of Length of Ownership and the Identification of Ideals**

Gabriela Tonietto, Washington University in St. Louis, USA  
Stephen Nowlis, Washington University in St. Louis, USA

Consumers often decide whether they need a new product. We demonstrate that identifying ideals increases (decreases) feelings of need when the current product has been owned for a relatively long (short) time or is of relatively poor (high) quality due to the salient large (small) discrepancy between current and ideal.

## **All Social Media Is Not Created Equal**

Marlene Towns, Georgetown University, USA  
Jay Legaspi, Georgetown University, USA  
Tess Bradford, Bank of America

Given marketers' frequent use of a single social media strategy across platforms, the current findings demonstrate a need for separate strategies based on platform used and how and why consumers use each platform (particularly Facebook and Twitter). Individual difference measures and motives are examined for their effects on platform choice.

## **Pretty Girl Rock: the Influence of Attractiveness, Genres, and Gender Stereotypes in Popular Music**

Lauren Trabold, Manhattan College, USA  
Stephen Gould, Baruch College, USA

Physical attractiveness plays a large role in perceptions of others. In the current research, we examine the influence of attractiveness in the music industry. Specifically, we study how a singer's appearance influences consumer perceptions of their talent, the genre of music they should sing, and consumer purchase intentions.

## **The Influence of Self-Identity on Consumer Recycling Behavior**

Remi Trudel, Boston University, USA  
Jennifer Argo, University of Alberta, Canada  
Matthew D. Meng, Boston University, USA

People buy products consistent with their self-identity, but what effect does self-identity have on subsequent recycling behavior when disposing of these products? Across three experiments, we show that consumers are less likely to trash a recyclable item when disposing of it, if the item expresses part of their self-identity.

## **Contagion Effects Between Product And Service – When Does the Magic Appear, and When Does it Stop?**

Natalie Truong, Norwegian School of Economics, Norway

The current research examines contagion effect between complimentary product and service. In particular, the author proposes that self-threat and the subsequent self-protection strategy is the underlying mechanism of the effect. Further, this research seeks to investigate potential boundary conditions as well as the moderating effect of physical proximity.

## **Subcultural Escapades: Radical Self-Expression, Therapeutic Praxis, and Controlled Chaos**

Emre Ulusoy, Youngstown State University, USA

Subcultural members discharge their resentment and frustrations through radical, extreme, and chaotic modes yet in a relatively controlled and secure environment relying on the codes, norms, and rituals embraced by subcultural members. As they seek solace in membership in subcultures, they also seek to reinvent the passion, creativity, and fun.

## **When 698 Victims Receive More Donations than 700 Victims: Effects of Number Roundness on Donations**

Noah VanBergen, University of Miami, USA

Jiao Zhang, University of Oregon, USA

This research examines factors influencing the effectiveness of round vs. sharp numbers specifying the number of victims in donation appeals. The authors show that three factors moderate whether sharp (e.g., 698) or round (e.g., 700) numbers lead to higher willingness-to-donate: message framing, psychological distance, and donor characteristics (e.g., NFC).

## **Cross-Media Advertising Affects Explicit but Not Implicit Consumer Memory**

Lisa Vandeberg, University of Amsterdam, the Netherlands

Jaap Murre, University of Amsterdam, the Netherlands

Hilde Voorveld, University of Amsterdam, the Netherlands

Edith Smit, University of Amsterdam, the Netherlands

An experiment on the advantage of cross-media over single-medium advertising showed effects on explicit but not implicit measures of consumer memory. This suggest 1) that cross-media advantages are driven by explicit retrieval mechanisms, and 2) that implicit advertising effects may require more drastic manipulations than (cross versus single-medium) context changes.

## **Rejection Boosts Brand Desire: The Moderating Role of Self Esteem and Brand Status in the Effect of Brand Rejection**

Fang Wan, University of Manitoba, Canada

Pingping Qiu, Monash University, Australia

Daniel Sun, University of British Columbia, Canada

Amitava Chattopadhyay, INSEAD, Singapore

Exclusiveness is one of the hallmarks of luxury brand as the appeal “not everyone can have it” implicitly rejects certain consumer segments. In this paper, we found that brand rejection can heighten brand desire only for high self esteem consumers and when the brand is high status (vs. low status).

## **“Luxury Meets My Implicit Needs”: Four Prototypes of Luxury Brand Appeals and Their Differential Effects**

Fang Wan, University of Manitoba, Canada  
Ray Lavoie, University of Manitoba, Canada  
Pingping Qiu, Monash University, Australia

Prior work on luxury focuses on status-driven luxury consumption. We extend this line of work, employ content analysis of luxury brands advertisements, and developed four typologies of luxury. We also examined their interaction effects with consumers' implicit self-esteem.

## **Exploring the Effects of Original Brand Advertising on Demand for Copycat Products**

Liangyan Wang, Antai Management School, Shanghai Jiao Tong University, China  
Jesse R. Catlin, California State University, Sacramento, USA  
Ke Xue, Shanghai Jiaotong University

In two experimental studies, we find that advertising appeals for original brands can impact purchase intentions for copycat versions of the advertised product. Additionally, we find evidence that attitudes toward copycat versions of the advertised product mediates this effect. This research was funded by the NNSF of China Grant (71072059).

## **The Effect of Affective State on Consumers' Pro-social Choices: Does Good Mood Make People More Environmentally Friendly?**

Xin (Cindy) Wang, University of Oregon, USA  
Lan Jiang, City University of Hong Kong

The current research posits that environmentally responsible behaviors (ERBs) and non-environmentally related behaviors (NERBs) differ fundamentally and argues that choices between NERBs and ERBs are influenced by a consumer's affective state. Our study showed that people under positive (vs. negative) affect exhibited a stronger willingness to perform ERBs (vs. NERBs).

## **Does Mortality Salience Always Lead to Materialism? The Interplay between Terror Management Theory and Just World Hypothesis**

Zhi Wang, The Chinese University of Hong Kong  
Feifei Huang, The Chinese University of Hong Kong  
Jiajia Meng, Liaoning University  
Rober S. Wyer, The Chinese University of Hong Kong

We argue that mortality salience leads to materialism only when people perceive their death as injustice and attempt to compensate. If they perceive their death justice compared to others, however, this materialism will not occur. This paper provides a conceptual framework to examine the boundary conditions of terror management theory.

## **Mental Traveling Along Social and Temporal Distance: The Influence of Cultural Orientation on Construal Level**

Zhi Wang, Chinese University of Hong Kong, China  
Robert S. Wyer, Chinese University of Hong Kong, China

This paper provides an integrated framework in examining the interactive effects of general cultural orientations (e.g., individualism/collectivism and short/long-term orientation) and psychological distance (e.g., social and temporal distance) on construal level. The present research reconciles the mixed findings of previous research on the effects of cultural orientation on construal level.

## **Sponsoring a Rival has Benefits Too: A Longitudinal Study of Changes in Fan Attitudes Toward Favored- and Opposing-Team Sponsor Brands**

Clinton S. Weeks, Queensland University of Technology, Australia  
Christopher M. Mahar, Queensland University of Technology, Australia

A longitudinal field experiment examined sports fans' attitudes toward favored- and opposing-team sponsors across time. Measurements at five timepoints showed fans' attitudes were more positive toward their favored-team sponsors, but that attitudes improved across time toward both favored-team sponsors and opposing-team sponsors. This occurred regardless of intensity of fan identification.

## **Sampling of Consumption Experiences**

Muyu (Sarah) Wei, University of Alberta, Canada  
Gerald Häubl, University of Alberta, Canada

This research examines how the opportunity to freely sample consumption experiences affects consumer search for, and choice of, experiential alternatives. Converging evidence from both the field and the lab suggests that, compared to merely acquiring descriptive information, sampling undermines commitment to a single preferred alternative and diminishes ultimate consumption enjoyment.

## **Expanding Channel Options Influence on Consumer Control in the Retail Store**

Suri Weisfeld-Spolter, Nova Southeastern University, USA  
Cindy Rippé, Embry-Riddle Aeronautical University, USA  
Yuliya Yurova, Nova Southeastern University, USA  
Dena Hale, Southeast Missouri State University, USA  
Fiona Sussan, University of Phoenix, USA

This research examines the effect of rapidly emerging channels leading to an empowerment of consumers who use these channels, with increases to their knowledge and control, on their retail store purchase intention, and compares these multichannel consumers (MCC's) with non-multichannel consumers.

## **Simply Watching Sports' Advertisements Makes Me Eat More**

Carolina O.C. Werle, Grenoble Ecole de Management, France  
Mia Birau, Grenoble Ecole de Management, France

Simply watching sports' advertisements may increase food consumption, depending on the difficulty of imagining the performed activity. Contrary to intuition, two studies show that exposure to advertisements portraying easy (difficult) to perform sports increases (decreases) subsequent food intake. We propose that imagery and perceptions of goal progress explain these effects.

## **Want More or Need Less: Assortment Size Preferences for Hedonic and Utilitarian Products**

Sarah Whitley, Boston University, USA  
Remi Trudel, Boston University, USA  
Didem Kurt, Boston University, USA

The case has been made that consumers always prefer having more options, yet recent research has argued that too many options can be overwhelming. To reconcile the coexistence of these viewpoints, this research explores how assortment size preferences differ due to the hedonic or utilitarian motivation of the product choice.

## **Disclosing the Underlying Mechanisms of the Gender Gaps in Entrepreneurial Outcomes: the Role of Implicit Bias and Double Binds**

Na Xiao, Ball State University

This research proposes implicit bias and double binds as the psychological and cultural factors, which helps to explain the gender gap in Entrepreneurial Outcomes. Two empirical studies are designed and will be conducted to test the proposed theories.

## **The Effect of Ethical Corporate Behaviours on Consumer Support for Nonprofits: The Role of Gratitude and Social Justice Values**

Chunyan Xie, Stord/Haugesund University College, Norway  
Richard P. Bagozzi, University of Michigan, USA

We add to CSR research by revealing the emotional pathway between corporate ethical actions and consumer response toward nonprofits. Results showed that felt gratitude mediates the impact of perceived corporate ethical actions on consumer support for nonprofits. Social justice values that consumers hold further moderate the elicitation of felt gratitude.

## **The Effect of Corporate Ethical Transgression on Consumer Support for Nonprofits: The Role of Negative Moral Emotions and Individual Differences**

Chunyan Xie, Stord/Haugesund University College, Norway  
Richard P. Bagozzi, University of Michigan, USA

We add to research on pro-social decision making by providing a new psychological mechanism underlying consumer support for nonprofits upon exposure to corporate unethical actions. Results showed that contempt, anger, and disgust mediate the relationship between corporate unethical actions and consumer support. Further, consumer characteristics moderate consumer emotional responses.

## **Action or Inaction? The Effects of Regulatory Mode on the Likelihood of Action to Get the Second Best When Missing the Best**

Lan Xu, Wuhan University  
Wenting Xie, Wuhan University  
Nan Cui, Wuhan University

This paper shows that individuals high in locomotion are more likely to take second action than those high in assessment. Furthermore, it examines the mediating effect of anticipated inaction regret on the influence of regulatory mode on the likelihood of action.

## **Self-Licensing or Satisfying Health Goals? Effect of Exercising on Food Choices**

Richard Yalch, University of Washington, USA  
Kyra Wiggin, University of Washington, USA

Health-related goals cause individuals to resist temptation but self-licensing justifies individuals indulging themselves with unhealthy foods. When given a choice between a healthy or tasty snack before or after exercising, more individuals resisted temptation after than before. Expecting to exercise provides self-licensing whereas exercising makes health goals more salient.

## **I Need Your Accompany: Low Temperature Promotes Preference toward Anthropomorphized Products**

Chun-Ming Yang, Ming Chuan University, Taiwan  
Wen-Hsien Huang, National Chung Hsing University, Taiwan  
Pei-Wen Fu, National Sun Yat-Sen University, Taiwan

Two studies find that low temperature cause people to prefer anthropomorphized products, especially when the possession-self link is high. Moreover, we also find that need for affiliation mediate this relationship. This research contributes to the literature by bridging anthropomorphism and embodied cognition literature, and provides new practical and theoretical insights.

## **It Must be Good Because I am Drooling: Incidental Salivating Experience Affects Product Liking**

Chun-Ming Yang, Ming Chuan University, Taiwan  
Wen-Hsien Huang, National Chung Hsing University, Taiwan  
Pei-Wen Fu, National Sun Yat-Sen University, Taiwan

Two studies provide initial evidences supporting the spillover effect of incidental salivating experience on product evaluation. Salivating, caused either by food tasting or olfactory imagery cues, positively affected product liking. This effect was stronger when consumer's cognitive resources is restricted, but had less influence when people are mindful.

## **Why are Your Luxuries Perceived as Counterfeits?**

Zheshuai Yang, NUS Business School, National University of Singapore

This research examines when and why luxuries will be perceived as counterfeits by others. Based on three studies, I identify two motivations for luxury consumption and demonstrate that luxuries are more likely to be perceived as counterfeits when others infer the consumer having an appearance-expression rather than a competence-expression motivation.

## **Positive Effects of Misfit in Sponsorship Relationships: When Misfit Benefits the Brand**

Lifeng Yang, University of Mississippi, USA  
Katie Howie, University of Mississippi, USA

Extant research has shown consensus that brand's sponsorship of events that are incongruent (misfit) with the brand beliefs would yield to a negative effect on the brand. In this research, a markness model is proposed, arguing that misfit in sponsorship is not inherently bad but can be beneficial.

## **Object's Attributes & Choice Decisions: A Developmental Investigation**

Marie Yeh, Loyola University Maryland  
Robert Jewell, Kent State University, USA  
Cesar Zamudio, Kent State University, USA

This study examines how children make tradeoffs among attribute-rich objects and finds that the product attributes children value systematically varies by age and gender with children, ages 5 to 7, and females preferring perceptually salient attributes while children, ages 8 to 12, adults, and males preferring cognitively involving attributes.

## **Two Facets of Narcissism and Compulsive Buying**

Sunghwan Yi, University of Guelph, Canada  
Roisin O'Connor, Concordia University, Canada

Although overt narcissism in compulsive buyers has been recognized in previous research, the role of covert narcissism has not been explored. We simultaneously investigated the association between covert narcissism vis-à-vis overt narcissism and compulsive buying. Furthermore, we explore mediational processes of the overt versus covert narcissism and compulsive buying.

## **When Highly Curious Consumers Have High Self-Esteem: Maximizing the Effects of Augmented Reality in Brand Communication**

Mark Yi-Cheon Yim, Canisius College, USA  
Hongmin Ahn, West Virginia University, USA

This study aims to identify personality traits that affect the effects of augmented reality in brand communication. The study demonstrates that both curiosity and self-esteem influence the persuasiveness of augmented reality in brand communication, suggesting they are critical individual differences to consider in predicting consumers' responses to augmented reality.

## **The U-Shaped Relationship between Hedonic Shopping Motivation and Consumers' Changes in Purchase Decisions**

Mark Yi-Cheon Yim, Canisius College, USA

The current study tests two competing hypotheses about how hedonic shopping motivation affects consumers' changed purchase decisions. A field study conducted in a superstore illustrates that a U-shaped relationship between hedonic shopping motivation and consumers' purchase switching is significant while a linear relationship is not.

## **What are Friends for: Shifting Focus of Social Relationship to its Instrumentality as a Response to Future Anxiety**

Heeyoung Yoon, Yonsei University, Republic of Korea  
Kyoungmi Lee, Seoul National University, Republic of Korea

This research suggests that future anxiety heightens the perceived instrumental value of social relationships. As individuals feel more anxious about their future, their appreciation for the instrumental support from a relationship intensifies, and they show more positive attitudes towards an experience that provides an opportunity to meet new people.

## **Norm Effects on Gender in Social Marketing Campaigns Promoting Savings Behavior**

Hye Jin Yoon, Southern Methodist University, USA  
Carrie La Ferle, Southern Methodist University, USA

Research examining the influence of social norms on gender is scarce. Two experimental studies found males and females to respond differently to various types of norm information in social marketing campaigns on saving money. The findings provide implications for theoretical as well as practical contributions.

## **Anchoring Effects in Product Valuation: Inferences and Self-generated Anchors**

SangSuk Yoon, Temple University, USA  
Nathan Fong, Temple University, USA  
Angelika Dimoka, Temple University, USA

The anchoring effect provides important evidence of preference construction, but studies that use anchoring to affect product valuations have reported inconsistent results. We seek to reconcile previous results by evaluating the roles of experimental procedures and participants' self-generated anchors. We find that both factors moderate the anchoring effect.

## **Does Believability Matter? An Exploration of Women's Responses to a Weight Loss Concept**

Jennifer Young, University of Auckland, New Zealand  
Denise Conroy, University of Auckland, New Zealand  
Sara Jaeger, New Zealand Institute for Plant and Food Research

Using a constructivist perspective, we explored how women, attempting to lose weight, made sense of an appetite control food concept. The in-depth interviews reveal that participants hold uncertain believability responses but definitely will try. Insight is provided into how they balance conflict between their expectations and more emotional wishful thinking.



## **Why Consumers Buy Green Products? A Utility Theory Perspective**

Ruizhi Yuan, Nottingham University Business School China  
Martin J Liu, Nottingham University Business School China  
Andrew Smith, Nottingham University Business School, UK  
Jun Luo, Nottingham University Business School China

This research investigates the influence of perceived green value (PGV) on consumers' purchase intention with the decision making criteria derived from utility theory. The pilot-test data confirmed the multi-dimensional construct of PGV, and the significant mediating effects of acquisition and transaction utilities on the relationship between PGV and purchase intention.

## **B-girls and B-boys: Cultural Production and the Hip-Hop Dance Subculture**

Jia Zheng, George Mason University, USA  
Laurie Meamber, George Mason University, USA

The research examines the hip-hop dance subculture with implications for extending our knowledge of cultural production within arts communities of production/consumption. Findings suggest that cultural production within this artistic community is conflicted and fragmentary, and that commodification is embraced to allow the subculture and art to flourish.



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