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ADVANCES IN CONSUMER PSYCHOLOGY

TRADEWINDS ISLAND RESORT ST. PETE BEACH, FLORIDA

PROCEEDINGS
VOLUME **TWO**

EDITORS
MARGARET "MEG" MELOY PENN STATE UNIVERSITY
ADAM DUHACHEK INDIANA UNIVERSITY

MySCP.ORG @
Society for Consumer Psychology

Margaret G. Meloy and Adam L. Duhachek, Editors

SCP 2010
St. Pete Beach

Welcome to SCP 2010!

We are delighted that you are here in St. Pete Beach FL to participate in the Society for Consumer Psychology annual winter conference 2010. We have been gratified by the overwhelming number of high quality submissions for the conference from around the world and for the enthusiasm of those of you who participated in the review process. The SCP 2010 conference is growing in tracks (now numbered at 7) and increasing in diversity. We received 383 submissions from 170 universities and 21 different countries this year. Over the next several days, we look forward to lively discussion and an active exchange of ideas centered on consumer psychology. The research that you hear about will shape the future of our field.

We would like to extend our sincere thanks to the many reviewers, authors, presenters, discussants and volunteers that helped ensure a terrific conference program in 2010. We are extremely grateful to SCP president Hans Baumgartner for his many efforts and assistance throughout the year, and to Larry Compeau for his vision and patience throughout this process. The SCP Doctoral Consortium is in its second year and is now being underwritten by funds from Jane and David Schumann. We extend our sincere thanks to you for ensuring the future of the consortium. We also wish to thank Paul Belcastro, Aleksey Cherfas, Patty Salo Downs and Terra Ingram for their behind-the-scenes efforts in supporting this year's conference. Finally, we would like to thank our sponsors for their support.

We are very grateful to have such wonderful contributions from so many people for the benefit of the Society. This is truly your conference and we hope you enjoy SCP 2010!

Best wishes,

Adam Duhachek   Meg Meloy
Indiana University   Penn State University

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2010 SCP ANNUAL WINTER CONFERENCE

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Thursday, 25 February 2010

| Working Paper Session |
| 6:00 PM - 7:30 PM |

Working Papers:

Friday, 26 February 2010

Sessions 1.1 – 1.7
8:15 AM - 9:30 AM

1.6 Symposium: Civic Consumerism: Field Studies of Prosocial Consumer Behavior
Chair: Vladas Griskevicius, University of Minnesota
Discussion Leader: Darren Dahl, University of British Columbia

1.7 Symposium: Effects of Social Exclusion on Consumption: Processes and Consequences
Chairs: Jaehoon Lee, University of Texas at San Antonio
L. J. Shrum, University of Texas at San Antonio
Discussion Leader: C. Nathan DeWall, University of Kentucky

Sessions 2.1 – 2.7
9:45 AM - 11:00 AM

2.1 Individual Papers: New Discoveries in Branding
Chair: Brittany Duff, University of Illinois at Urbana-Champaign

2.2 Symposium: In Pursuit of the Prime Suspects: Insights from Second Generation Research on Nonconscious Influences of Consumer Behavior
Chair: Robin Tanner, University of Wisconsin
Discussion Leader: Tanya Chartrand, Duke University

2.3 Symposium: Cue Substitution: Inferential Process in Judgments of Psychological Distance and Metacognitive Experience
Chair: Claire I. Tsai, University of Toronto

2.7 Individual Papers: Materialism and Consumption of Counterfeit Products
Chair: Inge Lens, KULeuven

Plenary Session: Distinguished Speaker Paul Slovic, Decision Research
11:15 AM - 12:15 PM
"Adventures with the Affect Heuristic"

Sessions 3.1 – 3.7
2:15 PM - 3:30 PM

3.1 SCP Dissertation Proposal Competition Award Winners
Chairs: Maria Cronley, Miami University of Ohio
Peggy Sue Loroz, Gonzaga University

Honorable Mentions:

Winner:

3.2 Individual Papers: Backlash to Advertising
Chair: Elizabeth G. Miller, Boston College

Bart de Langhe, Erasmus University*
Aparna Labroo, University of Chicago
Ann McGill, University of Chicago

Kenneth Herbst, Wake Forest University*
Eli Finkel, Northwestern University
David Allan, Saint Joseph's University
Gráinne Fitzsimons, University of Waterloo

Elizabeth G. Miller, Boston College*
Linda Court Salisbury, Boston College

3.3   Individual Papers: Familiarity and Fluency
Chair: Tina Kiesler, University of California, Northbridge

Jing Lei, University of Melbourne*
Ying Jiang, University of Ontario Institute of Technology

Oliver B. Büttner, Zeppelin University*
Arnd Florack, Zeppelin University
Anja S. Göritz, University of Würzburg

Joseph Redden, University of Minnesota*
Manoj Thomas, Cornell University

Joon Yong Seo, University of Utah*
Debra Scammon, University of Utah

3.4   Individual Papers: "Commitment" in Consumer Choice
Chair: Lan Xia, Bentley University

Jeffrey Larson, Brigham Young University*

Keri Kettle, University of Alberta*
Gerald Häubl, University of Alberta

Jeffrey Parker, Columbia University*
Rom Schrift, Columbia University

Lan Xia, Bentley University*

3.5   Symposium: The Implication of Cultural Values for Consumption: Going Beyond Individualism and Collectivism
Chair: Sukki Yoon, Bryant University
Discussion Leader: Alokparna (Sonia) Basu Monga, University of South Carolina

3.6 Symposium: Silver Linings: The Bad (Ratings), The Dumb (Consumers), and The Ugly (Lawyers)
Chair: Joachim Vosgerau, Carnegie Mellon University
Discussion Leader: Leif Nelson, UC Berkeley

3.7 Symposium: How Does it Really Feel? The Neural Bases of Emotional Experience and Perception in Consumer Behavior
Chair: Uma R. Karmarkar, Stanford University
Discussion Leader: Baba Shiv, Stanford University

Sessions 4.1 – 4.7
3:45 PM - 5:00 PM

4.1 Symposium: Corporate Social Responsibility: New Directions and Perspectives
Chair: Carlos Torelli, University of Minnesota
Discussion Leader: Michal Strahilevitz, Golden Gate University

Tillmann Wagner, Texas Tech University*
Richard Lutz, University of Florida
Barton Weitz, University of Florida

Carlos Torelli, University of Minnesota*
Alokparna (Sonia) Basu Monga, University of South Carolina
Andrew Kaikati, University of Minnesota

Sergio Carvalho, University of Manitoba*
Sankar Sen, Baruch College
Márcio de Oliveira, Faculdade Farias Brito
Renata Carneiro, Universidade de Fortaleza

4.2 Individual Papers: Dual Process Theories in Consumer Behavior
Chair: Yael Zemack-Rugar, Virginia Tech

Bruce E. Pfeiffer, University of New Hampshire*   Maria L. Cronley, Miami University of Ohio
Hélène Deval, University of Cincinnati   Frank Kardes, University of Cincinnati
David H. Silvera, University of Texas at San Antonio

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Chris Loersch, University of Missouri
Richard E. Petty, Ohio State University

Martijn Veltkamp, University of Twente*
Ruud Custers, Utrecht University
Henk Aarts, Utrecht University

Yael Steinhart, University of Haifa*
Michael Kamins, Stony Brook University
David Mazursky, The Jerusalem School of Business Administration
Avi Noy, University of Haifa

4.3 Symposium: The Fallibility of Consumer Memory Before, During and After Consumption Experience
Chair: Katie Kelting, Indiana University
Discussion Leader: Antonia Mantonakis, Brock University

Katie Kelting, Indiana University*
Dan Rice, Louisiana State University

Arun Lakshmanan, SUNY Buffalo*
Shanker Krishnan, Indiana University

Priyali Rajagopal, Southern Methodist University
Nicole Votolato Montgomery, College of William and Mary*

4.4   Symposium: Standards and Construction of Hedonic Value
      Chair: Meng Zhu, Carnegie Mellon University
      Discussion Leader: Joachim Vosgerau, Carnegie Mellon University

4.5   Individual Papers: Mindsets and Cross-Cultural Effects
      Chair: Bart De Langhe, Erasmus University

4.6   Individual Papers: Issues Linking Firms and Consumers
      Chair: Kelley Main, University of Manitoba

4.7 Individual Papers: Fear of Loss and Arousal
   Chair: Seung-Yun Lee, McGill University

Saturday, 27 February 2010

Sessions 5.1 – 5.7
8:15 AM - 9:30 AM

5.1 Individual Papers: Corporate Social Responsibility and Consumers
   Chair: Andrew Wilson, St. Mary's College of California

5.2 *Individual Papers:* Goals and Goal Progress
   Chair: Aaron M. Garvey, Penn State University

Claudiu Dimofte, Georgetown University*
Anne Brumbaugh, College of Charleston
Ronald Goodstein, Georgetown University

Cecilia Alvarez, Florida International University*
Kimberly Taylor, Florida International University*

5.6 Individual Papers: It's Who You Ask and How You Ask
Chair: Samuel Bond, Georgia Tech

Bart Claus, KULeuven*
Kelly Geyskens, University of Maastricht
Kobe Millet, KULeuven and Free University of Amsterdam
Siegfried Dewitte, KULeuven

Charles Y. Z. Zhang, University of Michigan*

Gerald Häubl, University of Alberta*
Benedict Dellaert, Erasmus University
Murat Usta, University of Alberta

Stephen He, Georgia Tech*
Samuel Bond, Georgia Tech
Talya Miron-Shatz, Ono Academic College

5.7 *Symposium:* Learning about Communications from Research on Older and Younger Consumers
Chair: Jane Ebert, University of Minnesota
Discussion Leader: Ron Faber, University of Minnesota

Noelle Nelson, University of Minnesota*
Jane Ebert, University of Minnesota

Ian Skurnik, University of Virginia*
Carolyn Yoon, University of Michigan
Norbert Schwarz, University of Michigan

Jing Wang, University of Iowa*
Catherine Cole, University of Iowa

Sessions 6.1 – 6.7
9:45 AM - 11:00 AM

6.1 Individual Papers: Pro-Social Consumer Behaviors
Chair: Fern Lin, University of Pennsylvania

Jen Shang, Indiana University*
Rachel Croson, University of Texas at Dallas

6.2 Symposium: How Feedback Influences Sequences of Goal Actions
Chair: Stacey Finkelstein, University of Chicago
Discussion Leader: Suresh Ramanathan, University of Chicago

6.3 Symposium: Profits, Numbers, and Schemas: What and How Consumers Infer
Chair: Michal Herzenstein, University of Delaware
Discussion Leader: Robert Wyer, University of Illinois

6.4 Symposium: Emotions, Predictions, and Decisions: Some Recent Findings
Chairs: Tamar Avnet, Yeshiva University
Leonard Lee, Columbia Business School
Discussion Leader: Nathan Novemsky, Yale University

Sessions 7.1 – 7.7
2:15 PM - 3:30 PM

7.1 Symposium: Green Marketing: Spurring Pro-Environmental Consumption, Conservation, and Sustainability
    Chair: Vladas Griskevicius, University of Minnesota
    Discussion Leader: Michael Norton, Harvard Business School

7.2 Symposium: Beyond Positive Affect: Behavioral Consequences of Fluency Experiences
    Chairs: Ted Matherly, University of Maryland
    Anastasiya Pocheptsova, University of Maryland

7.3 Individual Papers: New Findings in Information Processing
    Chair: Abhijit Guha, Wayne State University

7.4   Symposium: The Role of Emotions in Self-control Dilemmas
Chair: Francine Espinoza, ESMT, Germany
Discussion Leader: Aparna Labroo, University of Chicago

7.5   Individual Papers: Categories and Metaphors
Chair: Darron Billeter, Brigham Young University

7.6   Symposium: When Consumers' Mental Processing Becomes a Source of New Product Value
Chair: Susan Jung Grant, University of Colorado, Boulder

7.7 Individual Papers: Satisfaction Processes and Evaluation of Experience
    Chair: Sukki Yoon, Bryant University

Sessions 8.1 - 8.7
3:45 PM - 5:00 PM

8.1 Individual Papers: Consumer Health
    Chair: Ann Schlosser, University of Washington

8.2 Symposium: The Psychological Consequences of Goals
    Chair: Jinhee Choi, Korea University

8.3 Symposium: It's All Relative: How Frames of Reference Influence Consumer Budgeting and Willingness to Pay
Chair: Rebecca Hamilton, University of Maryland
Discussion Leader: Nathan Novemsky, Yale University

8.4 Individual Papers: Prediction and Forecasting
Chair: Nevena T. Koukova, Lehigh University

8.5 Individual Papers: Perceptions of Visual Information
Chair: Irene Scopelliti, Bocconi University

8.6   Individual Papers: Choice Confidence
     Chair: Josh Clarkson, University of Florida

8.7   Symposium: "Me and You and Everyone We Know": A Story of Value Creation in Social Networks
     Chair: Lalin Anik, Harvard Business School
     Discussion Leader: Chia-Jung Tsay, Harvard University

Papers Presented at the
Society for Consumer Psychology
2010 Winter Conference

February 25-27, 2010
St. Pete Beach, FL

#1 Working Papers: Feeling It: Haptic Priming Effects in Impression Formation

Joshua Ackerman, MIT*

Recent research on embodied cognition suggests that many abstract concepts are grounded in physical experiences. We investigated how the sensory experience of touch (haptics), including cues to weight, texture and hardness, can nonconsciously influence impression formation in ways consistent with touch-related metaphors (e.g., weight and importance, rough texture and difficulty, hardness and malleability). Our studies indicate that haptic cues can alter first impressions, even when those cues are incidental to the judgments being made.

For further information contact: Joshua Ackerman, MIT, joshack@mit.edu

#2 Working Papers: Don't We Like to be Flattered at All? Impact of Source and Item Characteristics on Consumer Perceptions of Agents′ Interpersonal Influence

Sutapa Aditya, York University*
Kelley Main, University of Manitoba
Darren Dahl, University of British Columbia

Flattery is a common method of interpersonal influence applied by agents in the marketplace. However, literature investigating flattery in a retail setting has primarily revealed a negative influence. The present research identifies two critical boundary conditions, which may result in a positive outcome of flattery in a retail setting. Findings from two studies demonstrate that when a highly attractive (vs. average in attractiveness) salesperson flatters a consumer on an item she/he already owns (vs. an item from the store), flattery can lead to higher satisfaction, trustworthiness perceived similarity and higher intentions to revisit the store.

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#3 Working Papers: There′s No Such Thing As A Free Lunch: Consumer Perceptions of Time Costs in Product Giveaways

David Alexander, University of St. Thomas*
Abhijit Guha, Wayne State University

This paper examines how marketers′ use of small, money vs. time payments in product giveaway offers affect consumers′ evaluation of those offers. We find that for free products that involve consumer time investments (vacations) consumers′ evaluation of the products are much higher when they must make small money payments vs. time payments to cover associated taxes. Consumers appear to focus on the money they are saving with the free product when money is salient. Consumers appear to focus on the time they have to invest in the free product when time is salient.

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#4 Working Papers: Perception of Bundle Value Across Contingency Levels: The Influence of Pricing Strategy and Images Presentation Format

Deny Belisle, Concordia University*
H. Onur Bodur, Concordia University

This research examines the impact of price bundling strategy (i.e., mixed-joint versus mixed-leader) and products′ images presentation format (i.e., products presented in the same image or in different images) on consumers′ perceived value of the bundle offer. Two studies have been carried out to demonstrate that perceived attractiveness of a bundle can be influenced by these contextual cues, depending on bundled products′ contingency level. Specifically, mixed-joint strategy yielded higher value for bundles of complements while mixed-leader strategy led to higher value for bundles of substitutes. In addition, bundles of complements appear more attractive when products are presented in the same image than in separate images.

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#5 Working Papers: Does an Invitation to Satisfice Lead to Measurement Errors? Cognitive Load Shapes Ones Answers

Elke Cabooter, Ghent University*
Maggie Geuens, Ghent University
Bert Weijters, Vlerick Ghent Leuven Management School
Iris Vermeir, Ghent University

Respondents often fill in questionnaires under cognitive load (e.g., under time-pressure or while listening to music or watching TV). This paper investigates the impact of cognitive load on different response styles. In two studies we show that cognitive load increases the level of the Net Acquiesence Response Style and the Extreme Response Style, but not the Midpoint Response Style. Moreover, the lower cognitive sophistication respondents possess, the more their response styles are affected by cognitive load. To conclude, this paper shows the pervasive impact cognitive load can have on the reliability of questionnaire responses.

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#6 Working Papers: Threats to Hope and Restoration of Self-Efficacy

Chiu-chi Angela Chang, Shippensburg University*
Xiaojing Yang, University of Wisconsin - Milwaukee

Given the importance of perceived self-efficacy in goal pursuit, this paper considers how to enhance perceived self-efficacy when the consumer is not confident in achieving a hoped-for goal. Construal level theory is applied to provide rationale for the hypothesis that higher-level construals would promote self-efficacy beliefs in such a reduced confidence condition. The results of a study in support of the hypothesis are reported, future research directions are outlined, and theoretical contributions are discussed.

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#7 Working Papers: I Spend, You Save: Gendered Reactions to Consumption During Economic Recessions

Elizabeth Cronson, University of Houston*
Vanessa M. Patrick, University of Houston
Henrik Hagtvedt, Boston College

We investigate influences of the economy on gendered consumption. We hypothesize that a recession mindset results in increased consumption practicality and decreased spending for women, despite census data showing that women's jobs are relatively secure. Study 1 surveys past consumption behavior and recession changes. Study 2 reveals that a recession mindset influences women's choices of products pretested to be versatile versus unique, while men show greater willingness for risk. Study 3 shows that women's disposition to adapt remains unchanged, despite exposure to uplifting information. These studies suggest that female recession preferences shift toward practicality, while male choices remain constant.

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#8 Working Papers: Why We Choose Employer Brands: The Role of Psychological Contracts on Employee Purchase Behaviors

Yoshiko DeMotta, Baruch College*
Sankar Sen, Baruch College

We examine why people decide to choose their employer's brand among a choice set that includes another more preferable brand. By conceptualizing employees' purchase behavior based on psychological contract theory, it is possible to identify a precursor of their purchase decisions: reciprocal obligations (transactional vs. relational). Our study demonstrates that reciprocal obligation type, peers' purchase norm, and peers' presence at the time of purchase will impact employees' brand choice in the case of choice dilemma.

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#9 Working Papers: Using Corporate Social Initiatives to Enhance the Job–Product Offering

Shuili Du, Simmons College*
C.B. Bhattacharya, European School of Management and Techonology, and Boston University
Sankar Sen, Baruch College

Corporate social responsibility (CSR) occupies a prominent place on the global corporate agenda today. In this research, instead of focusing on a company's external customers, we investigate the effects of CSR on its internal customers: employees. Because CSR can satisfy high-order psychosocial needs such as the need to know oneself (i.e., self-definition), the need to feel good about oneself (self-enhancement), and the need to feel special (self-distinctiveness), a company's CSR can significantly enhance its job-product offering and as a result, contribute to employee job satisfaction, employee retention and productivity. Results from an online, Zoomerang survey provide support for our hypotheses.

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#10 Working Papers: Embodied Product Preferences: The Flexibility of the Motor Fluency Effect

Jiska Eelen, KULeuven*
Siegfried Dewitte, KULeuven
Luk Warlop, KULeuven

In line with theories of embodied cognition, we investigate to what extent product preferences are influenced by physical interactions with products. Prior research demonstrated that people prefer tools that are easy to grasp over tools that are difficult to grasp (i.e., the motor fluency effect). In two experiments, we replicate and extend this effect and test the rival accounts for the underlying mechanism (e.g., learned stable action tendencies vs. dynamic construction of preferences).

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#11 Working Papers: The Influence of Assortment Size on Self-control in Food Choices

Maarten Elen, Ghent University*
Maggie Geuens, Ghent University

Resisting tempting, but unhealthy snacks requires self-control resources. The current research examines whether shopping in large assortments (versus small assortments) is a depleting activity that influences subsequent food choices. Results from an online experiment reveal that respondents who shopped in large assortments made unhealthier food choices afterwards, compared to respondents who spent money in small assortments. A lab experiment will be set up to generalize these findings and to test more directly the level of ego depletion.

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#12 Working Papers: Comparing Brand Attachment and Material Possession Attachment: An Empirical Examination of Similarities and Differences

Douglas Ewing, University of Cincinnati*
Chris Allen, University of Cincinnati

The relationship between brand attachment (BA) and material possession attachment (MPA) is not well understood. Some viewpoints suggests that they are manifestations of a common phenomena (Park, Priester, MacInnis, & Wan, 2009; Thomson, Macinnis, & Park, 2005) while others assert a more substantive difference (Kleine & Baker, 2004). The present research informs this ongoing discussion by examining BA and MPA in a controlled setting. Results of an exploratory study suggest that as attachment decreases, consumers have more ambivalence towards a possession attachment target than a brand. Results also support further inquiry having potential to inform strategy for consumer-brand connection development.

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#13 Working Papers: Happy Because It's Me, Sad Because It's Not Me: How Choices Only Partially Consistent with the Self Cause and Resolve Mixed Emotions

Stephanie Finnel, University of Pennsylvania*
Americus Reed II, University of Pennsylvania
Patti Williams, University of Pennsylvania

Consumers juggle multiple identities (e.g., mother and professional) and sometimes make choices that enable them to enact one identity but not another (e.g., quit work to be a full-time mother). In contrast to past work suggesting that such tradeoffs produce negative emotion, we demonstrate that they can produce mixed emotions (Study 1): consumers simultaneously experience positive and negative emotion because their behavior is consistent with one identity but inconsistent with another. Moreover, we examine whether making an identity salient can attenuate mixed emotions, such that primarily the positive or primarily the negative emotion remains (Study 2).

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#14 Working Papers: Hedonic-Utilitarian Goal Balancing as the Result of Functional Food Consumption

Aaron M. Garvey, Penn State University
Lisa Bolton, Penn State University

Consumption of hybrid products intended to support a goal may unexpectedly reduce intentions to pursue that goal. This paper examines the influence of functional food (hybrid products marketed as nutritionally enhanced) consumption upon subsequent dietary health decisions. Specifically, does exposure to a functional food activate a utilitarian health goal, and does consumption of the functional food satiate this goal? Furthermore, does satiation of this health goal result in goal balancing that increases preference for hedonically satisfying (but unhealthy) food items? Results from two preliminary studies indicate that functional food consumption unexpectedly boomerangs and undermines health protective behavior.

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#15 Working Papers: Counter-Stereotypical Products: What are the Barriers to their Adoption?

Tripat Gill, University of Ontario Institute of Technology*
Jing Lei, University of Melbourne*
Wonkyong Lee, University of Ontario Institute of Technology*

Counter-stereotypical products (e.g., male contraceptive pills, face grooming products for men, construction tool-kits for women, etc.) violate the behavioral norms and traits associated with their target group. We propose that the target group employs distinct cognitive strategies (i.e., psychological barriers) to reject such products. Using in-depth interviews we identified four such strategies, namely: subtyping (i.e., treating the product as an exception); subgrouping (i.e., considering the product appropriate for certain subgroups of their ingroup); derogating (i.e., denouncing the product or the user); and stereotyping (i.e., invoking stereotypes that the product is appropriate for the outgroup but not for the ingroup).

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#16 Working Papers: Is Product Placement More Persuasive Under Conditions of Ego-Depletion?

Brian Gillespie, Washington State University*
Jeff Joireman, Washington State University

Past research has shown that ego-depletion enhances the effectiveness of weak persuasive messages (Wheeler et al. 2007) and interferes with cognitive functioning (Schmeichel et al. 2003). The present study explored the implications of these findings for response to product placements. Participants assigned to an ego-depletion or a control condition—using an attention regulation task—watched a 30-minute episode of a current Television show with multiple product placements. Results showed that ego-depletion improved brand attitudes for products placed in the show, while also reducing recognition of those same products. Results highlight the importance of ego-depletion for response to product placement.

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#17 Working Papers: The Consequences of Product Harm Crises Moderated by Severity, Vulnerability, Brand Familiarity, and Company Response

R. Justin Goss, University of Texas at San Antonio*   Kate Gillespie, University of Texas at Austin
David H. Silvera, University of Texas at San Antonio   Ashley Rae Arsena, University of Texas at San Antonio
Daniel Laufer, Yeshiva University

We investigated the effects of product harm crisis severity, perceived vulnerability, brand familiarity, and company response on blame. Across three experiments, higher perceived severity was associated with greater personal vulnerability, increased blame to the company, negative brand attitudes, decreased purchase intentions, and negative product recommendations. Further, increased crisis severity negatively impacted an unfamiliar brand but not a familiar brand. Finally, participants attributed more blame to companies that issued apologies, took responsibility, or did nothing, than to companies that blamed the victim.

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#18 Working Papers: The Effects of Temporal and Social Distance on Consumers' Mean Preference and Choice Consistency: A Discrete Choice Experimental Approach

Sirui Guo, University of Guelph*
Towhidul Islam, University of Guelph
Vinay Kanetkar, University of Guelph

Building on literature on construal level theory, this study investigates the effects of temporal and social distance on the mean preference and preference consistency in the evaluation of technology-based innovation product, voice recognition software. Scale (preference consistency) adjusted latent class model is used to analyze the data. Our results support Salisbury and Feinberg's (in press) assumption of difference in preference inconsistency caused by temporal distance; and we find multiple segments of individuals who differently respond to stimuli of temporal and social framing. Overall, this research provides further insights on consumer decision making in a dynamic situation.

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#19 Working Papers: When Will Consumers Trust a Salesclerk?

Wenxia Guo, University of Manitoba*
Kelley Main, University of Manitoba

The literature examining the consequences of providing positive feedback to consumers during a retail experience has demonstrated primarily negative effects on trust of the salesclerk (Campbell and Kirmani 2000, Main, Dahl and Darke 2007). For example, the use of flattery results in lowered perceptions of trustworthiness towards salesclerks as consumers assume an ulterior motive is at work. Yet, there are circumstances in which salesclerks would like to be able to sincerely provide positive feedback. Two studies demonstrate when this is possible: when consumers are defense-motivated and a less transparent social influence tactic is used.

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#20 Working Papers: Two Worlds, Two Identities: An Investigation of the Malleable Self and the Theory of Presence

Mitchell Hamilton, Syracuse University*

An experiment was conducted in an effort to: (1) observe the relationship between a consumer's self-concept and the level of presence felt while immersed within a virtual environment; and (2) examine the possibility that different forms of a consumer's self-concept may elicit varying reactions toward advertising. This relationship was observed in the novel context of a virtual world (Second Life). Using ethnicity as a manipulation variable (i.e. - temporarily decreasing the consumer's level of ethnic self-awareness via avatar design), the findings suggest that a consumer's attitude towards an advertisement is influenced by their current, or most salient, form of self.

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#21 Working Papers: Liking Exceeds Reason for Liking: Affect-based Revision of Attribute Importance

Szu-Chi Huang, University of Texas at Austin*
Raj Raghunathan, University of Texas at Austin

The research examines how consumers justify their affect-based preferences by engaging in a revision of attribute importance, so as to make it appear that the option they (affectively) favor is the one that emerges as superior. Three studies in different domains were conducted, and the results supported the notion that, when participants experienced strong affect-based preferences toward an alternative, they tended to rate the attributes on which their preferred alternative was superior as more important than those on which the less-preferred alternative was superior. Results indicate that such affect-based revision of attribute importance occurs at a nonconscious level.

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#22 Working Papers: Uncertainty, Negative Advertising, Decision Making and Satisfaction: Will Uncertainty Lead to a Higher Satisfaction?

Jinfeng (Jenny) Jiao, Virginia Tech*
Kent Nakamoto, Virginia Tech*
Jane Machin, Virginia Tech*

Will people choose what they want and reject what they dislike in an ambivalent situation? Will a forced choice under preference uncertainty lead to a declining satisfaction? We tried to argue that it dependents on the degree of uncertainty and information type (negative or positive information provided for the choices). This research tries to explain how the underlying decision making processes could leads to higher satisfaction for undecided consumers. We found out that uncertainty will lead to the rejection of an unfavorite option but certainty will lead to the selection of a favorite option.

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#23 Working Papers: Regulatory Focus, Efficacy Appeals, and Self-Discrepancy in Consumer Psychology

Seung-A Jin, Boston College*

This study explored the potential of leveraging consumer psychology for effective health communication. Drawing from regulatory focus theory and self-concept discrepancy theory, an experiment examined the interactive effects of regulatory focus (prevention versus promotion), self-priming (actual self versus ideal self), and efficacy appeals embedded in promotional messages (self-efficacy versus response-efficacy) regarding diverse consumer behaviors. To this end, the experiment deployed an avatar-based video game, Mii Channel, as the self-priming apparatus and exergame, Wii Fit, as the advertised fitness product. The study discovered a moderating role of self-discrepancy in determining the effects of the fit between regulatory focus and efficacy appeals.

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#24 Working Papers: The Effects of Haptic Stimuli on Consumers' Brand-Self Connection

Seung-A Jin, Boston College*

The sense of touch plays a key role in consumers' tactile interaction with products. Utilization of force feedback devices that allow consumers to touch three-dimensional (3D) virtual products is a promising but under-explored area in consumer psychology. A 2 (the nature of tactile stimuli: force feedback vs. no force feedback) X 2 (need for touch: high NFT vs. low NFT) between-subjects factorial experiment indicated that consumers high in instrumental NFT show stronger brand-self connection when there are force feedback stimuli as opposed to when there is no force feedback. In contrast, those low in instrumental NFT indicate the opposite pattern.

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#25 Working Papers: A Cause for Chronic Maximizing: High Impact Expectations

Jonas Kiesekoms, Ghent University*
Maarten Elen, Ghent University*
Mario Pandelaere, Ghent University*
Maggie Geuens, Ghent University*

Maximizers spend more effort when making choices compared to satisficers. This study investigates a possible cause of chronic maximizing: High impact expectations. Two experiments show that maximizers estimate the impact of positive events on their subjective well being to be higher than satisficers. These results hold up for positive choice outcomes, as well as for other positive events. We hypothesize higher expectations lead to higher involvement and this causes maximizing behavior.

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#26 Working Papers: Differences in Reactions to Sales Promotion: Superior or Inferior to Your Product?

Chang Soo Kim, McGill University*
Myung-Soo Jo, McGill University

This study examines whether people's reactions to sales promotions differ according to whether they possess a product superior to or inferior to the product in the promotion. On the basis of downward and upward social comparison theory, the authors find that when a product inferior to the one promoted is possessed, people express less discomfort about the promotion and use the information relatively more than do people who possess a superior product. They also distort promotion information less, exhibit more positive attitudes toward the product on promotion, and express poorer attitudes toward their possessed product. People in the inferior condition engage in upward social comparison, which motivates them to improve themselves; people in superior conditions experience a downward social comparison to maintain a sense of superiority and high self-esteem, suggesting a strong influence of endowment effects.

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#27 Working Papers: WOM Source Disclosures and Persuasion:The Effect of Endowed versus Earned Expertise

Julia (Soyean) Kim, Boston University*
Andrew Schneider, Boston University
Barbara Bickart, Boston University

The use of consumer-generated product reviews requires people to make judgments about the quality and veracity of the information provided. Often, these product reviews will include personal disclosures, which offer clues as to the writer's level of expertise and possible motives for sharing information. We examine how such personal disclosures affect the persuasive impact of a word-of-mouth (WOM) message. We find that a disclosure about expertise that has been acquired through effort (or "earned") always increases the persuasive impact of the message, while the persuasive impact of a disclosure about expertise gained through an association (or "endowed") depends on the similarity of the WOM provider to the WOM recipient.

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#28 Working Papers: The Effect of Figurative Language in Consumer Online Reviews

Ann Kronrod, Ben Gurion University*
Shai Danziger, Ben Gurion University

We explore the effect of using figurative language in consumer reviews on review evaluation and on attitudes towards the reviewed product. Previous research shows that text using figurative language receives more attention and impacts attitudes more than comparable text that does not incorporate figurative language. In a preliminary sample of ~100 real reports we found significant correlations between figurativeness of the headline and the usefulness rating of the report. In a series of laboratory and field experiments we intend to show that use of figurative language elevates perceived usefulness and trustworthiness of review and enhances purchase intention.

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#29 Working Papers: Influence of Gender and Intense Imagery on Mental Imagery Processing of Advertisement Promoting Violent Entertainment

Dae Hee Kwak, Indiana University*
Choonghoon Lim, Indiana University
Paul M. Pedersen, Indiana University
Joon Ho Kang, Seoul National University

The current study examines the role that gender and intense imagery play in the mental imagery processing of ad within the framework of Perceived Message Sensation Value (PMSV). A 2 (image intensity: high vs. low) x 2 (gender: male vs. female) x 2 (presentation order: high-low vs. low-high) mixed design (N = 273) was used to test several proposed hypotheses. Results show that a high-intense imagery ad elicited greater vividness and quantity of imagery processing than a low-intense imagery ad, while negative feelings were reported when viewing a high-intense imagery. Gender did not show significant differences in vividness and quantity but males responded more favorably toward a high-intense imagery ad than females.

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#30 Working Papers: When Electronic Recommendation Agents Backfire: Negative Effects on Choice Satisfaction, Attitudes, and Purchase Intentions

Joseph Lajos, HEC Paris*
Amitava Chattopadhyay, INSEAD
Kishore Sengupta, INSEAD

Many websites provide electronic recommendation agents that ask users questions about individual factors and their preferences for product attributes, and then rate and rank order the available products. Previous research has hailed these agents as rescuing consumers from choice overload. However, we report the results of an experiment in which use of an electronic recommendation agent negatively impacted participants' choice satisfaction, attitudes, and purchase intentions over a period of between one and two weeks. The data support our hypothesis that use of an electronic recommendation agent leads consumers to overweight utilitarian product attributes and underweight hedonic product attributes in choice.

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#31 Working Papers: Effects of Color on Consumers' Perceptions of Package Volumes

Joseph Lajos, HEC Paris*
Amitava Chattopadhyay, INSEAD

Research in marketing has examined the effects of visual biases on consumers' judgments of product volumes. In the present research, we combine research indicating that packages that attract more attention are perceived to have a greater volume with research suggesting that high wavelength colors (e.g., red) attract more attention than low wavelength colors (e.g., purple) to hypothesize that consumers judge products to have greater volumes when their packages have a high wavelength color than when they have a low wavelength color. We report results from three studies that support our hypothesis.

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#32 Working Papers: The Illusion of (Not) Knowing: The Effect of Self-Esteem on the Relation between Subjective Knowledge Change and Memory for Information

Charles Lebar, HEC Paris*
Sandor Czellar, HEC Paris

Subjective knowledge (SK) can be defined as consumer perceptions of personal knowledge in a given domain. The present research investigates the impact of manipulating SK on information processing and retrieval strategies; it also seeks to uncover possible moderating mechanisms and boundary conditions for the hypothesized effects. In a first study, we show that consumer self-esteem moderates the relationship between SK manipulations and different measures of memory for new information. Implications of these results are discussed and details on our further experiments are provided.

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#33 Working Papers: Positive Emotions and Sociability: Differences in Self Construal

Seung Hwan (Mark) Lee, University of Western Ontario*
Miranda Goode, University of Western Ontario

Through three studies, we explore the distinct effects of enjoyment and pride and propose that their capacity to enhance sociability depends on self construal, the extent to which one is interdependent and independent. Many studies have examined what it means to be highly interdependent or independent. In contrast, we focus on the effect of positive emotions on sociability for those who are low on interdependence and independence. Our findings suggest that because low interdependent individuals are less socially inclined, enjoyment enhances their sociability. For low independent individuals who are less accustomed to being assertive, pride energizes their desire to socialize.

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#34 Working Papers: When We Are Who We Are Not: Centrality and Satisfaction in Networks

Seung Hwan (Mark) Lee, University of Western Ontario*
June Cotte, University of Western Ontario

Consistent with the tenets of the self-discrepancy theory (Higgins 1987), high central individuals experienced the lowest satisfaction when they lacked the knowledge or the ability to influence others. In other words, the degree to which high central members were satisfied with their social club was contingent upon whether or not they possessed the characteristics (i.e. knowledge, opinion leadership) which are typically associated with occupying a central position. Using social network methodology and analysis, we aim to make both theoretical and empirical contribution to the extant literature on networks and satisfaction.

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#35 Working Papers: Are Large or Small Numbers More Persuasive? The Moderating Effect of Message Framing

Sophia Lee, Yale University*
Daniel Read, Yale University

Large numbers are often used to emphasize the enormity of social problems and hopefully to persuade people to act on them. In our research we investigate the effectiveness of this strategy. We find that, in fact, sometimes large numbers are more effective and sometimes small ones. It depends on the framing.   In study 1, we show that when messages are positively framed small numbers are more effective in obtaining a promise of good behavior, while when messages are negatively framed large ones are more effective. In subsequent studies we consider some explanations for this.

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#36 Working Papers: The Effects of Relationship Anxiety, Self-Brand Connections and Reference Groups on Consumers' Loss Aversion

Sara Loughran, University of Pittsburgh*
Vanitha Swaminathan, University of Pittsburgh

This work extends the research on moderators of loss aversion. We examine how relationship anxiety, self-brand connections and reference groups influence loss aversion in a typical endowment effect setting. Specifically, we suggest that relationship anxiety increases loss aversion for objects associated with one's in-group and eliminates loss aversion for objects associated with one's out-group. Typical endowment experiments support our hypotheses and show that compared to control conditions, high anxiety increases selling prices for objects associated with one's in-group, and lowers selling prices for objects associated with one's out-group. We also rule out alternative explanations and discuss boundary conditions.

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#37 Working Papers: Familiarity Hijack: How Morphing Faces with Celebrity Images can Enhance Trust

Robin Tanner, University of Wisconsin - Madison
Ahreum Maeng, University of Wisconsin - Madison*

In this research we investigate the effect of combining unfamiliar faces with those of celebrities. Using facial morphing software we create composite faces consisting of 65% of an unfamiliar face and 35% of a celebrity face. In two studies participants rated the resulting composite images as being significantly more trustworthy than the unfamiliar faces despite being entirely unaware of the presence of the celebrity faces in the morphed image. Building on previous literature, we argue that this effect is consistent with a familiarity explanation but is inconsistent with explanations relying on either similarity or transfer of specific individual meaning.

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#38 Working Papers: Physical Distance, Culture and Evaluation: The Influence of Chronic and Instant Spatial Cues on the Level of Construal

Ahreum Maeng, University of Wisconsin - Madison*
Yuri Miyamoto, University of Wisconsin - Madison
Robin Tanner, University of Wisconsin - Madison

Research indicates that spatial distance (closeness) shapes high (low) level construal. Given different physical environments of Asian countries and America, we hypothesize that cultural environment may moderate the level of construal. In study 1, Asians favored a DVD when it was presented with feasibility information, whereas American favored desirability information. In study 2, Asians favored an automobile when presented in concrete visuals whereas American favored abstract words presentation; however, when primed with a physical closeness cue, the construal level is altered to opposite directions. These results support a broader conceptualization of distance-mediated effects on judgment and evaluation.

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#39 Working Papers: The Effect of Identification with a Social Group on Self-Accessibility

Frank May, University of Minnesota*
Carlos Torelli, University of Minnesota
Andrew Kaikati, University of Minnesota

Although it seems intuitive that a person who highly identifies with a social group should easily be able to access his/her interdependent self, our findings suggest otherwise. We focus on individuals' sense of connection with one particular social group, in terms of their identification with America, and show that high- (vs. low) identification with America impairs accessibility of the interdependent self. Thus, this research aims to shed light on the seemingly paradoxical American identity, examining what it is that prevents people who are highly identified with America from accessing their interdependent selves, and establishing how this identification in turn affects response to persuasive communications.

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#40 Working Papers: Unconscious Information Processing Reduces Information Overload and Increases Product Satisfaction

Claude Messner, University of Basel*
Michaela Wänke, University of Basel

Consumers are less satisfied with a product chosen from an extended assortment than a limited one (Iyengar & Lepper 2000). Presumably, information overload causes decreased satisfaction and reducing information overload would increase satisfaction. Building on Unconscious Thought Theory (Dijksterhuis & Nordgren 2006), study results suggest that this classic effect reverses when consumers do not deliberate. Consumers reported lower satisfaction with a praline chosen from a large assortment than a small one, when they either deliberated intensively or chose spontaneously. This effect reversed when consumers were distracted before choosing. Unconscious thinking about a large assortment led to the highest product satisfaction.

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#41 Working Papers: The Effect of the Choice Process on Variety-Seeking Behavior

Mauricio Mittelman, Universidad Torcuato Di Tella and COPPEAD Graduate School of Business*
Miguel Brendl, Northwestern University
Amitava Chattopadhyay, INSEAD

This research offers a new explanation for variety-seeking behavior: When people choose varied options, they may in part do so because they seek variety in the choice process, beyond just seeking variety in the choice outcome. Specifically, we propose that when making a series of choices, people have an urge to make choices that are different from previous ones, regardless of the consumption experience that eventually results. Based on this hypothesis, we further propose that people who choose options one-by-one will seek more variety than people who choose options all-at-once. We report two studies that provide evidence for our hypotheses.

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#42 Working Papers: Does Consumer Ethnocentrism Moderate the Impact of Mortality Salience on Foreign Product Evaluation?

Mark Mulder, Washington State University*
Jeff Joireman, Washington State University*

Previous research has shown a strong preference for domestic products under conditions of mortality salience. We explored whether consumer ethnocentrism would moderate the impact of MS on foreign product evaluations. Results revealed a marginally significant three-way interaction between CES, MS and country of production (U.S. vs. Iran) on product evaluation. All participants (U.S. college students) preferred products made in the U.S. Importantly, however, this tendency was strongest among high CES participants in the MS condition.

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#43 Working Papers: When Functional Knowledge and Aesthetic Benefits Collide: The Impact of Incongruent Product Information on Hedonic Consumption

Theodore J. Noseworthy, University of Western Ontario*
Remi Trudel, Boston University

The schema congruity effect, a robust phenomenon in marketing and psychology, has been demonstrated repeatedly using products where consumer preference relies heavily on functionality. With the growing emphasis on aesthetic considerations in product choice, there is a need to understand the impact of incongruity on hedonic offerings. Evidence from three studies suggests that although moderate incongruity can have a positive effect and enhance evaluations for utilitarian goods, it can also have a negative effect and reduce evaluations for hedonic goods. Importantly, we find a shift in perceived benefit and a change in processing underlies this reversal.

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#44 Working Papers: Risk Taking in Unrelated Domains and Compensation for Loss of Self-esteem

Joseph Paniculangara, University of Central Florida*
Xin He, University of Central Florida

Among the myriad motivations that exist for risk taking, this paper suggests that a perceived loss in a domain such as one's appearance may foment risky behavior in an unrelated domain such as driving. The underlying construct that appears to link the two domains is self-esteem. While the sources of state self-esteem may differ depending on the domain, a loss of self-esteem in one domain can increase risky behavior in another domain since risky behavior increases the gain in self-esteem. Acting in an additive manner to this propensity for risky behavior is the importance of the substitute domain for self-esteem.

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#45 Working Papers: Splitting Psychological Distance for Charitable Donations: The Effect of an Agent

Joseph Paniculangara, University of Central Florida*

Construal level theory suggests that with increase in psychological distance between giver and recipient, the quantum of charitable donations would decrease. As psychological distance increases, more abstract construals result which although synergistic with the pro-social behavior as a value, may not translate well into behavior which weights feasibility. The research proposed in this paper suggests that an agent who acts as an intermediary between giver and recipient may compensate for this effect, if the psychological distance between the giver and the agent was lesser than between the agent and recipient. Hence, psychological distance between giver and recipient would be split.

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#46 Working Papers: Understanding Certification Cobrand Strategy

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Certification cobrand is a marketing strategy when using a certification seal of approval from the reputable third party certification agency with the primary brand on a product. Using the certification brand on the product is permitted when a third party certifies the product has met a specific certification standard after thorough testing. Drawing on signaling theory, this research is among the first to investigate how a certification cobrand influences consumers' evaluations of the product quality and their willingness to buy. The effects of a certification cobrand with familiar and unfamiliar primary brand at different prices are examined.

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#47 Working Papers: I Buy for Quality, You Buy for Status: Marketplace Metacognition in Consumer-to-Consumer Inferences

Meghan Pierce, Virginia Tech*
Kimberlee Weaver, Virginia Tech
Kimberly Daniloski, Virginia Tech
Norbert Schwarz, University of Michigan

The results of three studies explored consumer-to-consumer metacognitions in conspicuous consumption. Across a variety of products, consumers associated reasons for their own purchases with characteristics of the product, while they associated others' identical purchases with the desire to impress others. The studies showed that these differences are not merely the result of social desirability concerns, can occur with hypothetical and actual product purchases, and occur both between and within subjects. Implications of this asymmetry for marketplace metacognition are discussed.

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#48 Working Papers: When the Spice of Variety Impairs the Pleasure of Consumption

Morgan Poor, Indiana University*

Affective reactions to most products and experiences attenuate with ongoing consumption, a process commonly referred to as hedonic adaptation. Although, extant research has shown that variety can reduce adaptation when introduced into a consumption experience, the literature is silent on the effect that variety may have when available prior to making a consumption decision. In this conceptual paper, it is argued that the mere presence of variety in a choice context will increase the rate with which a consumer adapts to the chosen item during actual consumption and that this effect is mediated by regret.

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#49 Working Papers: "The More I Use It, the Less You Can Extend It." The Influence of Brand Construal on Brand Extension Evaluations: The Moderating Role of Direct Experience with the Brand

Sanjay Puligadda, Miami University of Ohio*
Maria L. Cronley, Miami University of Ohio*
Frank Kardes, University of Cincinnati

Investigating the relationship between similarity of a brand extension with the parent brand and consumers' evaluation of the extension, we study prior experience with the focal brand and the temporal distance of the launch of the brand extension as potential moderators. Given that prior experience or current extensions lead to concrete construals, we argue that a brand previously used and a brand extension that is current will be less able to extend into dissimilar categories.

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#50 Working Papers: "Are You Benevolent or Strategic?" The Influence of Perceived Brand Benevolence on Consumers' Purchase Intentions: A Process Perspective.

Sanjay Puligadda, Miami University of Ohio*
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The growing phenomenon of purposeful or meaningful marketing is marked by benevolent brands that provide assistance and value to consumers other than the benefit derived from the consumption of the brands' product or service. This assistance may or may not be related to the focal brand's product or service. This research aims to investigate consumer responses to such benevolent acts by brands. Specifically, we investigate how perceived benevolence influences consumers' purchase intentions and how indebtedness and trust mediate the relationship. A functioning website of an existing benevolent brand is used for this purpose.

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#51 Working Papers: Differential Effects of Perception on Encoding and Recall of Haptic Imagery

Shannon Rinaldo, Texas Tech University*
Terry Childers, Iowa State University

Although the role of haptic processing within marketing has been increasingly studied, haptic imagery use has not received the same level of attention. Based on studies of visual and auditory modalities (Unnava, Agarwal, and Haugtvedt 1996), the interaction of imagery can selectively interfere or facilitate perception within modality. This study addresses the research question of how imagery may selectively interfere or facilitate perception. In two studies, blind consumers simultaneously processed perceptual information either during encoding or during recall. Perceptual and imagery processes within-modality resulted in interference during encoding, while within-modality perceptual processing enhanced memory for imagery information during recall.

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#52 Working Papers: Don't Go to the Grocery Store Hungry?

Christine Ringler, Arizona State University*
Andrea Morales, Arizona State University
Steve Nowlis, Arizona State University

Common wisdom suggests when you go to the grocery store hungry you buy more products, but we find when consumers go shopping and are hungry they are more likely to buy hedonic but not utilitarian food items. In addition, hunger also influences consumption. Not surprisingly, we find hungry consumers eat more utilitarian foods than non- hungry consumers. However, we also find hunger has no effect on the amount of hedonic food consumed; rather, consumption effects are driven by the interaction between hunger and cognitive load such that it is only when consumers are both hungry and under load that they lose their self-control and eat more hedonic food items.

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#53 Working Papers: Measure What I Do, Not What I Say: On The Predictive Accuracy of Attitudes and Behavioral Intentions

Caroline Roux, McGill University*
Ulf Böckenholt, McGill University

Because the pragmatic self governs the here and now, people repeatedly fail to act in a way that reflects their core values, creating a gap between their attitudes, intentions and behaviors. The goal of this paper is to determine whether different construal levels of hypotheticality activate different selves, and if this self-activation leads people to express different levels of attitudes and intentions. We also investigate whether putting people in a mindset similar to the one they are in when they act helps them to express attitudes and intentions that are more reflective of their actual behaviors.

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#54 Working Papers: Possessions as an Extension of the Conflict between Selves: The Case of Transgenders' Self-Identity

Ayalla Ruvio, Temple University*
Russell Belk, York University

This ethnographic study explores the role possessions play in the formation, development, and resolution of the conflict between different selves. Focusing on the gender identity conflict experienced by transgendered individuals, we found that the symbolic power of possessions causes the conflict to surface to the level of consciousness. Possessions also help individuals cope with their conflict in different ways, and reflect the conflict's resolution and the formation of a new self-identity. The implications of this study contribute to the literatures on transgenders and the extended self.

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#55 Working Papers: Symbol Abandonment as a Collective Response to Symbol Hijacking

Joachim Scholz, Queen's University*
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The present research examines the role of collective processes in the context of hijacked group symbols. We focus on perceived threat to the distinctiveness of one's social group as a collective process. Two studies support our hypotheses that people with strong (vs. weak) identification with a group abandon their group's symbol more readily when the symbol is hijacked by a similar (vs. dissimilar) group and that the extent to which group members experience distinctiveness threats mediates this effect. Our results extend previous findings on symbol abandonment and highlight the need to consider collective processes in this phenomenon.

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#56 Working Papers: The Mediating Role of Hope in the Relationship Between Product Attributes and Judgment

Inbal Segal, Ben Gurion University*
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Various product attributes elicit different emotions, which in turn influence product judgment. Building on regulatory focus theory and research on emotions, we propose: (1) products associated with prevention attributes are more favorably viewed than those associated with promotion attributes; (2) hope mediates the effect of the type of attribute on judgment. Two experiments support our hypotheses. In experiment 1, participants read about a car presented as either luxurious (promotion) or safe (prevention), and then completed feelings and judgments scales. Experiment 2 replicated experiment 1 using different attributes: fun driving (promotion) versus environmentally friendly (prevention). Implications and future directions are discussed.

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#57 Working Papers: You Have Great Taste! Examining Consumer Responses to Scripted Rapport in Service Settings

Nancy J. Sirianni, Arizona State University*
Katherine E. Loveland, Arizona State University*
Naomi Mandel, Arizona State University

Firms may attempt to balance standardization and personalization by having employees engage in scripted rapport behavior with customers. This research investigates situations in which consumers receive and overhear scripted flattery to understand the implications of such a customer service strategy. An experiment demonstrates that customers who receive a compliment and then overhear that compliment given to another customer will experience cognitive dissonance, but will resolve this discrepancy by believing the employee is trustworthy, accepting the flattery, and then rewarding the firm with positive evaluations. Conversely, participants who overhear a compliment being given and then receive it themselves are not likely to respond as positively to the employee's ingratiation effort.

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#58 Working Papers: He Who Dies with the Most Alternative Fuel Wins: An Alternative Use of Terror Management Theory

Krystina Smith, Skidmore College*
Christine Page, Skidmore College*

Climate experts argue that is it essential for humans to change their behavior with respect to energy consumption to curb the devastating effects of global warming. In this study, the efficacy of terror management theory is examined as an effective means by which to influence consumer attitudes and behaviors toward an alternative fuel, BioHeat. The findings of this study reveal that reminders of impending death significantly increased individuals' preference for BioHeat, but only when BioHeat was represented as a luxury item. Theoretic and practical consequences of this findings are explored.

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#59 Working Papers: Self Discrepancy and Consumer Decision Making: Optimal Decisions and Risk Aversion

Kamila Sobol, York University*
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Self discrepancy theory postulates that people exhibiting high levels of self inconsistency become motivated to align their actual self perception with their self standards (i.e. ideal and ought). The present study expands our knowledge of the effects of self discrepancy by examining how inconsistent self views influence consumer decision making. The results of four studies provide evidence that people with a heightened awareness of self discrepancy have a higher tendency to make quality decisions, in terms of resisting to self indulgence and engaging in elaborative thinking when making choices, as well as to avoid unwarranted risk by selecting conservative options.

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#60 Working Papers: Consumer Knowledge as a Moderator of Specificity-Based Product Selection

Jason Stornelli, University of Michigan*
Anirban Mukhopadhyay, HKUST
Andrew Gershoff, University of Texas at Austin

One way marketers differentiate functionally equivalent or similar offerings is by varying product claim specificity. For example, drug manufacturers may offer one product indicated for migraines and another for general analgesia that contain identical active ingredients. Previous research suggests this strategy often works – consumers prefer functionally specialized products over general or "all-in-one" alternatives. Yet, this may not always be the case. We argue that preference for specialized alternatives may depend on the consumer's subjective knowledge within the category.

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#61 Working Papers: The Impact of Brand Personality Traits on Post-Consumption Behavior

Lauren Trabold, Baruch College*
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Extant research in the area of brand consumption has suggested that brands may be consumed to express underlying goals. The authors find that brand influence is associated with underlying desirable goals and results in goal directed behavior. Although these findings are robust across positive associations (e.g. honesty, creativity), it is not clear how consumers would be influenced by brands with strong negative associations or how these brand influences may extend beyond the consumption domain. We address these two questions in three studies. We show that consumption influences consumer personality measures and impacts the likelihood of pro-social behavior. Our work extends the current understanding of how brands influence behavior and has implications for how consumers and marketers may alter human behavior.

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#62 Working Papers: Does Brand Rejection Make the Heart Grow Fonder? The Impact of Consumer Exclusion, Brand Exclusion, and Ego-Defensive Goals on Brand Evaluations

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Preeti Krishnan, University of Manitoba

This research examines a brand-exclusivity effect from the perspective of aspiring consumers (Kirmani, Sood, & Bridges 1999), and by providing evidence that brand exclusion may activate an ego-defensive goal which lower brand evaluations. We also look at the previously unexamined role of co-consumer exclusion in buffering negative brand exclusion effects.

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#63 Working Papers: Strategic Localization of Global Brands: Choosing Brand Names to Minimize the Impact of Consumer Animosity and Leverage Positive Country-of-Origin Perceptions

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Geopolitical disputes often trigger consumer animosity, turning a foreign brand's otherwise positive country-of-origin perception into a serious impediment to its success. Building on psycholinguistic research, we propose a theoretical framework elucidating how consumers react to different types of brand naming strategies. We demonstrate that brand names localized via certain strategies not only benefit from the positive aspects of their country-of-origins but also are immune to animosity. We also show that consumer animosity is not necessarily a generalized, chronically stable construct as extant research suggests; rather, consumers disapprove of foreign brands only when the exporting nation's misdeeds are made salient.

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#64 Working Papers: Matching the Words and the Features: The Effect of Matching Advertisement Language and Product Attributes on Attitude

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Karthik Easwar, Ohio State University

Matching the level of abstraction between products attributes and marketing messages can improve attitudes towards the products. Using concrete (abstract) words to describe concrete (abstract) attributes of a product will lead to better product attitudes than abstract (concrete) words. Experiment 1 examines this matching hypothesis using two different products with either matched or unmatched messages. Experiment 2 examines the matching hypothesis by priming the same product to be either hedonic or utilitarian. Overall, these two experiments provide preliminary evidence that advertising language matching a products primary use can improve attitudes.

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#65 Working Papers: Online Auction: The Effect of Time and Visual Product Presentation on the Development of Psychological Ownership

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Matthew Eastin, University of Texas at Austin
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Heather Schulz, University of Texas at Austin

Past studies suggest that bidders develop a sense of psychological ownership toward not-yet-owned products over the course of an online auction. The duration of time spent in an online auction was found to positively contribute to that mental state. To extend past research, the current study proposes the imagery processing induced by visual product presentation will act as a contributing factor to the development of psychological ownership. In addition, this study examines the moderating role of trait-based buying impulsiveness. Preliminary results of this experiment show support for these propositions.

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#66 Working Papers: Integrating Mindfulness with Consumer Psychology: Awareness of Action Increases Consumption Satisfaction

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Leigh Anne Novak, University of Southern California*   Wendy Wood, University of Southern California
Joseph R. Priester, University of Southern California

An increasing wealth of evidence indicates that mindfulness (awareness) can have an array of positive outcomes, physiological and psychological. To date, such research has involved intensive training. We investigated whether mindfulness could be manipulated via a subtle, temporary manipulation, and whether such manipulations might influence satisfaction with specific activities. Participants in the high-awareness group were instructed to "rest your attention on the activity of eating the chocolates [playing tic-tac-toe] and sense the sensations of the activity." Indicators of satisfaction were averaged to form one measure of satisfaction for each activity, and we found that mindful awareness resulted in increased satisfaction.

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Session 1.1

Europoly Money: The Impact of Currency Framing on Tourists' Spending Decisions
Priya Raghubir, New York University
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In January 1999, 12 countries decided to adopt the Euro at a given exchange rate: Belgium, Germany, Greece, Spain, France, Ireland, Italy, Luxembourg, the Netherlands, Austria, Portugal and Finland. In all of these countries, except Ireland, the nominal prices of goods were lower in Euros than they were in the prior local currency. From January 1999 onwards, the 12 participating countries included prices in Euros along with the prices in their local currencies. The legal tender of Euro was introduced on January 1, 2002, and countries gradually ended the circulation of their existing national currencies. There was a dual circulation period until the changeover was complete, during which time both the new Euro and the old national currency remained in circulation. By the end of February 2002, all 12 countries had discontinued the use of their local currency. However, to help people translate prices from one currency into the other, in many countries, a reverse pricing communication system was adopted: Prices were displayed in Euro terms, with the local national currency conversion shown just below. It was expected that, over time, consumers would have become accustomed to thinking in Euro terms, and would no longer require the local currency reference as an aid. This paper examines whether that assumption was well founded.

We investigate how framing a price in nominally different (but economically identical) currencies affects consumer-spending decisions based on the predictions of the "money illusion," a tendency to over-weight nominal values relative to real values (cf. Shafir, Diamond, & Tversky, 1997). Prior research has shown that the money illusion influences spending in foreign currencies: People under spend when one unit of their home currency buys multiple units of the foreign currency and overspend in the reverse situation (Raghubir & Srivastava, 2002). We extend this line of research by examining how sequential and simultaneous exposure to multiple currencies, that is exposure to a price in French Francs and in Euros, affects consumers' price magnitude perceptions and spending. The primary theoretical contribution of this paper is to show that when multiple nominal values are available, then the manner in which people integrate them can lead to "money illusion" biases, and that these individual level effects have economic consequences with implications for consumer welfare, public policy, and the prices that companies can charge.

We first examine the impact of sequential exposure to foreign currencies on price perception and intended spending. We propose that people will perceive prices in Euros to be cheaper if they are first exposed to a currency whose face value is larger than the Euro (DM $2 \cong$ €1) than if they are first exposed to a currency whose face value is smaller than the Euro (£0.5 $\cong$ €1). A one-way ANOVA on the total cost of a hypothetical shopping basket using three levels of prior currency exposure (DM, £ or Irish Punt 1 = €1) was significant ($F (2, 48) = 9.96$, $p < .01$). As predicted, those in the UK £ condition overestimated the cost of their shopping basket (M = €89.78 vs. Actual = €46.96, Control Irish Punt = €52.13), whereas those in the German DM condition underestimated it (M = €33.47).

The second experiment examines the impact of simultaneous exposure to two foreign currencies. We propose that people anchor on the nominal value of the currency that is more salient and display the "money-illusion" effect, even when the original currency is available to them in the context. We provided people prices in two currencies: Euro and French Franc highlighting one and providing the second as a reference: €$_{FF}$ or FF$_€$. Study participants rated their likelihood of purchasing 13 different products including toiletries and clothing, using the cover story that they had to shop due to their baggage being misplaced by an airline. A repeated measures ANOVA on the purchase intentions for the thirteen items showed that people are likely to spend more when the frame is €$_{FF}$ versus FF$_€$ ($M_{€FF} = 2.24$ vs. $M_{FF€} = 1.87$, $F (1, 22) = 3.55$, $p < .05$), and are also likely to consider a larger set of items ($M_{€FF} = 5.60$ vs. $M_{FF€} = 3.62$, $F (1, 22) = 4.49$, $p < .05$). Study 3 examines the external validity of these effects. We analyzed tourist receipts data from 1993–2008 for 10 of the 12 countries that adopted the Euro (excluding Ireland as the exchange rate is in the opposite direction, and Luxembourg due to data unavailability) compared to a set of six comparable countries that did not: UK, Denmark, Iceland, Norway, Sweden, and Switzerland. To control for country differences and overall trend in tourism expenditures, we included GDP, CPI, population, and unemployment numbers for the year as predictor variables along with whether or not the country had adopted the Euro (0 = not, 1 = yes), the number of years prior to or subsequent to the introduction of the Euro (e.g., 1993 = -9, 2002 = 0, 2008 = 6), as well as the interaction between these two variables. The regression was significant ($R^2_a = .73$, $F (8, 196) = 66.24$, $p < .01$), with the interaction term positive and significant ($\beta = 4433.93$, $t_{196} = 2.64$, $p < .05$). The positive and significant interaction implies that tourism receipts were higher after the Euro introduction in 2002 for those countries that adopted the Euro as compared to those who did not, controlling for overall trend and other differences across Euro and non-Euro countries.

To summarize, we show that while presenting prices in multiple currency frames could lead to a gradual adaptation to the new Euro currency standard as demonstrated by Marques and Dehaene (2004), it may not be sufficient. Results of our laboratory experiments determined that there was a systematic error in the price magnitude perceptions of the same unfamiliar currency due to differences in prior exposure to another currency (Study1), and when prices were presented in more than one currency (Study 2), suggesting that providing both currencies simultaneously is not adequate at attenuating money-illusion effects.

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A Breakeven Strategy in the Consumption of Flat-Rate Goods

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Carey Morewedge, Carnegie Mellon University

People often pay a fixed upfront cost in order to consume in *bulk*—to consume a large or unlimited amount of a good (e.g., buffets, cellular telephone plans, and unlimited rental miles). What governs consumption of such unlimited goods? In addition to the desirability of a good, one important feature that affects consumption is its price. For example, people consume more of the same good when its sunk cost—the amount they paid—is greater (Arkes & Blumer,1985). Bulk goods are an interesting area in which to examine the influence of different kinds of prices on consumption, as people may pursue different consumption strategies. They may consume to achieve perfect satiation, or consume to get a "good deal" (maximizing transaction utilty). In other words, people may consume to consume exactly as much as they would like to of a good (i.e., an ideal amount), or consume enough of the good to have paid less than what they would have paid for the good if buying it at its retail price.

In four experiments we examined which of these two consumption strategies is pursued. Participants in Experiments 1 and 2 ate from an all-you-can-eat buffet of mini Reese's' peanut butter cups for a flat-rate of $1 or for free. (Participants received a $2 budget to use during the taste test, and kept the remainder of the budget at the end of the experiment.) In Experiment 1, we manipulated sunk costs ($0 vs. $1) and whether participant considered the retail price of the food before or after eating. We expected an interaction, such that the salience of price to influence consumption only when participants paid for the bulk good. A 2(payment) x 2(retail price salience) ANOVA revealed the predicted Payment x Retail price estimation interaction, $F(1,129) = 3.87$, $p = .05$. As predicted, participants in the payment condition ate more cups when the price of the candy was considered before consumption than after consumption, $F(1,129) = 3.13$, $p_{one-tailed} < 0.04$. There was no effect of price consideration when the cups were *free*, $F < 1$.

In Experiment 2, we manipulated sunk costs and retail prices to see whether people are only sensitive to the size of sunk costs, or attempt to recoup sunk costs by consuming in accordance with the good's retail price. When the number of cups taken was analyzed with a 2 (payment) x (retail price) ANOVA, it revealed a significant Payment x Retail price interaction $F(1,418) = 3.93$, $p = .048$. Whereas participants in the free condition requested an equal number of cups whether they believed the cups to have a low or high retail price ($M_{Free, High Retail Price} = 2.77$, $SD = 3.39$), $F < 1$, participants in the payment condition requested more cups when they believed the cups to have a low than high retail price, $F(1,418) = 5.38$, $p = .02$.

In Experiment 3 expanded the research beyond the domain of food. Participants first read a description of the rides an amusement park offered and then were told the park is considering a pay-as-you-go pricing option for either a higher ($5) or lower single ride price ($3). They were then asked how many rides they would go on had they purchased a higher ($30) or lower ($15) price unlimited-ride day pass. We found that participants predicted they would consume greater than or equal to the break-even volume in each condition. In addition, a 2(single ride price) x 2(pass price) ANOVA revealed a significant effect of the single ride price, $F(1,110) = 3.89$, $p = 05$. As predicted, participants in the *low* single ride price condition predicted they would take more rides than participants in the *high* single ride price condition.

Experiment 4 used the same procedure as Experiment 3, with one additional measure—Need for Cognition (NFC). People's NFC has been shown to relate to a variety of cognitive processes that involve an increase explicit consideration of product information. A positive mood's tendency to decrease the scrutiny of a advertisement, for example, is more pronounced in people low in NFC (Batra & Stayman, 1990). Also, the product assessments of people high in NFC have been shown to reflect a more complete evaluation of their attributes (Haugtvedt, Petty, & Cacioppo, 1992). A fully factoralized regression using dummy variables to code for single ride price and pass price, with participants' standardized NFC scores as another predictor revealed the a significant three-way interaction between single-ride price, pass price, and NFC, $b = -9.08$, $t(156) = -2.48$, $p = 0.01$. Participants who were high in NFC and paid for the higher price day pass were most likely to exhibit the recouping strategy, suggesting that the strategy is explicit.

Together, these findings suggest when and how consumers prioritize transaction utility before consumption utility (ideal satiety) when engaging in unrestricted consumption. Consumers appear to prioritize transaction utility over consumption utility when costs are salient or the consumers are prone to deliberation. These results are thus of importance to researchers studying sunk costs as well as mental accounting. We think this research may have interesting implications for businesses, and consumer advocates as well. Consumer advocates, for example, may find that manipulating the perceived value of food items mitigates some of the harmful effects of buffet consumption while at the same time helping business owners. Restaurants with an all-you-can-eat sundae buffet, for example, might both reduce their patrons' caloric consumption and increase profitability by listing the price of a small serving of ice cream, rather than the price of a large or no alternative, on their menu next to the price of the buffet.

In sum, these studies provide strong evidence as to how people consume flat rate goods as well as the effect of payment and price on consumption more generally.

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Unpacking and Valence in Future Time Estimates

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The present research examines how unpacking a multifaceted future event influences the estimate for time spent on the event when the valence of the event varies. Extending findings regarding probability judgments in support theory (Rottenstreich & Tversky, 1997; Tversky & Koehler, 1994) and drawing on research on hedonic editing (Thaler, 1985), we proposed and later confirmed in a series of experiments, that unpacking a pleasant event into several sub-activities increases the time consumers expect to spend on the event; however, this effect is reversed for unpleasant events such that unpacking decreases the time estimates. As an underlying mechanism for this pattern, we showed that unpacking increases the predicted enjoyment for pleasurable events and increases the predicted pain for aversive events, and, as a result, predicted enjoyment/pain of a target event mediates the effect of unpacking.

In experiment 1, we examined the effect of unpacking on a fun activity (visiting a museum) and there were three conditions. Specifically, in the unpacked condition we decomposed the visit into a list of major current exhibits and asked participants to provide individual time estimates for each of the exhibits they intended to visit. The total time for the visit was the sum of the individual time estimates for the exhibit(s) selected. In the packed condition, participants provided the estimated time for the visit without viewing the list of exhibits. To control for judgment frequency, we added an unpacked-1-estimate (U1E) condition in which participants viewed the exhibit list first as in the unpacked condition, but they only provided one overall estimate for the visit as in the packed condition. As predicted, time estimates were greater in the unpacked condition and U1E condition than time estimates in the packed condition, extending the support theory effect to future time estimates. The results showed that unpacking can increase time estimates even when judgment frequency is controlled for.

Next we tested our hypothesis in three lab experiments and ruled out a number of alternative accounts. First, to minimize the difference in task-relevant knowledge between the packed and unpacked conditions, we presented identical information about the target event and varied only the way in which the event was presented. Second, to control for task-complexity, participants never unpacked the target events themselves. Rather, participants in the unpacked condition were presented with the sub-activities of the target event that the experimenter had unpacked for them. The method allows us to slice the task any way we want and offers opportunities to test our hypotheses using a great variety of domains, including simple and complex tasks or discrete events and continuous experiences. Last, to rule out mental accounting as an alternative explanation, we tested our hypotheses in both the positive and negative domains. Mental accounting would predict a main effect due to time constraint but our hypotheses imply an interaction of unpacking and valence on time estimates.

In experiment 2, participants were asked to estimate the time they would allocate to social activities: meeting a blind date and attending a birthday party. In the pleasant conditions, the date was attractive and the birthday party was fun. In the unpleasant condition, the date was unattractive and the party was boring. We found that unpacking increased the time estimates in the positive domain but decreased the time estimates for negative domain, confirming our hypotheses. One may raise the possibility that reading descriptions of pleasant events might induce positive mood and that unpacking the events further enhances the positive mood. However, we find no difference in mood across conditions.

Perhaps the more finely the event is unpacked, the more attention will be paid to the prediction task and thus time estimates will increase regardless of the valence of the event. We addressed this issue in experiment 3 by increasing the number of sub-activities from two to three: date, party, and a phone conversation with an acquaintance. Consistent with experiment 2, unpacking increased the time estimates for pleasant events but decreased the time estimates for unpleasant events. Further, the mediation analysis in experiment 3 revealed that predicted enjoyment or pain derived from the target event mediated the interactive effect of valence and event representation on time estimates.

Experiment 4 further controlled for task-relevant knowledge and task complexity by holding the target event constant across all conditions. In this study, participants were asked to estimate the amount of time that they would spend watching a video clip, which was identical across conditions. We manipulated valence by simply varying the framing of the video clip so that the same experience would be perceived as something pleasant or unpleasant. To test the effect of unpacking on neutral events, we added two control conditions where we manipulated event representation but not valence. The results showed that for the seemingly pleasant video clip, unpacking increased the time estimate for watching the video clip, but the pattern of the results reversed for the seemingly unpleasant video clip. However, unpacking did not have an effect on time estimates when watching the video clip was perceived as a neutral experience, suggesting that with task-relevant knowledge being controlled for, simply increasing judgment frequency is insufficient for producing the effect of unpacking. To test the extent to which time estimates deviated from the default duration, we subtracted participants' time estimate from the default duration that it would take to play the video clip. The results suggested that unpacking caused participants to deviate from the default duration of future events when making time estimates.

In conclusion, our research showed that unpacking can influence the time estimate for an event but the change depends on the valence of the event. Our research contributes to the extant literature by extending support theory to time estimation and identify an important moderator, namely valence, for the unpacking effect.

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One or Many: How Number of Accounts Facilitate Spending or Saving Behavior

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In the current recessionary environment people are actively looking for ways to help secure their financial situations and policy makers are devising ways to encourage savings behavior. The stock market crisis and the economic uncertainty have led people to prefer liquid assets in banks. However, in order to keep their assets safe some people might be motivated to open multiple accounts following the principle of "diversifying their risk." On the other hand, others might prefer to maintain a single account because it is simpler and they can keep a better track of their assets. Given the renewed emphasis on savings, we investigate whether consumers save a different proportion of their earnings when using a single versus multiple liquid accounts. Across three studies, we find that the individuals who use one account save a greater proportion of their earnings compared to those who use multiple accounts.

We also propose and test the underlying mechanism of this effect. A big portion of purchases are not pure necessities, so people feel the need to generate reasons to justify consumption decisions to avoid a sense of guilt. People with multiple accounts are able to distort their financial situation because deposits and withdrawals happen across accounts, perhaps in varying amounts, and total savings are not immediately obvious. This increases the ambiguity of the situation and allows for variable, creative interpretations and justification of the situation such as "I save in account A and therefore, can spend from B" or by updating and changing an account's purpose to support the decision. Therefore, the vagueness afforded by multiple accounts facilitates spending justification. In other words, with multiple accounts, it is relatively easier to create justifiable reasons to support the desire to purchase a particular product because the vagueness of the situation allows for flexible interpretation of one's financial situation.

On the other hand, the clarity and precise nature of a single account stops such justification-facilitating distortion preventing people from spending. This happens because the information that is available about a single account tends to be precise and leaves very little room for distortion. People may find it difficult to distort the account information in a manner that allows them to justify their spending. The limited freedom to manipulate their view of the circumstances forces people with one account to be relatively more objective when deciding whether to spend or save.

Study 1 demonstrates the basic effect. Participants were first given the chance to earn real money in several computer based tasks (such as solving mathematical problems, identifying brand slogans). After each task they allocated the money they earned into a one (single account condition) or three (multiple account condition) accounts. Prior to a deposit, participants saw a beginning balance. After they had deposited their earnings, across one or three accounts depending on condition, they saw the updated balance. They were subsequently given the chance to buy different kinds of products using the money in their account(s). Across the complete study participants could earn up to $100 and spend around $40. The results indicated that those who were given only one account to save spent less than those who could save across three accounts. We collected thought protocols which indicated that participants were allocating accounts for spending versus saving in the multiple account condition. That is, they designated one account for saving and other account(s) for spending.

Study 2 followed the same procedure and replicated the results of study 1. It also demonstrated moderation by the personality trait of frugality. Participants who scored low on the frugality scale spent more if they were assigned to the multiple account condition than in the single account condition. There was no difference in spending for high frugals. Finally, past research has shown that the need to justify one's decision reduces the ability to distort the situation in a desired manner. Therefore, study 3 used a justification manipulation to demonstrate that when participants did not have to justify their saving or spending decisions they spent more in the multiple accounts versus the single account condition. However, participants who had to justify their decisions did not differ across the two conditions. Therefore, study 3 provided support for our thesis that multiple accounts because of their ambiguity provide a justification that facilitates spending behavior.

The findings of this research suggest to individuals who want to increase their overall proportion of savings that they should consolidate their earnings into a single liquid bank account, which will help limit their ability to justify unnecessary purchases and will subsequently increase their savings rate. From a policy standpoint, FDIC can facilitate savings behavior by increasing the deposit insurance limit so that people could safely keep their deposits in one account.

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Session 1.2

Is More Always Better? The Role of Construal on Assortment Size Preference

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Consumers prefer to shop at retailers with larger assortments (Broniarczyk, Hoyer, and McAlister 1998; Kahn and Lehmann 1991), and consumers are attracted to these large option sets despite the difficulty associated with choosing from them (Chernev 2003; Iyengar and Lepper 2000). Since larger assortments are more attractive, consumers seem willing to travel further for these assortments and even plan vacations around massive assortments (e.g., Mall of America).

Recent research, however, has identified boundary conditions to this effect by demonstrating that consumers are less likely to prefer large assortments when the options in the set are attractive or when they focus on choice difficulty (Chernev 2006; Chernev and Hamilton 2009). In this work we examine another potential moderator of preference for large assortments. In particular, we examine whether a consumer's preference for a retailer's assortment size is influenced by the abstractness of their mindset (Trope and Liberman 2003). On the one hand, consumers who think abstractly and remotely in a high construal might be less likely to consider the difficulty associated with choice, which would increase preference for a large assortment (Chernev 2006). On the other hand, consumers thinking abstractly might have a more general perspective and perceive distant objects as more similar (Day and Bartels 2007), decreasing preference for a large assortment.

We argue that consumes in a low-level and concrete construal focus on the specifics in their environment and decision set, which makes the differences between options salient and leads consumer to prefer a larger assortment to a smaller one. Alternatively, consumers who are in abstract mindsets perceive the options in a set to be more similar, effectively eliminating consumers' preferences for larger assortments. In three studies we test our similarity process by systematically varying consumers' mindsets and measure their preference for small and large assortments across an array of product categories.

In study 1 we asked participants to imagine that there were two new restaurants opening in their area either that day (low-level) or next semester (high-level). The owners offered participants a gift certificate (valid only for the opening day) for the restaurant of their choosing. Two menus were presented that were similar in the items offered in all aspects, except one of the restaurants offered 7 options and the other 14 options. The presentation order of the menus was counterbalanced and had no effect on choice. As expected, when participants were choosing a restaurant for that day (low-level) a majority (63%) preferred the restaurant with the larger assortment. When the restaurants were opening months later (high-level), however, only 46% chose the restaurant with 14 options. Study 2 aimed to increase the generalizability of our findings in a different product category, while establishing boundary conditions that test the similarity process. For participants to perceive the two assortments similar, they indeed need to be reasonably similar and comparable. Alternatively, if one of the stores has, say, five times the assortment, it would be difficult to judge them as comparable. Thus, we manipulated the assortment difference between the two stores. We asked participants to imagine that they just realized that their existing blender malfunctioned and they are having a dinner party that night (low-level) or at the end of the summer (high-level) and need to replace the blender for the event. Participants chose between two stores with either 4 and 12 blenders, or two stores with 4 and 24 blenders on a 9-point scale. We predicted that high construal would lead to a decreased preference for the large assortment only when the difference between assortments was reasonable (4 vs. 12), but not when the difference was unreasonable (4 vs. 24). In line with our predictions, the analyses revealed a significant interaction between construal and assortment difference. When choosing between assortment sizes of 4 and 12, participants under high construal showed a decreased preference for the larger assortment, compared to the low construal participants. However, when the choice was between 4 and 24, participants preferred the larger assortment with no significant differences across construal levels. Study 3 provides more direct evidence for our proposed process, with a category homogeneity manipulation, by asking participants to imagine that they are purchasing either peanut butter (homogenous) or jam (heterogeneous) for a camping trip that was either 1 mile (low-level) or 1500 miles (high-level) away from the town they live in. The categories were chosen based on a pretest indicating that consumers viewed options in the jam category as less similar compared to options in the peanut butter category. Participants chose between two stores: one with 8 options and one with 30 options. They then indicated the similarity between options within peanut butter or jam categories (SKU similarity). We predicted that when shopping for jam participants would choose the larger assortment, regardless of their mindset. However, when shopping for peanut butter they would prefer the larger assortment in a low-level construal, but would be indifferent when in high-level construal. The analyses supported this prediction with a significant product category by construal interaction. We found that when choosing a store to buy jam, consumers preferred the larger assortment when in low and high construal. When buying peanut butter, they preferred the large assortment store only in low construal, but not in high construal. Supporting our theory, the SKU similarity results showed the same pattern as preference and mediated the category by construal interaction on assortment size preference.

In three studies we demonstrate that the level of construal has a systematic effect on consumers' preferences for large assortments. We find that while consumers prefer larger assortments when in concrete mindsets, this preference decreases when they are thinking more abstractly and they

appear indifferent between large and small assortments. We further demonstrate that abstract construal encourages options to appear more similar to each other and underlies the findings we report.

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Being - Becoming Mindsets in Self-Control Dilemmas

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It is proposed that momentary self-definitions may be associated with specific mindsets and that these mindsets can impact how consumers behave in self-control dilemmas. Specifically, we suggest that defining oneself in the future leads to prudent preferences and choices while defining oneself in the present leads to more hedonic preferences and choices. The underlying process concerns the association of the momentary self-definitions with different levels of construal.

A momentary self-definition may be characterized as defining oneself in terms of the present state and condition; *the being mindset*, or in terms of whom one is becoming; *the becoming mindset*, (Blanton, 2001; Johnson & Stapel, 2009; Markus & Nurius, 1986). We argue that the being mindset is characterized by low levels of construal in which objects are processed in terms of their concrete characteristics. In contrast, we argue that the becoming mindset is characterized by high levels of construal in which objects are processed in terms of their abstract characteristics.

Shifts in self-definition should be accompanied by shifts in construal level for a variety of reasons. First, being and becoming mindsets differ temporally and temporal factors influence construal level. That is, defining oneself in the moment may feel temporally closer than when defining oneself in the future. Hence, the being mindset should be associated with lower level construals than the becoming mindset. Second, these self-definitions are related to factors that increase psychological distance, and therefore influence construal levels (Kim, Zhang, & Li, 2008; Liberman, Trope & Waslak, 2007). Given that descriptions of the self in the present may be higher in their probability of being correct or accurate; these self-definitions should psychologically be closer than self-definitions based on future change. Thus, the being self should be accompanied by lower levels of construal and the becoming self should be accompanied by higher levels of construal, (Todorov et al., 2007).

In addition to altering levels of construal, changes in self-definitions are expected to influence behavior in self-control dilemmas, with becoming selves associated with greater self-control than being selves. These predictions are based, in part, on previous research demonstrating that shifts in temporal focus and orientation influence behavior in self-control dilemmas because they alter levels of construal (Fujita, Trope, Liberman & Levin-Sagi, 2006; Malkoc, Zauberman, & Ulu, 2005). Similarly, because, the becoming self leads to higher levels of construal and these levels of construal carryover to subsequent situations (Malkoc, Zauberman, & Bettman, 2008), people who are defining themselves in terms of the future should be better able to engage in acts of self-control than people who are defining themselves in terms of the present.

Apart from influencing preferences for products, being and becoming mindsets should be associated with differential sensitivity to product information. In general, product information that matches consumer's motivational state is valued whereas product information that mismatches consumer's goal states is devalued (Fishbach & Zhang, 2008; Hong & Lee, 2008). Accordingly, in a becoming mindset, individuals should find information regarding the practicality of a product to be more persuasive, while, in a being mindset, information regarding the indulgent qualities of a product should be more persuasive.

Study 1, examined the relation between construal levels and self-definitions. To activate becoming or being selves, participants wrote a brief self-description about "who you may become, focusing on the person you may develop into" (becoming) or about "who you are right now, focusing on the stable things that define your personality" (being). Participants in the becoming condition described themselves more abstractly (i.e. higher level construal) whereas participants in the being condition used more concrete nouns (i.e. lower level construal). Study 2 examined how eliciting a being or becoming self affects spending preferences in an open-ended context. Participants wrote a brief self-description (same as in Study 1) and then imagined that they had just won $1000 in a raffle. In the becoming mindset participants listed more prudent spending choices while in a being mindset they listed more indulgent choices. In Study 3, participants were asked to imagine they were having a housewarming party. They assembled a gift registry from a selection of 20 gift items. Activation of mindsets was the same as in Study 1. Participants in a becoming mindset preferred practical to indulgent options more than participants in the being mindset. Study 4, activated becoming or being mindsets in a more subtle way. Participants were presented with what they believed was an advertisement. The advertisement exhorted the participants to think about themselves in terms of who they are becoming, or who they are now. At the end of the study participants choose one of two snack bars (hedonic vs. prudent). Participants in the becoming mindset were more likely to choose the prudent snack, whereas those in the being mindset showed the opposite. Study 5, shoppers were addressed before entering a convenience store and asked to read an advertisement that elicited a being or becoming self-definition (as in Study 4). After they completed their shopping trip, they were given a choice of a snack as a reward. Shoppers in the being mindset preferred the indulgent option (i.e. chocolate bar), whereas shoppers in the becoming mindset preferred the prudent option (i.e. apple or no snack). Study 6, examines how lower construal level (i.e. being mindset) will lead to greater valuation of a hedonically-framed product while the higher construal level (i.e. becoming mindset) will lead to greater valuation of a prudently-framed product. Accordingly, when the advertisement and mindset matched, participants evaluated a car more positively, than when they mismatched.

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How Construal Levels Attenuate the Search for Unpleasant Truths

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People looking for potentially unpleasant truths, is often a function of affective goals and is unrelated to self-improvement purposes (Shani et al., 2008; Shani & Zeelenberg, 2007). For example, imagining that one failed to win a large amount in a lottery because one forgot to send in the ticket, may drive people to seek information that shows whether or not an opportunity was really missed. Apparently, people are willing to seek unpleasant information (i.e., SUT: Search for Unpleasant Truths) not because they welcome exposing themselves to unpleasant experiences, and not always because the information holds instrumental values, but because lack of knowledge is in itself disconcerting (Loewenstein, 2006), and this is particularly true when a negative outcome is anticipated.

According to our SUT approach, this type of information serves a short-term affective goal by reducing the irritating uncertainty about a negative outcome. Ironically, people expose themselves this way to knowledge that may confirm their expectations, if they find out that they could indeed have obtained superior outcomes. Thus, lack of knowledge can be exceptionally frustrating, forcing people to ruminate about what might have been. This rumination can only end when the abovementioned affective goal is reached, for instance when finding out that one obtained a superior outcome, or alternatively that one did indeed miss an opportunity. Without a doubt, definite knowledge can be less disturbing than unpleasant uncertainty, even when one finds out that one's current situation is indeed inferior (Loewenstein, 1987).

Earlier research suggests (Shani et al., 2008; Shani & Zeelenberg, 2007) that an important feature of our SUT approach is the presence of an unpleasant peripheral aspect within an overall event. For example, thinking that one was overcharged (the unpleasant aspect) on ones' wedding day, may be a powerful motive for information search, yet at the same time, this aspect is clearly peripheral to the whole wedding event (the central aspect). Uncertainty about an outcome is associated with a negative feeling, which people want to reduce by searching for potentially unpleasant information. To gain additional insights into the conditions which lead to this search, we look at how these situations are cognitively represented using the construal level theory (CLT; Trope & Liberman, 2003).

Mental Representations of Events and the Need to Know

Psychological distance from the event determines whether high or low-level construals are formed. With an increase in psychological distance, individuals are more likely to form high-level construals, but if the event is psychologically near, they are more likely to form low-levels construals. Psychological distance from events or actions can be influenced by their temporal distance, their social distance, their spatial distance, and their hypotheticality (Liberman, Trope, & Stephan, 2006; Trope & Liberman, 2003). For example, if an event is temporally remote (e.g., the wedding took place a long time ago), individuals form a high-level construal (i.e., focusing on the purpose of wedding). However, when it is temporally near (e.g., it was yesterday) the same event is more often represented in terms of low-level features (e.g., the photographer's bill).

Furthermore, Liberman and colleagues (2006) argue that increase or decrease of affect depends on whether the affective experience is central to the situation or not. When affect is central, high-level construals are expected to increase affect. If, however, affect corresponds to peripheral aspects of the situation, high-level construals are expected to reduce affect. How do construal levels influence the information search that our SUT approach refers to? We argue that different construals of the overall event may change the affective need underlying the search for the potentially unpleasant information. Given that individuals search for the information because not knowing is experienced as disconcerting, the question is whether different construals of the event change this affective experience and thus the corresponding affective goal.

Particularly, we offer that higher level construals weaken the discomfort of not knowing the relatively unimportant, potentially unpleasant, truth. Consequently, high-level construals are expected to attenuate the need to search for this information. Thus, we suggest that when an event consists of peripheral negative information (e.g., being overcharged is subordinate to the importance of the wedding day), low-level construals of the event elicit stronger affective responses (e.g., to the suspicion that one may have been cheated or that one was overcharged by the photographer), which will increase the need to search for potentially unpleasant truths. In contrast, high-level construals of this negative event should weaken negative affective responses and their corresponding affective goal, consequently attenuating the tendency to search for this information.

To sum, when experiencing a discomfort from not knowing the truth about a peripheral aspect of an even – an affect goal arises to reduce the discomfort. High level construals which shift the focus to the main aspect of the event reduce the need to "seek for the truth" (i.e., the search for additional information about the unpleasant peripheral aspect). Low level construals, on the other hand, which facilitate a focus on peripheral aspects, increase the need to search for additional post-decisional information.

In a series of five studies we examined the willingness to seek out potentially unpleasant information. Construal levels was manipulated in various ways. In Experiment 1, we manipulated how abstractive individuals perceive the scenario ("why" versus "how" perspective). In Experiment 2, we manipulated construal levels by varying spatial distance ("near" versus "distant"). In Experiment 3 we manipulated construal levels by varying social distance ("self" versus "other"), and we examined whether the information search effect is mediated by the level of discomfort that results from not knowing more about the event. In Experiments 4 and 5, besides manipulating construal levels ("why" versus "how" and spatial distance, respectively), we manipulated participants' beliefs in whether knowing the information would help attenuate their negative feelings. We show that the

need to know potentially hurtful information about one's own decision increases when people adopt a low-level construal, but decreases when people adopt a high-level construal.

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Having Power Makes People More Implemental in Their Goal-Related Decision-Making

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Having power makes one feel more independent and distinct from others (e.g., Emerson, 1962; Thibaut & Kelley, 1959). Such an increase in psychological distance leads the powerful to make higher level construals (Smith & Trope, 2006). As a result, people who have power are better able to achieve their goals and show more goal-directed action (Galinsky et al., 2003; Guinote, 2007). We propose that the higher construal levels of high-power people also affect the actual manner in which they pursue a particular goal.

Goal pursuit involves both deciding between potential means to pursue a goal and acting upon that choice (Gollwitzer & Bayer, 1999). The predecisional stage usually involves deliberation: people are receptive to all information, and they process this information impartially (Beckmann & Gollwitzer, 1987). The postdecisional stage usually involves implementation: people are less receptive to information in general (because they are ready to act) and focus on information about their chosen option. Additionally, implementation also involves a change in attitudes. In the implemental mindset, people show greater spreading of alternatives (Harmon-Jones & Harmon-Jones, 2002), liking the chosen option more and the other options less.

According to construal level theory (Liberman, Trope, & Stephan, 2006), adopting a high-level construal involves reduced attention to peripheral, goal-irrelevant information. Such an information processing style is in line with an implemental mindset, as information about nonchosen options is by definition peripheral and goal-irrelevant. Thus, since high power leads people to adopt higher-level construals, we predict that those with high power should be more implemental in their goal pursuit than those with low power. We tested this hypothesis in two experiments by priming participants with low or high power (Smith & Trope, 2006), giving them a goal, and allowing them to access information about possible means they could use to achieve that goal. In both experiments, the goal was to create a trip using a travel website, and the possible means were three different fictitious travel websites. Participants accessed information about the websites via an information matrix (Payne et al., 1993). In this matrix, each column represented a website, and each row represented a different attribute (e.g., airlines). Participants could only view information about one website for one particular attribute at a time. Participants could view as much information as they wanted about these websites for as long as they wanted until they indicated they were ready to make a decision (predecisional phase). After choosing a website to use, they were offered the opportunity to view more information about all three websites (postdecisional phase). If they took this opportunity, a new information grid was displayed.

In Experiment 1, priming did not affect how many times participants accessed information about the different websites in the predecisional phase. That is, low-power and high-power participants were equally receptive to information before they made a decision. After choosing a website, most participants were interested in seeing more information. However, during this postdecisional phase, high-power participants were more biased in their information search. Specifically, high-power participants looked much more at information about their chosen website relative to the other websites, but low-power participants did not. In particular, high-power participants looked significantly less often at information about the nonchosen websites than low-power participants. In Experiment 2, two measures were added to assess additional aspects of the implemental mindset. To assess biased processing, participants were asked to recall as much about each website as they could at the end of the experiment. Better relative recall of information about the chosen website indicated greater bias. To assess spreading of alternatives, participants were asked to indicate how much they liked each website. Again, priming did not affect how many times participants accessed information about the different websites in the predecisional phase, indicating that priming did not affect receptivity to information. However, high-power participants processed this information in a more biased manner than low-power participants. Additionally, high-power participants showed more spreading of alternatives than low-power participants.

Across two experiments, we found that high-power participants were more implemental in their goal pursuit than low-power participants. Though both groups were equally receptive to information before making a decision, already high-power participants were processing this information in a biased fashion. After making a decision, high-power participants were more focused on their chosen option and less likely to seek information about other alternatives. Such implemental behavior also affected their attitudes: high-power participants showed more of a preference for their chosen option than low-power participants. Interestingly, across both experiments, priming did not affect participants' explicit commitment to their chosen website, nor their reported difficulty in making a decision, suggesting that participants are not conscious of these processes. These results suggest a cognitive basis for the confidence shown by high-power people, and the caution shown by low-power people, in their decision-making (Anderson & Galinsky, 2006). Since low-power people have less control over their situations, and thus need to be prepared to have their decisions overridden, such cognitive tendencies may be seen as functional. Unfortunately, preoccupying themselves with information on options they did not choose and cannot choose may also contribute to low-power people's decreased efficacy in goal pursuit (Armor & Taylor, 2003).

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Session 1.3

Knowing Too Much: False Recall Effects in Product Comparisons
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Although traditional research has shown that, experts' well developed knowledge structures provide numerous advantages in judgment and memory tasks (Chase and Simon 1973; Voss, Vesonder, and Spilich, 1980), contemporary work suggests that expertise may be a double-edged sword. Experts' well-developed schemas have been shown to interfere during information retrieval, thereby increasing the likelihood of committing recall errors (Baird 2003; Castel et al. 2007). For example, while attempting to remember an event or a list of items, experts are more likely to falsely recall items that are strong associates to concepts presented in the original list. Baird (2003) suggests that just as the number and strength of associative links in an expert's memory increases the number of correct recalls, they also increase the number of spontaneous *schema-based errors.*

Explanations for the false memory effects have focused on a cognitive explanation i.e. the strength and complexity of schema structures. We extend this research by suggesting that there might also be a motivational aspect underlying experts' generation of false recalls.

Experts are considered to be a credible source of information, and are often relied upon for unbiased product advice (King and Summers 1970). As such, experts are likely to feel a heightened sense of accountability for the quality and depth of the information they provide. Hence, when engaging in memory-based product comparison, the expert will be motivated to make careful feature comparisons in order to arrive at justifiable product evaluations. We propose that this felt accountability can impair experts' feature recall and can result in non-optimal product choice. Specifically, we suggest that in striving for accuracy, consumer experts will attempt to make product options comparable by aligning product features in memory. When features are not perfectly comparable, efforts to align them in memory may lead to the generation of different kind of false recall (Mather et al. 2005), i.e., *alignable errors*, and possibly decrease product evaluation accuracy.

Across four studies we investigate this motivational account for experts' false memories. Our findings support the proposition that in addition to the cognitive account, motivational aspects of expertise, namely, feelings of accountability, also contribute to sub-optimal memory performance. We demonstrate that in a product comparison context experts are susceptible to another kind of recall error that occurs as a result of aligning attributes in memory.

In each of the experiments we presented expert and novice participants with feature information about two competing brands of videogame consoles, Option A and Option B, and later asked them to recall these features from memory. For each option, eight features (four comparable and four non-comparable) were presented to the participants. One option was designed to be slightly superior to the other.

Experiment 1A examined whether the product comparison paradigm made experts susceptible to alignable errors. The results indicated that experts generated a higher number of incorrect recalls as compared to novices. These incorrect recalls were divided into schema-based errors and alignable errors. *Schema-based errors* consisted of false recalls of features that had not been originally listed for either option or recalls of incorrect values for comparable features. In line with prior research on false memory effects, we found that experts generated significantly more schema-based errors than novices. *Alignable errors* were false recalls made for one option that enabled comparison with a non-comparable feature from the other option. In line with our predictions, experts generated a significantly higher number of incorrect alignable recalls as compared to novices.

Experiment 1B mirrored experiment 1A with one exception. To test our belief that experts tend to feel more accountable for domain-relevant material than novices, we included accountability measures. We found that experts indeed reported significantly higher feelings of accountability for their responses than novices.

The results of experiment 1B provide support for our hypothesis that experts experience a heightened sense of accountability. We suggest that this elevated accountability leads experts to try to make brand options more comparable by attempting to align non-comparable features. This effort leads to an increase in alignable errors. Spontaneous schema errors, on the other hand, should not be exacerbated as they occur simply through an association in memory (Baird 2003), and are not influenced by the task format or the respondent's motivation level. If, as we suspect, accountability is driving experts' alignable errors rather than schema-based errors, then relieving experts of their feelings of accountability should reduce the alignable errors but have little impact on schema-based errors. We tested this hypothesis in experiment 2. We used a 2 (Expertise: Experts vs. Novices) X 3 (Accountability: Non-Accountable vs. Accountable vs. Control) design. Participants were told they would be accountable for their responses, would *not* be accountable for their responses, or were given no accountability instructions. The study proceeded in the same manner as experiments 1A and 1B. The results indicated that indeed when experts were relieved of their accountability they generated fewer incorrect recalls. Importantly this reduction came from experts' committing fewer alignable errors, as there was no difference in schema-based errors generated as a function of accountability. As compared to novices, experts generated more errors only under accountable and control conditions. Supporting our results from previous studies there was no difference between accountable and control conditions for experts. For novices no differences were observed at all as a function of accountability. We also took product evaluation measures for this study and demonstrated that experts' product judgments are more accurate when unaccountable for their responses than when accountable.

In the final experiment we demonstrated that experts' feelings of accountability relate to feeling accountable for the judgment process rather than the

final outcome. When experts are made accountable for an outcome and relieved of accountability for the process by which they reacted it, they demonstrate better memory based performance and more accurate product evaluations as compared to when they are made accountable for the process of evaluation.

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Different Motivational Foci Drive Risk Aversion During Recession and Risk Seeking During Economic Prosperity

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It has been shown that an economic recession has a deep impact on consumer well-being, economic outlook, and purchase decisions (Shama, 1981): Consumers become more careful and examine their product needs carefully, make decisions cautiously and prefer to increase savings instead of spending money (Cravens, 1974; Jensen & Rao, 1988). However, the impact of different stages of the business cycle on risk aversion in decision making is relatively understudied in marketing and psychology. Gordon and Saint Amour (2005) find that risk aversion is strongly countercyclical, rising during recessions and falling during expansions. Yet the question remains which causal mechanism drives this countercyclical pattern. After all, risky choices rely on judgments involving two components, including perceptions of: (1) the likelihood and utility of *positive outcomes* (how desirable the benefits are) and (2) the likelihood and utility of *negative outcomes* (how severe the costs are). Judgments leading to risk seeking during growth and risk aversion during recession might be driven by both components. Thus, risk seeking / aversion might be driven by positive and negative components independently.

A recession can be defined as a period with "a significant decline in activity spread across the economy, lasting more than a few months, visible in industrial production, employment, real income, and wholesale-retail sales."(Nordhaus, 2002) Therefore, it might be perceived as threatening and therefore activating a self-protective motivation which may lead people to process information so as to facilitate avoidance of risk and protection from harm. Prosperity on the other hand is the economic state of growth (the second phase of expansion, after recovery) with rising profits and full employment. Therefore, it might activate a motivational orientation reflecting a pronounced desire to approach opportunities for attaining desired experiences. Maner and Gerend (2007) presumed that these different motives can color the manner in which people judge potential outcomes, because these judgments can facilitate choices promoting avoidance of threat (risk aversion) or engagement of opportunity (risk seeking). Accordingly, they provided evidence suggesting that fear and curiosity (fundamental motivational orientations associated with avoidance and approach; Blumenthal, Chapman & Muse, 1995) are linked to the manner in which people judge decision outcomes and future events. Curiosity is especially associated with heightened perceptions of positive outcomes, while fear is especially associated with heightened perceptions of negative outcomes. In contrast, relatively weaker links are observed between curiosity and negative outcomes and between fear and positive outcomes. As a consequence, we hypothesize that people are especially focused on positive outcomes and 'approaching gains' during prosperity, but on negative outcomes and 'avoiding losses' during recession. Therefore, we predict an impact of recession primarily on financial measures of risk aversion in the domains of losses, but on the other hand an impact of prosperity primarily on financial measures of risk aversion in the domain of gains.

In study 1 we examined how information on economic recession or prosperity could have an impact on participants' judgments of both positive and negative outcomes of an uncertain investment. A 3 (between subjects: recession, prosperity, control) x 2 (within subjects: positive vs. negative outcomes) subjects design was utilized. We made use of short imagination scenarios (approximately 600 words) to provide information on economic recession or prosperity, or no information on the economic state was given (control condition). Afterwards, participants indicated the perceived likelihood of resp. positive and negative outcomes of 8 financial investment decisions (e.g. "investing 5% of your annual income in speculative stocks"). Participants indicated for each decision the chance on both a positive and a negative outcome (1: very unlikely and 7: very likely). In accordance with our hypothesis, we find that the perceived likelihood of a negative outcome is higher in the recession condition than in the prosperity and the control condition (with prosperity and control condition not differing from each other). On the other hand, the perceived likelihood of a positive outcome is higher in the prosperity condition than in the recession and the control condition (with recession and control condition not differing from each other).

Study 2 aims to investigate the impact of information on economic recession or prosperity on risk aversion in the domains of financial losses and gains. A 3 (between subjects: recession, prosperity, control) x 2 (within subjects: gains vs. losses) subjects design was utilized. We followed exactly the same procedure as in study 1, except for the dependent variable: risk aversion in the losses and gains domains was measured with a measure used by Hsee and Weber (1999). Each question offered a choice between a safe and a risky option. The risky option was always the same (100 euro if heads, 0 euro if tails), while the safe option varied from an amount much lower in expected value to an amount much higher in expected value than the risky option (resp. 20, 30, 40, 50, 60, 70 & 80 euro for sure). In the gain set, participants supposed to receive money while in the loss set to pay fines. Afterwards, each respondent was assigned a Risk Preference Index which ranged from 1 (most risk-averse) to 8 (most risk-seeking), based on the choices in each set of questions. We find a completely similar pattern of results as in study 1. In accordance with our hypothesis, we find that people become more risk averse for losses in the recession condition relative to the prosperity and the control condition, and that they are more risk seeking for gains in the prosperity condition, relative to the recesssion and the control condition (see Figure).

These studies provide evidence for the idea that the general counter-cyclical risk aversion curve might be driven by an approach-related motivation during prosperity which focuses on gains (and not on losses), but by an avoidance-related motivation during recession which focuses on losses (and

not on gains). We believe that this research is important as we think it might help to uncover the underlying psychological mechanism and give a causal explanation for the countercyclical risk aversive pattern of consumer choices (or other types of behavior) in the business cycle.
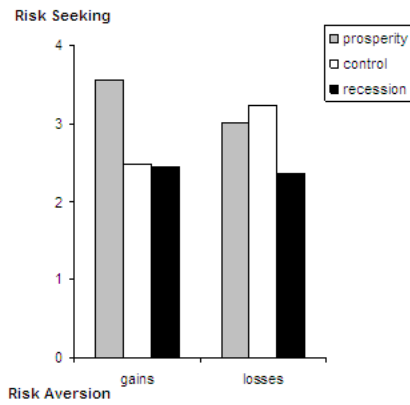
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When Do Consumers Prefer a Vaguely Remembered Alternative? The Role of Feature Valence in Mixed Choice

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Consumers often make choices from sets that include both a stimulus brand – for which information is externally available – and a brand whose description is only available in memory. Many shopping scenarios fit this description, such as when a consumer visits one store, finds a viable product, but continues to search for alternatives in other stores, relying on memory to compare information for previously considered alternatives to physically present ones. This type of task has been described as mixed choice (Lynch and Srull 1982) and despite its commonplace occurrence, only a handful of articles have looked at it (e.g. Alba, Marmorstein and Chattopadhyay 1992; Lynch, Marmorstein and Weigold 1988).

Biehal and Chakravarti (1983) represents the first formal investigation of situations in which information about a choice set is partly externally available and partly in consumers' memory. They found that when consumers did not have a good memory for aspects of a previously encountered brand, they tended to favor a fully observable one, often leading to suboptimal choices. Alba et al. (1992) referred to this finding as a conservative bias. In their examination, they found that this tendency to "overvalue" externally present information at the time of choice can be reversed when characteristics of the alternatives lead to a superior retrospective evaluation. Specifically, when abstract claims or a large number of attributes are used, consumers form superior evaluations about the memory brand, because abstract beliefs and number of arguments are easier to recall than detailed attribute information.

The current article adds to this body of research by investigating another important characteristic of option descriptions, namely feature valence. Across different streams of research, the study of feature valence has been shown to play an important role in shaping theories of consumer behavior (e.g. Ahluwalia 2002; Brenner, Rottenstreich, Sood and Bilgin 2007; Dhar and Simonson 1992; Nicolao, Irwin and Goodman 2008). Alternatives may be described using both positive and negative attributes. For example, a consumer looking for a used car may have to make a decision considering both positive features, such as a powerful engine, as well as negative ones, such as fading paint. Products may even be similar in terms of positive features, leading a consumer to consider tradeoffs between undesirable attributes. Previous research on mixed choice has relied exclusively on options that are described using only positive features. This somewhat narrow focus is understandable given that this is the way offerings are often presented in the market. However, when consumers analyze the brands they often find undesirable characteristics, which may be construed as negative features. Thus it is important to understand the role of feature valence on mixed choice.

In a mixed choice scenario, consumers have full information about the stimulus brand, but unless one has perfect memory, there is only limited information about a memory brand. In view of this asymmetry of information, we propose that the decision between a memory and a stimulus brand can be viewed in the context of a risky choice. Taking this perspective allows us to make predictions using a basic but robust psychological principle that has been shown to explain behavior in a multitude of situations. In their development of prospect theory, Kahneman and Tversky (1979) showed that individuals tend to be risk averse in the domain of gains, but risk seeking in the domain of losses. We argue that this principle can be successfully applied to explaining mixed choice decisions. When consumers face a choice between two attractive products, they are assumed to be choosing in the domain of gains, and therefore should be risk averse, as observed in Biehal and Chakravarti (1983). However, when consumers face a decision involving some negative features, this tendency should be mitigated and even reversed when these negative features are what differentiate alternatives. Thus, whereas a tendency to choose a present option is predicted when alternatives are described using positive features, the opposite is predicted when negative features are used.

We conducted three studies to test our hypothesis using different product categories, namely used cars, jobs and apartments for rent. In each of these studies, we employed a 2 (features attractiveness: positive vs. negative) x 2 (order of presentation: A→B vs. B→A) between-subject design. Together they showed a consistent pattern in support of our hypothesis. Next, we describe one of these studies.

Based on results from a pre-test, we created stimuli as a pair of apartments described mostly on positive features ("close to restaurants"), and a pair described mostly on negative ones (e.g. "weak heater"). Two-hundred and fifteen students from a Midwestern University took part in the actual experiment. They read the description of the first apartment at their own pace and continue to an unrelated study, which served as a filler task for our experiment. After completing the filler task, which took approximately 10 minutes, participants were presented with a second apartment and asked to make a choice between the option they saw at the beginning of the session and the one presented at the time of choice. In the mostly positive pair, preference for an apartment brand shifted from 58% when it was the memory option to 87% when it was the stimulus option ($\chi^2(1)$ =11.46, p<.01), replicating the conservative bias. More importantly, in the mostly negative pair, preference for an apartment brand shifted from 25% to 87%, as the option moved from stimulus to memory ($\chi^2(1)$ =74.45, p<.001), indicating a huge reversal of the conservative bias. Results from the other two experiments were in the same line. Specifically, in the used cars study, choice share shifted from 37% to 84% for the mostly negative pair, and 37% to 50% in the opposite direction for the mostly positive pair. Finally, in the jobs study, the negative shift was from 43% to 86%, while the positive was from 33% to 60%.

This article contributes to research in the following ways. First, it addresses a gap in mixed choice studies by investigating the role of feature valence. Second, it presents a novel and robust finding indicating a preference for a memory option when negative features are used to differentiate the alternatives. Third, it provides a unifying theoretical account for the conservative bias and its reversal.

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On Knowing More, But Liking it Less: The Moderating Role of Knowledge on Accessibility Experiences in Consumer Choice Decisions

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The importance of accessibility has long been recognized by marketers, as evidenced in commonly used measures such as top-of-mind awareness and unaided awareness. In this paper we contribute further by examining the moderating role of expertise. Our focal hypothesis was to examine the moderating role played by expertise on the relationship between accessibility and evaluative judgments. The standard finding is that generating more information (e.g., 12 instances of assertive behavior) is more difficult than generating less information (e.g., six instances of assertive behavior). These accessibility experiences influence subsequent judgments (e.g., ratings of assertiveness go down when asked to retrieve 12 instances instead of six), as suggested by the availability heuristic (Schwarz, et al., 1991; Schwarz, 1998).

We suggest that there would be interference effects (Keller, 1987, 1991; Burke and Srull, 1988; Alba and Chattopadhyay, 1986) for knowledgeable people (Smith, Adam and Schorr, 1978) such that being asked to bring one piece of information to mind might feel difficult since each element of information would compete with other pieces of information creating a phenomenological experience of difficulty in retrieval. Thus, we would predict reversals of the usual patterns when asked to retrieve one element of information (but this would hold true only for people who were knowledgeable). We test our hypothesis in three studies.

Experiment 1

This was conducted to examine whether the proposed differences in experienced ease of recall did exist between experts and novices. Participants were provided with information about places to visit while vacationing in Scotland. However, the manner in which they processed this information was manipulated such that some participants were permitted to memorize this information (the 'expert' group), while others had a cognitive-load (the 'novice' group). Subsequently, they were asked to list either one (easy) or six (difficult) places they could visit and how much they would be willing to pay.

Analyses yielded a significant group x number of instances recalled interaction, $F (1, 121) = 3.71$, $p = 0.05$. Decomposing the interaction revealed that novices displayed the pattern documented in earlier literature (greater liking inferred from ease of recall), such that participants who recalled one place to visit in Scotland were willing to pay more a trip to Scotland ($M = 1771.67$) than participants who recalled six places ($M = 1310.83$), $F (1, 59) = 2.93$, $p = 0.09$. This pattern however, reversed in direction for the expert group. These participants were willing to pay more for a trip to Scotland when they recalled six places ($M = 1977.68$) than when they retrieved one place ($M = 1625.00$) (Figure 1).

Experiment 2

This was conducted to test the focal hypothesis regarding the moderating role played by expertise on the relationship between accessibility and evaluative judgments. Participants were asked to list either two places (easy) or eight places (difficult) they would like to visit in California (experts) or England (novices) and subsequently they were asked for the amount of money they would be willing to pay for a trip.

Analysis revealed that both experts and novices were able to list two places they would like to visit without much problem ($M_{expert} = 2$ vs. $M_{novice}= 1.88$), however, when asked to recall eight places experts were able to list more places comparing with novices ($M_{expert} = 6.26$ vs. $M_{novice} = 3.68$). Analyses also yielded a significant group X number of instances listed interaction, $F (1, 159) = 108.67$, $p <.0001$. Decomposing the interaction revealed that novices displayed greater liking inferred from ease of recall, such that participants who recalled two places to visit in England were willing to pay more a trip to England ($M = 1609.02$) than participants who recalled eight places ($M = 664.13$). This pattern however, reversed in direction for the expert group. These participants were willing to pay more for a trip to California when they recalled eight places ($M = 1232.05$) than when they retrieved two places ($M = 685.00$) (Figure 2). This happens probably because knowledgeable people might have feel difficulty listing two places since each element of information would compete with other pieces of information creating a phenomenological experience of difficulty in retrieval.

Experiment 3

We manipulated the level of knowledge experimentally to test the focal hypothesis. Participants were exposed to different print ads about places to visit for either California or England (information about only three places - novice manipulation; information about ten places – Expert manipulation). Then, participants were asked to list either one, three or seven places they would like to visit either in California or England and how much they would be willing to pay.

Analyses also yielded a significant group X elaboration X number of instances listed interaction, $F (1, 276) = 7.09$, $p <.001$. Decomposing the interaction revealed that in low elaboration condition participants (when exposed to ads about three places to visit in California or England) displayed greater liking inferred from ease of recall, $F (1, 141) = 14.07$, $p <.0001$. Participants who recalled one place to visit in either California or England were willing to pay more a trip to ($M_{California}= 1156.01$ vs. $M_{England}=1744$) comparing participants who recalled three places ($M_{California}= 957.08$ vs. $M_{England}=1297.39$) and seven places ($M_{California}= 514.58$ vs. $M_{England}=462.61$) (Figure 3). However, in high elaboration condition, participants revealed greater linking when they recalled three places and seven places comparing to one place, $F (1, 134) = 2.97$, $p <.05$. Participants were also willing to pay more for a trip to either California or England when they recalled three places ($M_{California}= 1236.52$ vs. $M_{England}=1512.27$) and seven places

($M_{California}$= 1184.09 vs. $M_{England}$=1218.18) than one place ($M_{California}$= 459.78 vs. $M_{England}$=554.35) (Figure 4).

Discussion

This paper advances and provides support for a rather simple, but potentially powerful, hypothesis: Knowledge plays a moderating role such that it interferes with free recall. This research suggests that classic interference effects for knowledgeable people will be observed when they try to bring one or two pieces of information to mind comparing to many. This happens probably because knowledgeable people might have feel difficulty listing few (one or two) pieces of information since each element of information would compete with other pieces of information creating a phenomenological experience of difficulty in retrieval.

FIGURE 1: EXPERIMENT 1
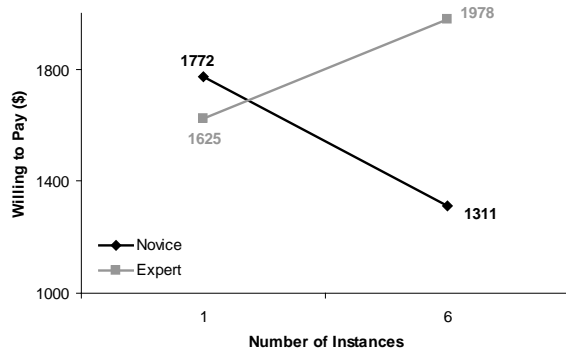
FIGURE 2: EXPERIMENT 1
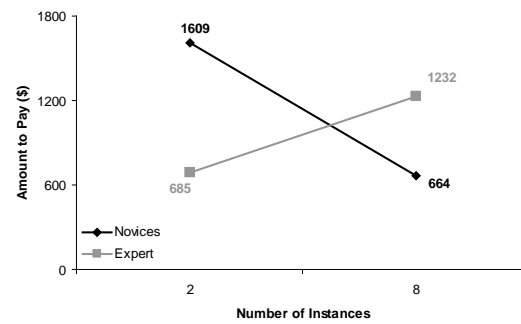
FIGURE 3: LOW ELABORATION - EXPERIMENT 3
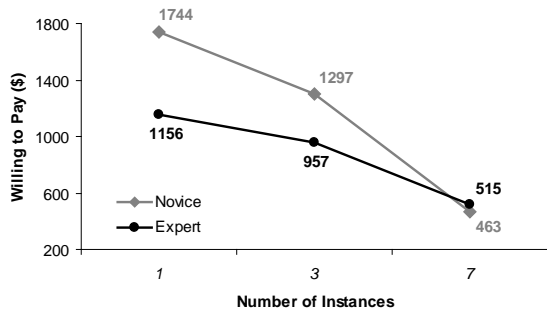
FIGURE 4: HIGH ELABORATION- EXPERIMENT 3
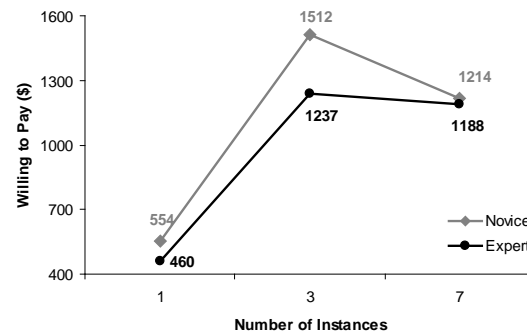
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Session 1.4

Control Deprivation and Compensatory Shopping

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Leonard Lee, Columbia University
Andy Yap, Columbia University

The desire for control over the environment is a fundamental human motive (DeCharms, 1968; White, 1959). Control motivation is a dynamic and ubiquitous force that potentially reacts to everyday events. On this account, violation of this basic need provokes distress that initiates efforts to reassert control (Pittman, 1993; Skinner, 1996). Considering the abundance of opportunities people encounter in contemporary society to acquire goods and services, could consumer spending be an avenue via which control-deprived individuals attempt to recover their sense of control? This research examines whether control deprivation results in compensatory shopping behavior. In contrast with self-control that has been the focus of recent literature, "control" here refers to a more general concept of control that includes control over external circumstances. Akin to the notion of "retail therapy", we propose that people shop and spend more when they experience a weakened sense of control. This hypothesis runs counter to the view that control deprivation would engender passivity and withdrawal that could lead to reduced spending (Abramson, Seligman, & Teasdale, 1978).

Several factors support this hypothesis. First, shopping is an activity that affords consumers latitude to exercise volition (Baumeister, 2002). Second, the finding that powerlessness fosters a desire for status-related products (Rucker & Galinsky, 2008) implies the operation of a compensatory mechanism in a consumption context. Thus, diminished control could lead to augmented spending. We test this hypothesis in two experiments.

Study 1 was designed to establish the effect of control deprivation on compensatory spending in a field setting—a local supermarket. Regular shoppers (N=192) were recruited as they entered the store to participate in a short study in exchange for a \$2-coupon. Before they commenced shopping, participants were randomly assigned to one of three conditions: they were asked to write about (1) an incident in which they had experienced a loss of control (LC condition), (2) one in which they had experienced a sense of control (HC condition), or (3) a typical day during the past month (baseline condition). After shopping, they handed their receipts to a research assistant to redeem the coupon.

To determine the effectiveness of the control manipulation, two independent raters who were blind to the hypothesis and assigned conditions scored the writings for participants' level of experienced control. Mean scores for all three groups differed significantly from each other with HC participants scoring the highest (M=4.16; SD=1.65), followed by those in the baseline condition (M=.61; SD=1.41), and finally LC participants (M=-3.29; SD=2.72), $F(2,189)$=219.82, $p<.001$. Consistent with the hypothesis, LC participants spent significantly more (M=\$11.08; SD=9.88) than participants in the HC condition (M=\$7.56; SD=5.25; $p<.05$), and the baseline condition (M=\$7.96; SD=6.23; $p<.05$). Importantly, expenditure was not significantly different between the latter two conditions, thus indicating that control deprivation increased spending. These findings held for both male and female shoppers.

To rule out the alternative explanation that differential spending across conditions was due to different emotions induced by the control manipulation, participants' writings were content analyzed by the same two independent raters for ten different affective states (i.e., *anxious, fearful, sad, ashamed, frustrated, angry, disgusted, contented, happy,* and *excited*). After controlling for these emotions separately, the control manipulation exerted the same effect on spending. Significant differences in expenditure between the LC group and the two other groups persisted even after controlling for different clusters of emotions identified through factor analyses.

Having established that control-deprived consumers are more likely to engage in compensatory shopping, Study 2 was designed to conceptually replicate this effect within a controlled lab environment, while testing the underlying mechanism by relying on an individual-difference factor: need for cognitive closure (NFCC; Webster & Kruglanski, 1994). Prior research has shown that, compared to low-NFCC individuals, high-NFCC individuals are more motivated to reach firm conclusions swiftly, and more averse toward ambiguity and unpredictability. Therefore, we expect high-NFCC individuals to be more sensitive toward control deprivation and to exhibit a higher tendency to compensate through spending when their sense of control is reduced.

In Study 2, after completing the NFCC-Scale and a filler task, participants (N=60) were manipulated to experience either a momentary sense of control or not using the same recall task in Study 1. As a token of our appreciation for their participation, they were then invited to shop at a store in the lab purportedly unrelated to the study. A variety of eight products with prices ranging from \$0.50-\$5 (e.g., chocolates and school supplies) were offered for sale; participants were told that these products were experimental stimuli from previous studies sold at discounted prices. While each participant shopped, a research assistant (blind to the assigned conditions) recorded the number of items examined by the participant and rated the participant's involvement on a five-point scale.

As hypothesized, LC participants spent more (M=\$1.18; SD=1.85) than HC participants (M=\$0.19; SD=.34), $F(1,58)$=7.61, $p<.01$. LC participants also examined more items in the store (M_{LC}=2.06 vs. M_{HC}=1.22; SD_{LC}=1.58 vs. SD_{HC}=1.31), $F(1,58)$=4.86, $p<.05$, and were more involved in the shopping process (M_{LC}=3.03 vs. M_{HC}=2.15; SD_{LC}=1.40 vs. SD_{HC}=1.23), $F(1,58)$=6.55, $p<.05$. Furthermore, there was a significant interaction effect between control and participants' NFCC scores, $F(1,56)$=11.18, $p<.01$. In particular, among high-NFCC participants, those in the LC group spent significantly more (M=\$2.00; SD=2.18) than those in the HC group (M=\$0.18; SD=.32), $F(1,26)$=9.54, $p<.01$. However, among low-NFCC participants, there was no significant difference in spending between LC and HC groups (p=.50).

In sum, our findings demonstrate a compensatory mechanism that operates in response to control deprivation. In particular, shopping seems to serve as a strategy that individuals adopt when their sense of control is undermined. What remains uncertain however is which aspect of this complex process (e.g., browsing, selecting, spending, and consuming) do people exactly seek to help them regain their sense of control. Besides identifying critical components of shopping that restore control, future research should also appraise the efficacy of consumer spending as a compensatory strategy. Specifically, personal control could be measured after spending to evaluate whether control is restored to initial levels before control deprivation.

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Mental Simulation and the Vicarious Experience of Self-Control
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The use of self-control to inhibit impulsive urges can deplete self-regulatory resources and reduce the ability to use self-control in a subsequent situation (Baumeister 2002). Studies of self-control have typically focused on intrapersonal effects of depletion (e.g., being depleted leads that person to spend more money on luxury goods). But what are the interpersonal consequences of perceiving other people's use of self-control?

According to behavioral priming theories, social perception can automatically and nonconsciously activate cognitions, behaviors and even goals in perceivers. Perceiving another's use of self-control may therefore prime related actions and goals. From this perspective, one person's self-control may actually produce better self-control in a second person (e.g., shopping with stingy friends may inspire less impulsive purchasing). However, work on mental simulation suggests a possibly different outcome. Simulation occurs when the perceiving or imagining of actions (e.g., taking someone's perspective) evokes mental or embodied representations of those actions that are in many ways identical to the representations that occur when people engage in those actions themselves. This includes the downstream effects of actions and goal-related pursuits. For example, if one were to mentally simulate a person stubbing his or her toe, the result might be a grimace and a feeling of pain. In the current context, the simulation of one person's inhibition could produce a vicarious experience of self-control use, and potentially, the consequences associated with that self-control use—self-regulatory depletion.

Can perceiving another's use of self-control vicariously deplete people? I present five studies demonstrating that social self-control experiences can affect resistance to persuasive messages, time perception and impatience, and consumer spending. All of these studies used measures that have been shown to be affected by depletion within intrapersonal settings, but have not been examined within interpersonal environments.

Studies 1 and 2 examined this question within the context of social influence. The availability of self-control resources predicts the ability to resist strong persuasive messages (Burkley 2008). In Study 1, participants first read a story about a waiter who came to work at a good restaurant without having eaten recently and thus had to exert self-control in order to resist eating food on the job (or else risk being fired). Subsequently, as part of a purportedly unrelated study, participants viewed an advertisement for a shaving razor that featured either strong or weak messages. Participants also reported the degree to which they (naturally) took the perspective of the waiter, providing an indication of automatic simulation. Automatic perspective-taking was positively associated with favorability towards the product, but only when the ad messages were strong, suggesting that participants were no longer able to effectively resist these persuasion attempts. Study 2 used a similar paradigm but actively manipulated the degree to which participants took the perspective of the waiter. Additionally, the second task in this study involved reading an essay advocating a change in the school grading system to a system that participants initially disliked. Simulating the perspective of the hungry waiter in the first task completely eliminated the negativity towards the grading change and led to a doubling of support for this previously disliked system.

The availability of self-regulatory resources has also been found to predict restraint from impulsive spending (Vohs and Faber 2007). Depleted individuals are willing to spend more money on desirable goods than non-depleted individuals. Using the two-task paradigm in Study 3, participants first read the restaurant story while either taking the perspective of the waiter or not and then judged the amount of money they were willing to spend on luxury products such as cars, appliances and electronics. Participants who took the perspective of the waiter in the first task reported being willing to spend over $6,000 more on the same products than participants who merely read the story without perspective-taking.

Studies 4 and 5 examined temporal effects of vicarious depletion. Depleted individuals have previously been found to overestimate the passage of time and make more short-term decisions (Vohs and Schmeichel 2003; also see Hoch and Loewenstein 1991). In Study 4, participants completed a temporal discounting measure as the second task. Those participants who simulated the waiter's use of self-control exhibited more impatience by discounting the future more strongly (i.e., preferring smaller, sooner rewards rather than larger, later ones). In Study 5, the actual time spent reading the initial story was recorded along with participants' estimates of that time. Additionally, in a separate set of conditions, the waiter story was altered to involve a physically exerting, but self-control free, task. Participants who simulated the waiter using self-control believed that more time had passed than participants who did not simulate self-control *and* those participants who mentally simulated physical exertion.

In summary, the results of five studies indicate that the mental simulation of others' self-control use can deplete the self-control of those doing the simulating. Experiences with temptations are shown to be influenced by the social environment in a manner especially important for consumers. For example, shoppers who exert self-control to avoid buying luxury goods may sometimes impair the self-control of friends who are shopping with them. I will discuss further implications of these findings and highlight environments in which we may be especially likely to see the emergence of vicarious depletion.

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Illusory Fatigue in the Marketplace: The Effects of Perceived Resource Depletion on Choice Behavior

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Considerable research within the area of self-regulation has argued that the actual amount of cognitive resources available to exert control over regulatory processes is limited (Baumeister, Bratslavsky, Muraven, and Tice 1998). As a consequence of this limited pool of available resources, any initial act of self-control depletes the resources needed to engage in subsequent self-regulatory behaviors. Not surprisingly, this *resource depletion hypothesis* has important implications for consumer behavior (see Baumeister, Sparks, Stillman, and Vohs 2008). The depletion of these valued resources, for instance, has been shown to impact spending behavior (Vohs and Faber 2007), processing of persuasive communications (Wheeler, Briñol, and Hermann 2007), and even compliance to authority (Janssen, Fennis, Pruyn, and Vohs 2008).

In contrast to this growing body of research on the effects of actual resource depletion on consumer behavior, the primary objective of the present research was to assess the impact of *perceived* resource depletion on consumer behavior and, more specifically, on consumer choice preferences. Emerging research from social psychology suggests self-regulatory performance can be driven by the subjective perception of mental resource availability (Clarkson, Hirt, Jia, and Alexander forthcoming). Across four studies, Clarkson et al. demonstrated that the perception of low depletion enhanced performance on subsequent tasks of self-regulation, whereas the perception of high depletion impaired self-regulatory performance. Notably, these differences in subjective perceptions of resource depletion (i.e., *illusory fatigue*) occurred independently of actual levels of depletion. Thus, individuals who should have resources available were unable to successfully self-regulate their behavior (e.g., low depleted individuals who perceived themselves as depleted), whereas individuals who should not have resources available were able to successfully self-regulate their behavior (e.g., highly depleted individuals who perceived themselves as less depleted). Furthermore, this pattern was demonstrated across a diverse array of important regulatory behaviors (e.g., problem-solving, attention regulation, information processing). Building on this research, the present work sought to address the role of subjective perceptions of resource availability on consumer choice behavior.

In two experiments, participants were exposed to a traditional depletion manipulation before being presented with a situational attribution for their depleted state. Following this manipulation, which has been used in prior research to vary perceptions of depletion at high and low levels of actual depletion, participants were presented with one of two choice scenarios. In Experiment 1, participants were exposed to a series of products. These products were presented in pairs (e.g., two brands of toothpaste) that differed on a variety of dimensions and thus made one option an objectively better buy in terms of unit price. In Experiment 2, participants were exposed to information about two department stores that differed in terms of their global quality as well as the quality of one specific department.

Results indicated that individuals who perceived they were more (versus less) depleted were less likely to select the objectively better product in Experiment 1. Further analysis revealed that this pattern of choice behavior was due to participants' decision-style, as individuals who perceived themselves as more (versus less) depleted reported being less attentive to specific product attributes. In Experiment 2, perceived depletion had no effect on participants' global quality ratings of the department stores, yet individuals who perceived they were more (versus less) depleted were less likely to accurately recall the quality of the one specific department—suggesting specific (versus holistic) evaluations of purchase environments are more susceptible to the perception of resource impairment.

Additionally, the effects of Experiment 2 were qualified by individuals' motivation to engage in effortful thought (i.e., need for cognition: Cacioppo and Petty 1982). Interestingly, though, the choices of both individuals high and low in need for cognition were predicted by their perceived level of resource availability. However, high need for cognition consumers based their perceptions of resource availability on a comparison between the situational attribution and their actual resource availability, whereas low need for cognition consumers based their perceptions of resource availability solely on their actual resource availability—suggesting that the process of comparing one's actual state of resource availability with situational information is metacognitive in nature.

These findings, then, provide cogent support for the role of perceived (versus actual) resource depletion on consumer choice behavior. Specifically, the results of Experiment 1 suggest that the mere perception of depletion can undermine consumers' ability to select objectively optimal products, whereas the results of Experiment 2 suggest that the mere perception of depletion is enough to impair consumers' evaluations of purchase environments. This latter finding is especially intriguing given that many purchase environments contain specific departments whose evaluations are often independent of the evaluation of the store's global quality—for instance, grocery stores and farmers' markets, hardware and sporting good retailers, and outlet and strip malls. Furthermore, these findings offer important theoretical insight into the different processes through which these perceptions can be formed and the conditions under which these processes are more/less likely to occur. Given rising interest in the role of resource availability on consumer behavior, we hope these findings encourage further research on the aspects of the consumer experience that affect these subjective resource perceptions and the important behaviors they predict.

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Just This Once? Seeing Dissimilarity between Current and Future Choices Allows Consumers to Indulge

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Many everyday consumers choices are driven by underlying goals that are rarely fully attained (Zhang, Fishbach & Dhar, 2007). Staying in shape is a typical example of an ongoing goal that requires the pursuit of multiple actions over time, i.e. deciding to eat healthy at meal times. While individual choices usually only have a marginal impact on long-term goal achievement, collectively they determine goal progress. Failing to resist spending on a single occasion will not have a significant impact on a consumer's long-term goal. However, failing to resist spending on many occasions will affect goal progress (e.g. savings money). Consequently, whether or not a current choice is seen as part of a set of similar future choices may have a substantial impact on the current decision. This paper addresses the impact of the perceived dissimilarity between present and future choices on the current decision.

Indulgence without justification can evoke guilt (Giner-Sorolla, 2001; Kivetz & Simonson, 2002). In three studies we test the idea that, despite their ongoing goal, a motivation to indulge right now will drive health-conscious consumers to use even superficial differentiation cues to convince themselves that the current temptation is different from future ones. If consumers succeed in credibly doing so, indulgence right now does not pose a threat on their intention to adhere to their long-term goal (Ainslie & Haslam, 1992; Bénabou & Tirole, 2004), allowing them to justify making an indulgent choice "just this once". We further explore to what extent consumers will actively depict current temptations as dissimilar from future ones through a motivated categorization process (Cheema & Soman, 2006; Poynor & Haws, 2009) to justify current indulgence. In all studies, female participants expect two self-regulation decisions within one experimental session. We analyze the effect of the perceived difference between the first and second decisions on the first decision.

Study 1 shows that participants are more likely to indulge in their current decision if an ostensible differentiation cue allows them to construe it as different from their future decision. Participants decided whether to consume a small amount of regular M&M's in front of them right now (phase1) while expecting to be offered either a large bowl of regular M&M's (phase2; control condition) or a large bowl of black and orange colored M&M's (labeled "Halloween M&M's"; treatment condition) later on in the experimental session. While all participants expected functionally identical M&M's, tempted participants were significantly more likely to consume the small amount of regular M&M's (phase1) in the treatment condition, where the current temptation could be construed as different from the later one.

Study 2 investigates whether dissimilarity between the decisions can also be induced by merely changing peoples' choice frames. The product (paprika chips) is kept constant across phases and conditions, ruling out a variety seeking explanation. Participants decided whether to consume a small amount of chips right now (phase1) whilst expected a large amount of chips later on (phase2). Reminding (vs. not reminding) consumers of the possibility to decline the large amount later was found to set the current consumption opportunity (phase1) apart from the later one (phase2), leading to a significant increase in phase 1 indulgence.

Study 3 exposes the proposed process using an experimental-causal-chain design, allowing us to make strong inferences (Spencer, Zanna & Fong, 2005). Study 3A examines the first part of the process by investigating whether people will rationalize indulgence by actively differentiating the current from future temptations. Study 3B provides the causal chain's second part, showing that seeing dissimilarity between the current and future temptations allows indulgence in the current choice.

Participants in study 3A were given a small amount of *paprika* potato chips. They were informed they would be free to eat these (phase1) after filling out a judgment task. Participants also were told that, later on in the session, they would watch a full length sitcom episode during which they would be provided with a large (vs. small) amount of *salt* potato chips (phase2). Reasoning that eating a small amount of chips right now only threatens the long-term goal if it is somehow predictive of eating too much chips in the future, we expected participants to construe the paprika chips as more different from the salt variety relative to a control condition, but only when they expected a large (vs. a small) amount of salt chips to follow later on. An MDS analysis showed that participants in the "large-amount-later" condition gave a significantly higher weight to the dimension along which products in phase 1 & 2 differed (flavor) leading to a larger perceived difference between the two types of chips than participants in the "small-amount-later" and control conditions. Consumers rationalize indulgence by setting the current temptation apart from future ones, but only if eating now is threatening in that it could be predictive of failing to adhere to the long-term goal in the future.

In study 3B, product dissimilarity was manipulated while keeping actual choice options constant between conditions. Participants received a small amount of paprika *chips* (phase1), while expecting to be confronted with a large bowl of paprika *encrusted peanuts* later on (phase2). Before being told that they were free to consume the phase 1 chips, the latter were suggested to be more dissimilar from (vs. similar to) the encrusted peanuts through a task that repeatedly depicted products of the two consumption phases as belonging to a different (vs. the same) product-group. Participants were significantly more likely to eat the small amount of chips (phase1) when these had been had been presented as dissimilar from (vs. similar to) the upcoming large amount of encrusted peanuts.

Our findings suggest that perceiving differences between the current and future decisions increases indulgence. One of the reasons why consumers often stray from their long-term goals may be that they continuously distort their perception of the current situation to make it different from future situations. This allows them to indulge right now, without their intention to adhere to their long-term goal in the future being threatened.

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Session 1.5

The Accentuation Bias: Money Literally Looms larger to the Powerless

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Power is a foundational basis of social hierarchy (Magee & Galinsky, 2008). Because power hierarchies are the most prevalent form of social organization (Leavitt, 2005), position in a hierarchy affects numerous psychological processes including risk-taking (Anderson & Galinsky, 2006), information processing (Briñol et al., 2007), social perception (Galinsky et al., 2006; Keltner and Robinson, 1997), as well as negotiation (Magee et al., 2007) and consumer behavior (Rucker & Galinsky, 2008, 2009). In the present research, we contend that power, in addition to being a strong motivational factor in social contexts, also has important, but previously unstudied, effects on fundamental processes regarding how consumers perceive and represent their social world.

How might a temporary shift in people's state of power affect how people see their world? As a first step, we hypothesize that a state of powerlessness will lead to an accentuation bias where associated with monetary value will be seen as larger in size. Our reasoning stems from recent work finding that powerlessness is a state that consumers seek to escape (Rucker & Galinsky, 2008). Based on these findings, we propose that a state of powerlessness should increase individuals' desire for means that allow economic control (i.e., money). This is consistent with research suggesting that money can serve as a source of power (Vohs et al., 2006). Furthermore, experiencing a feeling of powerlessness might evoke a feeling similar to actual economic depravity, or low SES, a position in which people tend to over-represent monetary goods (Bruner & Goodman, 1947). Consequently, we hypothesize that money might literally loom larger when individuals are in a state of low power.

We conducted three experiments to document the proposed accentuation bias, and measured the diameter of the drawn quarter in each of them. Results were analyzed using ANOVAs and t-tests, as appropriate.

Experiment 1: Demonstrating the Accentuation Bias. Participants were randomly assigned to a 3-cell (power: high, low, baseline) between-participant design and were asked to imagine they were either a boss (high power) or an employee (low power; see Lammers et al., 2008). Next, in a different task, participants were asked to draw a quarter as accurately as possible from memory. Participants drew the quarter larger in the low power condition compared to high power and baseline conditions, $ps < .05$. Quarters drawn by participants in the high power and baseline conditions did not differ, $p > .7$, supporting the proposed accentuation bias.

Experiment 2: General versus Value-driven Accentuation: An alternative explanation of experiment 1 is that powerlessness leads to an overestimation of any object as opposed to only valued objects. To rule out this possibility, Experiment 2 included an object of identical size to a quarter that had no inherent value (a blank disc). We also included a condition where the coin was present as opposed to being drawn from memory. Prior research has shown that the mere physical presence of a desired object or person can increase their value (Hill and Buss 2008). If our perspective is correct, a state of powerlessness should lead to an even stronger accentuation bias when the coin was present.

Participants were randomly assigned to a 2 (power: high, low) x 3 (task: coin absent, coin present, disc) between-participant design. Power was manipulated via an episodic recall task (see Galinsky et al. 2003). Subsequently participants were instructed to draw an object as accurately as possible: a quarter (without looking at one), a quarter (while holding one in their non-dominant hand behind their back); or a disc of similar size to a quarter (placed in their non-dominant hand behind their back). In addition to replicating experiment 1's results, low power participants drew a bigger quarter when holding it than when it was absent, while high power participants drew quarters of similar size in the present and absent conditions, $ps < .05$. High and low power participants did not differ in their drawing of the disc, $p > .2$. In summary, the accentuation bias was even stronger when the quarter was made salient. However, when asked to draw a disc, neither group of participants inflated their representations, consistent with our proposition that the accentuation bias is not a general overestimation bias but specific to objects associated with value.

Experiment 3: Same object, different values. Experiment 3 sought further evidence that the accentuation bias is tied to the value of the object. If the observed effect rests in the subjective value of the object, then we should be able to moderate the accentuation bias by assigning different values to the same object. Participants were randomly assigned to a 2 (power: high, low) x 3 (value: baseline, $5, $500) between-participant design. After all participants completed the power manipulation from experiment 2, they were asked to hold their hand behind their back and a blank poker chip was placed in their palm. Participants were told the poker chip was worth $5, $500, or were not told it had any value. There was a significant power × value interaction, such that the diameter of high power participants' drawing did not differ as a function of value condition, but low power participants' diameter size was an increasing function of the value assigned to the poker chip, $ps < .001$.

Conclusion and Contributions. Across experiments, individuals experiencing a state of powerlessness systematically accentuated their representation of monetary objects (coins, poker chips). Powerless, but not powerful individuals, perceived these objects as larger than they are, presumably because money offered a means to address their loss of power. Furthermore, this accentuation bias increased as the value of the object increased due to its salience (experiment 2) or its ascribed value (experiment 3). Supporting a value-driven mechanism, a follow-up study found that when value was inversely associated with size (i.e., smaller objects were more valuable), the powerless drew the objects smaller, not larger, with this reversal mediated by differences in subjective value. Thus, the present research suggests that simple differences in psychological power can permeate into, and exert profound effects on, perception.

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Power and Spending on Oneself versus Others: From Psychological to Economic Value
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Power—defined as an individual's control over resources or people— has been a central force in the study of organizational behavior (see Magee and Galinsky 2008). However, only recently has power been brought into marketing to understand consumer behavior. In a recent set of papers, Rucker and Galinsky (2008, 2009) find that states of powerlessness increase consumers' desire and willingness to pay for products associated with status. This effect is argued to occur out of a desire to compensate for a lack of power via the demonstration of status to others. An additional finding of this past work is that powerlessness and power seem to have no affect on mundane products that lack an association with status.

The present work proposes that power, in fact, exerts effects on consumption even when the goods at hand are non-luxuries. Specifically, we hypothesize that another influence of psychological states of power and powerlessness is that they provide information with respect to the *value* of oneself versus others. Why would this occur? We hypothesize that a state of powerlessness reduces the social distance between oneself and others making others more valued to an individual. This idea is consistent with recent work suggest the powerless are better at taking the perspective of others than the powerful (Galinsky, Magee, Inesi, and Gruenfeld (2006), consistent with a possible reduction in social distance.
In contrast, a state of powerfulness signals that one is important and thus is of greater value. Recent work supporting this suggests high power leads to greater value associated with one's own thoughts (e.g., Briñol et al. 2007) and goals (Gruenfeld, Inesi, Magee, & Galinsky, 2008).

If our differential value hypothesis is correct, we propose that power should differentially affect how much consumers are willing to spend on purchases for themselves versus others. When purchasing an item for another individual (e.g., a gift certificate, chocolates), individuals in a state of low power should spend more on the item than individuals in a state of high power. However, when purchasing an item for themselves, this spending propensity should reverse: individuals in a state of high power should spend more on the item than individuals in a state of low power. These ideas are tested across three experiments, using different operations of power and distinct dependent measures. In addition, we focus on relatively mundane objects as these represent an area where power has previously not been show to have an effect (e.g., Rucker & Galinsky, 2008, 2009). In addition, we wanted to avoid any status-seeking motive by low power participants.

Experiment 1. Experiment 1 tested our hypothesis by randomly assigning participants to imagine themselves in a role of high power (i.e., a boss) or low power (i.e., an employee) and asking them to indicate the amount they would spend on gifts (i.e., gift certificates for the movies, a casual restaurant) for themselves or another person. We found that, when purchasing gifts for themselves, high power individuals were willing to spend more than low power individuals. In contrast, when purchasing to give to another person, low power individuals were willing to spend more than high power individuals. Thus, the findings of experiment 1 support our differential value hypothesis.

Experiment 2. Experiment 2 included a condition in which it was not made clear who would be the recipient of the purchase. We hypothesized that when the recipient (self, other) was not made salient any effects of power would be attenuated. Participants were assigned to low or high power via an episodic recall task. Subsequently, participants took part in a bidding study. Participants were told they would have an opportunity to bid on several objects (i.e., a mug, a t-shirt) and that they would be able to purchase the object if they bid more than an undisclosed reserve price. We randomly assigned participants to (a) bid on the object for themselves, (b) bid on the object for another person, (c) no instructions on the target of the bidding. When bidding on the object for themselves, high power individuals bid higher than low power individuals. In contrast, when bidding for another person low power individuals bid higher than high power individuals. Finally, when the recipient of the object was not made salient, there were no differences in bidding behavior among low and high power participants.

Experiment 3. Experiment 3 induced power using a real manipulation of power as the independent variable and another real measure of behavior as the dependent variable. Power was manipulated using a hierarchical role manipulation whereby participants were assigned to take the role of an employee or boss in an upcoming task. It was made clear that in the upcoming interaction the boss had complete control over the employee in terms of how the task would be conducted and how any rewards would be distributed. However, prior to the task, participants took part in a study on purchasing behavior. As part of this study, participants were randomly assigned to a task that allowed them to purchase a number of chocolates for themselves or another person. When participants were purchasing for themselves, individuals purchased significantly more chocolates when assigned to the high as opposed to low power condition. In contrast, when participants were purchasing for another person, individuals purchased more chocolates when assigned to the low as opposed to high power condition.

Conclusion and Contributions. The present work provides new insights into how power affects consumer behavior. In particular, we find that states of power and powerlessness affect purchasing behavior in a dynamic fashion with respect to whether the purchase is for oneself or another person. This work suggests that power does not only affect spending on luxuries, as previously observed, but also on non-luxuries given a clear orientation to who the recipient of the purchase is. Theoretical and practical implications of this work in understanding power in consumer behavior are discussed.

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Consumer Entitlement: Implications for Theory and Practice
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Individuals are said to have a sense of entitlement when they believe they deserve more than others (Campbell et al., 2004). Our examination of consumer entitlement (CE) is based on three research questions: 1) can we effectively measure feelings of consumer entitlement as an individual trait, 2) are there behavioral markers of entitled consumers, and 3) does the level of CE impact expectations? Similar to Nenkov, Inman, and Hulland (2008), this research moves beyond scale development, examining the relationship between CE and other consumer traits as well as expectations.

Consistent with the psychological entitlement literature (Campbell et al., 2004), we define *consumer entitlement as a consumer's sense that they deserve more and are entitled to more than other consumers.* Since CE suggests that individuals harbor exaggerated expectations, we first examine the extant expectations literature. Will expectations are developed based upon pre-trial beliefs about the likelihood of outcomes (Olson & Dover, 1979), while ideal expectations are developed based upon what would happen in a "perfect world" (Boulding et al., 1993). Based on these two types of expectations, we operationalize a consumer's sense of entitlement as how they differentiate between will and ideal expectations, and investigate this gap between will and ideal expectations for entitleds versus non-entitleds.

In a series of four studies, employing five samples of both adult and student subjects, we first develop a CE measure that extends the construct beyond the retail context (cf. Boyd and Helms, 2005), examine how the CE construct correlates with specific marketplace behaviors, and determine whether CE predicts individual consumers' ability to differentiate between will and ideal expectations. Finally, we utilize a marketing communications manipulation to investigate whether CE is the underlying process of this reduced gap between will and ideal expectations.

Scale Development.
Study 1a (EFA; n=259 non-student adults). Our 10-item CE scale (CES), developed following psychometrically sound procedures (cf. Bearden and Netemeyer, 1998), is uni-dimensional and internally consistent (α = .90; CR = .90). The scale includes items such as: "I demand more from products and services than others" and "I honestly feel I'm just more deserving than other consumers."

Study 1b (CFA; n=156 students). Evidence of convergent validity (Fornell & Larcker, 1981) and discriminant validity (Bagozzi, 1981) between the CES and three related measures was established (Psychological Entitlement Scale, Campbell et al., 2004; Narcissistic Personality Inventory: Entitlement Subscale, Raskin & Terry, 1988; Retail-Specific Consumer Entitlement Inventory, Boyd & Helms, 2005).

Nomological Network.
Study 2 (n=259 students). At the beginning of the scale development process (study 1a), 28 non-student adults provided the authors with characteristics of entitled consumers (e.g., wealthy; loud/demanding with complaining behaviors; and narcissistic/spoiled/conceited). To explore whether these traits are indeed correlated with CE, we conducted a study consisting of multiple trait measures, including the short form of the material values scale (MVS; Richins, 2004), scales for assertiveness and aggressiveness (ASSERT and AGG; Richins, 1983), and scales for disconfirmation sensitivity and perfectionism (DS and PERF; Kopalle & Lehmann, 2001).

Results. Level of CE is positively correlated with aggressive interaction style (AGG; r = .47), sensitivity to disconfirmation (DS; r = .14), and perfectionism (PERF; r = .29) (all p's < .05). CE was not correlated with materialism (MVS; r = -.09) nor assertiveness (ASSERT; r = .08), suggesting that entitlement goes beyond material acquisition (Richins, 1983) and simply standing up for one's rights (Galassi & Galassi 1978).

Experimental Findings.
Study 3 (n=145 students). Our conceptualization of CE suggests that entitled consumers show less differentiation between will and ideal expectations than non-entitleds. We use study three to test this hypothesis. Participants completed the CES followed by filler tasks. They were then exposed to a fictitious restaurant review, and asked a series of seven-point Likert statements regarding will and ideal expectations (cf. Boulding et al., 1993).

Results. Consistent with our theorizing, we found that level of CE predicted the difference between will and ideal expectations (β = -.22, t(143) = -2.63, p = .01). Further analysis using a median split suggests that participants with high CE levels have significantly smaller differences between will and ideal expectations than participants with low levels of CE (M_{LOWCE} = 1.75, M_{HIGHCE} = 1.29) (t(143) = -2.32, p = .02).

Study 4 (n=117 students). To determine whether CE is the process underlying this gap between will and ideal expectations, we employed a marketing communications manipulation to determine whether non-entitleds could be induced to behave like entitleds (i.e., display this diminished

gap). The first part of the experiment replicated study three. Level of CE significantly predicted the difference between will and ideal expectations (both measured at time 1) (β = -.21, t(115) = -2.25, p = .03).

After a series of unrelated tasks, participants were exposed to communications from the restaurant—an invitation to a "friends and family" event touted as an *exclusive* experience for *most valued* guests. Will and ideal expectations were captured again (time 2).

Results. For the 57 entitled consumers (as determined by a median split), there was a non-significant reduction in the gap between will and ideal expectations from time 1 to time 2 (M_{time1} = .63, M_{time2} = .37) (t(56) = 1.63, p = .11). However, for the 60 non-entitleds, there was a significant reduction in the gap between will and ideal expectations (M_{time1} = .97, M_{time2} = .57) (t(59) = 2.23, p = .03). In other words, priming a sense of entitlement with marketing communications (suggesting the consumer is special) led non-entitleds to exhibit a smaller gap between will and ideal expectations.

Conclusion.
This research begins an examination of CE. We have proposed a parsimonious trait measure and have begun to explore related consumer behaviors. We have also demonstrated that entitled consumers idealize expectations, revealing smaller differences between will and ideal expectations. Finally, we have preliminary process evidence that shows that consumer entitlement is driving this idealization of expectations. Future studies will examine whether CE impacts dissatisfaction and/or loyalty (Oliver, 1997; Drèze & Nunes, 2009), whether specific situational factors may increase CE, and how CE manifests in marketplace behaviors (e.g., aggression).

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Consumer Strategies for Regaining Optimal Distinctiveness
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Optimal Distinctiveness Theory (ODT) posits that assimilation and differentiation are opposing forces whose equilibrium is optimal distinctiveness (Brewer 1991). The need for assimilation refers to an individual's desire for group membership and inclusion. Differentiation, on the other hand, refers to the need to feel distinct (Pickett & Brewer 2001). When an individual feels that these forces are in balance, the individual is said to have reached optimal distinctiveness, and deviations from optimal distinctiveness should motivate individuals to assimilate or differentiate themselves to regain equilibrium. Research on ODT has found a myriad of effects of heightening either the need for differentiation or assimilation. Individuals primed to feel overly different from (similar to) their peers overestimate (underestimate) the social consensus of their attitudes (Simon et al. 1990) and exaggerate (minimize) perceptions of in-group homogeneity (Pickett & Brewer 2001), importance, and size (Pickett, Silver & Brewer 2002).

The implications of ODT for consumer behavior have not been extensively researched. Because consuming a product places the individual into a group consisting of users of that product or products like it, two differentiation strategies seem particularly applicable to consumerism: identifying with numerically distinct in-groups and identifying with a group that positions itself against the mainstream (Hornsey & Jetten 2004). Indeed, recent work by Timmor and Katz-Navon (2008) suggests that individuals with a heightened need for differentiation will identify with a numerically distinct in-group in a consumption setting: Individuals predisposed to a high need for differentiation (assimilation) were more likely to adopt a new product when they perceived the current group of adopters to be small (large).

However, estimating the size of the in-group associated with a product may not always be easy. Some brands carry with them a cult-like group of consumers (e.g., Apple, Harley Davidson), easily defining the in-group and out-groups for the consumer. However, in other cases, consumption groups are less well-defined. In those situations, consumers' needs for assimilation and differentiation may be more easily met by selecting seemingly "typical" and "atypical" offerings.

Because atypical products or product styles are less frequently instantiated and generally less popular than more typical products or product styles (Loken & Ward 1990), I hypothesize that they will be chosen more often by individuals with a heightened need for differentiation because consumers assume that doing so places the consumer into a numerically distinct in-group and/or a group that positions itself against the mainstream. Alternatively, I hypothesize that individuals with a heightened need for assimilation will select more typical products or product styles because they assume that doing so places them into a numerically larger and/or more mainstream consumption group.

These hypotheses were tested in two studies that investigated consumer choices after their optimal distinctiveness levels were threatened. In both studies, the needs for assimilation and differentiation were manipulated by informing consumers that they were similar to or dissimilar to a large majority of their peers. This information came in the form of feedback from a task where consumers were asked to provide their attitudes toward a variety of well-known brands: After providing their attitudes, consumers either learned that they were similar to 20% of their peers (heightened-need-for-assimilation condition) or 80% of their peers (heightened-need-for-differentiation condition).

In Study 1, after receiving this feedback, consumers were asked to choose between 13 University of Florida t-shirts differing in how typical they were (i.e., in how commonly they were worn by members of the student body). As predicted, individuals who were told that their tastes were very similar to their peers chose less typical t-shirt styles than individuals who were told that their tastes were very different from their peers, F(1,135) = 4.893, p < .05. Open-ended responses also supported the hypotheses: Some consumers explained their atypical choices by saying that the t-shirt was not worn by thousands of students on campus. Alternatively, other consumers explained their typical choice by saying it was the t-shirt they felt best represented the University.

In Study 1, choices among t-shirts apparently allowed consumers to regain optimal distinctiveness, but are all products equally suited to help consumers regain their optimal distinctiveness? Past research suggests that consumers express themselves through classically "symbolic" goods such as cars and clothing (Belk 1988), whereas recent research suggests that consumers express themselves through personally important products such as music preferences or hairstyles (Berger and Heath 2007). Study 2 examined two dimensions: product symbolism and consumption conspicuousness. Specifically, this study explored whether threatening optimal distinctiveness would affect product choices for all product types, or whether only choices among highly conspicuous or symbolic products would be affected by such a threat. Thus, the study featured a 2(feedback: similar to or different from peers) X 2(target product consumed conspicuously or inconspicuously) X 2(target product symbolic or unsymbolic) between-subjects design.

After receiving feedback about their similarity to their peers (as in Study 1), consumers chose between browsing two special collections on two mock websites: "unique, one-of-a-kind offerings" and products with "more mass appeal". Product conspicuousness and symbolism were manipulated by changing the website's name (e.g., www.tshirts.com vs. www.movies.com).

When choosing among products consumed conspicuously, consumers who were told that they were very similar (very different) from their peers chose to browse the "unique" ("mass appeal") offerings ($p < .05$), as in Study 1. However, when choosing among less conspicuously consumed products, there was no effect of similarity/distinctiveness feedback ($p > .15$). Thus, consumers seem to perceive conspicuously consumed products to be more useful for regaining optimal distinctiveness than inconspicuously consumed products [Feedback X Conspicuous Interaction: $F(1,99) = 4.29$, $p < .05$].

The results of these two studies suggest that consumption-based coping strategies exist for helping consumers regain their threatened optimal distinctiveness. Further, Study 2 suggests threatened optimal distinctiveness is best regained publicly. Future studies will examine whether a non-consumption-based affirmation of optimal distinctiveness eliminates this effect, and, if so, whether this affirmation must be made publicly.

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Session 1.6

Reciprocity Done Right: A Hotel Field Experiment of Towel Reuse

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A large-scale societal intervention aimed at stimulating prosocial conduct is currently underway around the world. Increasingly, under the label of cause-related marketing (CRM), would-be persuaders are using reciprocity-oriented approaches to spur socially desirable activity, offering to donate to causes that individuals consider important if those individuals will take actions that align with the would-be persuaders' goals. For instance, numerous companies offer to donate a specified amount of money to a worthy cause for each unit of product sold (Varadarajan & Menon, 1988), and many benefactors offer to match every dollar that the public donates to a nonprofit organization with a dollar of their own (Karlan & List, 2007). Indeed, CRM is the fastest growing arena of corporate sponsorship, now generating more outlay (well over a billion dollars annually) than sports sponsorships.

It is easy to see why such reciprocity-focused influence strategies have intuitive appeal. Besides increasing compliance with requests (Cialdini, 2008), the norm of reciprocity—the societal rule that *obligates* individuals to repay gifts, favors, and services (Gouldner, 1960)—has been shown to help potential partners form and maintain relationships, generate mutual trust and cooperation, and be more productive (Cialdini & Goldstein, 2004; Flynn, Reagans, Amanatullah, & Ames, 2006). However, it remains to be seen whether the kinds of reciprocity-inspired appeals increasingly used to promote prosocial behavior actually stimulate the desired action. Based on the theoretical underpinnings of the norm of reciprocity, we suggest that these kinds of tit-for-tat proposals can be suboptimal in motivating prosocial behavior because they fail to activate properly the central motivating element of the norm—social obligation.

However, a relatively small—but theoretically crucial—alteration to such practices should engage the obligating power of the norm, thereby elevating compliance. Specifically, we argue there is little felt social duty to cooperate with those who offer something in return for something that must be provided first. This sort of request is just an inducement to cooperate; and there is no social obligation to cooperate with another because an inducement has been offered—such a proposition merely constitutes a form of economic exchange. Yet, embodied in the rule for reciprocation (Cialdini, 2008; Gouldner, 1960), there *is* a powerful sense of social obligation to cooperate with and, indeed, assist someone who gives first and is owed a positive response in return. Thus, we suggest that the proper use of the reciprocation norm requires reversing the sequence of the widespread CRM approach: First provide noncontingent benefits and only later request a reciprocating favor.

To explore this possibility, we conducted a large-scale field experiment in a major hotel, in which we examined the effectiveness of specific types of appeals on guests' towel reuse by creating and deploying our own signs. (1) One of the signs employed the most common approach taken by hotels, which is to urge compliance on the basis of environmental benefits; this served as our *Control* condition. (2) A second sign was designed to be similar to typical CRM appeals, which attempt to induce a desirable action by offering a reciprocal favor. Specifically, this *Action-Inducing* sign informed guests that the hotel would make a donation to an environmental protection organization that was based on the guests' conservation efforts, thereby using the donation to induce a reciprocal response. (3) A third sign utilized the norm of reciprocity properly, reversing the sequence of action by describing an already-made donation and thereby harnessing the obligating force of the norm. This *Action-Obligating* sign stated that the hotel had already donated to an environmental protection organization on behalf of the hotel's guests and asked guests to help the hotel recover those costs by reusing their towels. We predicted that the Action-Obligating message would stimulate greater towel reuse than either of the other messages, which we did not expect to differ.

Over an 80-day span, we collected data on 634 instances of potential towel reuse in 190 rooms in a midsized, mid-priced hotel. Rooms were randomly assigned to one of the three message conditions: Standard environmental control; Action-Inducing (i.e., the typical CRM appeal), and (3) Action-Obligating. The dependent measure was whether a guest did or did not participate in the towel reuse program.

Results showed that guests in the Action-Inducing Message condition were no more likely to reuse their towels (30.7%) than those in the Standard Environmental condition (35.1%); in fact, they were somewhat, but nonsignificantly, less likely to do so. However, as hypothesized, guests in the Action-Obligating Message condition were significantly more likely to reuse their towels (45.2%) than were those in either the Action-Inducing Message condition ($p < .01$) or the Standard Environmental condition ($p = .03$). Thus, whereas the least effective appeal was the one that asked the hotel guests to be the first to give (the most common type of appeal used in CRM), the most effective appeal was the one in which it was the hotel that was the first to give.

We conducted a separate test of our signage to help determine the primary psychological mechanism underlying the effects demonstrated in the field experiment. The results revealed that those in the Action-Obligating Message condition were more likely to report feeling they *owed* it to the hotel management to reuse their towels than those in the Action-Inducing Message condition ($p < .05$), or in the Standard Environmental Message condition ($p = .07$). Importantly, the results showed no differences between the conditions in perceptions of the hotel management's trustworthiness or commitment to the environment.

In Summary, the Action-Obligating message fared significantly better at spurring participation in the hotel's environmental conservation program than did the two types of messages most commonly used in hotels. The results of our studies not only have important practical implications for hotels but also for communicators, organizations, and policymakers in general: Rather than requiring influence targets to give first, influence agents could reverse the sequence of action to produce the behavior-mobilizing sense of obligation necessary for greater change.

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Micro-Financing Decisions: When a Group Receives Less Than an Individual
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A recently-hyped effort to alleviate world poverty has emerged in the form of micro-financing, or small loans made to small businesses and entrepreneurs in developing countries. These types of loans have provided $25 billion in small collateral-free loans to the poorest of the poor. Given limited lending capital, a system of direct-to-borrower financing has been established to allow individuals to make uncollateralized loans to individuals and small businesses in need. This contemporary form of helping the poor has won favor because it appeals to economically-minded individuals who believe that supporting entrepreneurial endeavors will spur growth and thus do more good than traditional charitable giving (Yunus, 1999).

If micro-finance is indeed a more sensible solution to poverty, an important question is whether people who lend money are, in fact, behaving sensibly by making decisions that maximize social welfare. Recent research emphasizes the distorting impact of emotions on rational decision making. Much of this research focuses on choices for which the outcomes primarily affect the chooser's welfare. However, emotions can also bias decisions where the outcomes affect social welfare. For instance, when people donate to charity, emotional responses to victims and situations do not map onto to the gravest needs. Specifically, all else being equal, people are more likely to donate to a single individual than to a group of individuals (Kogut & Ritov, 2005a; Kogut & Ritov, 2005b). A single individual in need is more vivid and emotionally-compelling than multiple or statistical victims (Small & Loewenstein 2003; Small, Loewenstein, & Slovic, 2007). This is often sub-optimal because more people can benefit when resources are shared rather than concentrated on a single person.

Similarly, micro-finance loans to groups should be more beneficial than loans to individuals. However, our evidence suggests that lenders do the opposite. We analyzed micro-finance lending data from Kiva.org, a non-profit organization that links individual lenders and needy borrowers, who can be either individuals or groups. Lenders have full information about each loan request including information about the borrower(s) and the number of people in the borrower group. Lenders evaluate borrowers' requests and decide to whom and how much to lend (starting at $25). We analyzed 371,521 loans made to 23,024 borrowers (individuals or groups; size $M = 1.37$, $SD = 1.17$, min. = 1, max. = 20) between November 27, 2007 (the first day Kiva allowed group borrowers), and June 18, 2008.

To assess whether group size affected the sizes of loans made, we regressed the amount of money that a lender loaned to a borrower on borrower group size, as well as covariates controlling for loan term (in months; longer-term loans are likely less attractive to lenders), average borrower gender (the gender of a group of borrowers was "average" gender, male = 0 and female = 1; historically, micro-financing has emphasized business activities of females), and a random effect for borrower (to control for heterogeneity across borrowers and latent borrower characteristics that might affect loan size).

Because borrowers' requested loan amounts decrease over time as partial loans are made, each successive potential lender for a given borrower has less of an opportunity to lend larger amounts. Therefore, the amount loaned to a borrower at any time will depend on the unfilled or incomplete requested loan size. For example, if a borrower requests $1,000, the first lender can lend any amount up to $1,000. If she lends $25, then the next lender can lend any amount up to $975, and so on. We control for this "shrinking loan" characteristic by using a scale-free dependent variable: the *proportion* of what could be loaned to a given borrower at the time immediately before each loan was made. For example, if a borrower requested $1,000 and loan 1 was $25, this measure was 25/1000 = .025. If loan 2 was $50, the measure was 50/(1000-25) = .0513. Thus, we regressed loan size (as the proportion of the incomplete requested loan amount that was loaned) on borrower size and the other covariates.

We find that as group size increases, loan size decreases nonlinearly. The best-fitting model was a nonlinear regression (specifically, exponential regression, consistent with the distribution of the dependent variable; quadratic and cubic regressions gave similar results, albeit with poorer fit). Group size had a negative effect on loan size ($b = -.067$, $p < .001$). As the size of the borrower group increased, loan sizes decreased exponentially. Hence, individual borrowers were more likely to receive larger loans than groups of borrowers acting as a consortium.

Because of the large volumes of money being distributed, as well as the gravity the problem of world poverty that micro-finance is purported to help solve, it is important to understand lending behaviors. Our evidence suggests a strong preference for (and perhaps bias toward) individual borrowers. This preference is apparent despite the logical argument that helping groups of individuals should be better both in terms of the number of people benefiting from the loan and the likelihood of successful loan repayment.

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The Benefits of Prosocial Spending for Individuals and Organizations

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A large body of research has examined the link between money and happiness, finding a reliable but generally underwhelming correlation between the two (Diener & Biswas-Diener, 2002; Frey & Stutzer, 2000) - despite laypeople's predictions to the contrary (Aknin, Norton, & Dunn, in press). Recent research, however, demonstrates that money can buy happiness – if that money is invested in others (such as charitable donations) rather than spent on consumer goods (such as flat screen televisions). Dunn, Aknin, and Norton (2008), for example, conducted a field study in which employees at a Boston-based company reported their level of happiness shortly before receiving a bonus of between $3,000 to $8,000, and then again six to eight weeks later; employees had spent about five times as much of their bonuses on themselves as on others, but only the small percentage they spent on others actually led to increased happiness. In the research reported below, we examine the ramifications of such "prosocial spending" for corporations. We report two field studies in which we encourage two corporations to change their typical manner of engaging in charitable giving. Rather than donate money directly to charitable causes as is their common practice, we encourage them to channel that money through their two most important consistencies – their employees and their customers – and then examine the impact of this strategy on the well-being of those constituents, as well as the health of the company.

In Study 1, we report the results of an experiment conducted with KarmaCurrency, a company that allows businesses to give "charity vouchers" to their employees. We predicted that, as with other initiatives designed to increase prosocial behavior in the workplace (e.g., Grant, Dutton, & Rosso, 2008), prosocial spending would increase employee satisfaction. We randomly assigned the employees of one company to receive either $50 or $100 to donate to charity; a third control group received no money. We assessed employee's well-being and their satisfaction with their job both before and after receiving their charity voucher. Results showed that while there was no change in happiness or employee satisfaction for either employees in the control or $50 conditions, employees in the $100 condition demonstrated a significant increase in happiness and employee satisfaction. Thus channeling prosocial spending through employees had a positive impact on those employees – by increasing their well-being – and on the company's health – by increasing employees' job satisfaction.

In Study 2, we report the results of an experiment conducted with DonorsChoose.org, an organization that facilitates charitable donations to low income public schools through a novel procedure: Public school teachers create project proposals at DonorsChoose.org (such as asking for musical instruments, or equipment for special needs students) and consumers fund the projects of their choice. While any individual can donate to DonorsChoose.org, we worked with a large retailer to send vouchers for DonorsChoose.org to their customers to examine the impact of empowering customers to engage in prosocial spending on their future spending at the retailer. We randomly assigned customers of this retailer to receive either no voucher or a $50 voucher to donate to DonorsChoose.org, and then tracked their spending at the retailer over the ensuing six months. As predicted, customers who received a voucher spent more money than those who did not. Interestingly, while those who redeemed the voucher spent the most money, even customers who received the voucher but did not redeem it – those who in some sense were merely aware that the company was engaged in socially responsible actions – still showed a significant increase in spending compared with customers in the control condition.

Taken together, these two studies demonstrate the benefits of prosocial spending for both individuals and organizations, revealing the benefits of companies shifting from donating money directly to charitable causes and instead empowering their customers and employees to engage in this behavior themselves – impacting not just the individuals involved, but the company's bottom line.

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Session 1.7

Reconnection Through Consumption: Socially Excluded People Adapt Consumption Patterns to Foster Affiliation

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Humans are a hyper-social species and have a fundamental need for affiliation (Baumeister and Leary 1995; Buss and Kenrick 1998). Consequently, people experience social exclusion as deeply aversive. How does social exclusion affect spending? Possibilities include spending money impulsively, spending on luxuries, hording, or saving money. Our prediction was based on evidence that social exclusion can activate affiliative motivations which prompt people to try to forge new connections with others (Maner, DeWall, Baumeister, and Schaller 2007). Specifically, in three experiments we tested whether people who were socially excluded (compared to people who were socially accepted or given negative, non-social feedback) would use consumption to forge new social bonds and promote affiliation.

It is well known that people infer information about consumers based on their consumption and spending decisions (e.g., Belk, Bahn, and Mayer, 1982). Recent research also indicates that people use spending as a means to try to help them achieve interpersonal goals. For example, using an evolutionary theoretical framework, Griskevicius and colleagues (2007) demonstrated that after activating the motive to attract a romantic partner, men's spending patterns shifted in a way that could help them fulfill their motive. Those with a romantic goal, for instance, signaled their desirability as a potential mate through increased conspicuous consumption, which can display wealth. Following the logic that people will use the symbolic nature of spending to try to help them achieve interpersonally activated goals, we tested the hypothesis that the motive to affiliate, activated by means of social exclusion, would cause people to consume and spend in a manner that could increase their chance of forging new social bonds.

In experiment 1, participants were led to believe that their partner declined to have a face-to-face interaction with them. The reason for the partner's departure constituted the exclusion manipulation. Participants in the non-excluded condition were told that their partner had forgotten about an appointment, whereas participants in the excluded condition were told that their partner left the experiment because of a dislike for the participant. After the exclusion manipulation, participants were given $10 (ostensibly as compensation for participation) and were allowed to peruse products for sale in a laboratory store. Results indicated that excluded participants were more likely than non-excluded participants to purchase school spirit wristbands, a product symbolic of group affiliation and loyalty. Exclusion did not, however, increase the likelihood of purchasing practical or self-gift items, suggesting that exclusion did not increase impulsive spending or spending to cheer the self up.

Experiment 1 demonstrated that participants were willing to spend money on a product indicating group membership, but it did not necessarily establish that participants spent money in a strategic effort to increase the likelihood of affiliation. Experiment 2 sought to address this shortcoming. In experiment 2, participants were assigned to an exclusion or acceptance condition. Specifically, participants completed a personality test and received bogus feedback concerning the implications of the personality for future social bonds. Participants assigned to the social exclusion condition were led to believe they could anticipate a life devoid of social connections whereas participant assigned to the social acceptance condition were led to believe they could anticipate a life full of strong social connections.

After the manipulation, participants were told that they would be discussing their spending preferences partner. Before the discussion, however, participants reviewed a questionnaire that was purportedly completed by their partner—the partner was depicted as either a lavish spender or a frugal spender. Participants' desire for an expensive watch (lavish product), a Sam's Club Membership (frugal product), and Netflix service (neutral product) were then assessed. As predicted, for participants expecting to meet a lavish spender, social exclusion increased desire for a luxurious watch. In contrast, for participants expecting to meet a frugal spender, social exclusion increased desire for a Sam's Club Membership. There were no differences in willingness to pay for Netflix service between groups. The findings are consistent with exclusion as promoting affiliation-motivated spending. Additional analyses indicated that these findings could not be explained by differences in mood between the experimental groups.

One alternative explanation for Experiment 2 is that excluded participants were passively mimicking the preferences of another person, rather than actively seeking affiliation. Experiment 3 sought to rule out this explanation. In experiment 3, participants were asked what they would be willing to spend for several food items, including an expressly undesirable food item for participants in our sample: chicken feet. As expected, participants were willing to pay more for chicken feet when socially excluded, relative to being socially accepted. However, social exclusion only increased willingness to pay when participants were led to believe that the amount they were willing to pay would be seen by their partner, who reported liking chicken feet. That is, when participants were led to believe the amount they were willing to pay was either confidential or that there was no partner, exclusion did not increase the amount they would pay for the chicken feet. Moreover, social exclusion did not increase willingness to pay for three other undesirable food items. Thus, the effect of exclusion on spending seems to reflect an active, person-specific affiliative motive, rather passive mimicking.

In sum, the present studies suggest that people who are socially excluded adjust their consumption patterns in a manner that could increase their chance of forging social bonds. Results were inconsistent with alternative explanations, such as exclusion increasing indiscriminate consumption, passive mimicking, or spending to alleviate a negative mood. The present research highlights how social motivations such as affiliation can influence consumption patterns.

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The Differential Impact of Being Ignored and Being Rejected on Conspicuous Consumption and Helping Behavior

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A number of studies have shown that social exclusion produces powerful effects on motivation. However, this research suggests that social exclusion can produce two seemingly contradictory responses. Exclusion has been linked to antisocial outcomes such as aggression (Twenge, Baumeister, Tice, & Stucke, 2001) and decreased prosocial behavior (Twenge, Baumeister, DeWall, Ciarocco, & Bartels, 2007). However, research has also shown that social exclusion can produce prosocial responses such as conformity (Williams, Cheung, & Choi, 2000) and increased attention to social information (Pickett, Gardner, & Knowles, 2004).

One possible explanation for these different outcomes of social exclusion is that different types of social exclusion differentially threaten social needs. More specifically, social exclusion can threaten basic needs such as belonging, self-esteem, control, and meaningful existence, and reactions to restore threatened social needs may drive either prosocial or antisocial responses (Warburton & Williams, 2005). Individuals with belonging and self-esteem needs often behave prosocially because both belonging and self-esteem motivate them to be adaptive and attractive to obtain positive social evaluations. For example, belonging needs threatened by social exclusion lead to conformity to unanimously incorrect others (Williams et al., 2000), whereas individuals with control and meaningful existence needs often behave antisocially and aggressively because control and meaningful existence motivate them to seize attention and recognition, thus increasing their visibility.

In addition to the differential needs distinction, research suggests a distinction in types of social exclusion: being rejected (as a direct, explicit, active manner) versus being ignored (as an indirect, implicit, passive manner; Molden, Lucas, Gardner, Dean, & Knowles, 2009). Being rejected results in greater threats to self-esteem than does being ignored, whereas being ignored results in greater threats to meaningful existence and control than does being rejected. Taken together, it seems plausible that the consequences of direct, explicit, and active exclusion (being rejected) could be prosocial to conform, but the consequences of indirect, implicit, and passive exclusion (being ignored) could be antisocial to achieve immediate recognition. Moreover, some indirect antisocial behaviors may include the symbolic superiority over others (Baumeister, Smart, & Boden, 1996). Experiment 1 tested this possibility in a consumer context. Conspicuous consumption is a showy behavior to gain symbolic status and impress others and is driven by conscious motives to gain recognition of others (Griskevicius et al., 2007). Thus, conspicuous consumption may provide the easiest and surest way of gaining immediate recognition, thereby satisfying the need for meaningful existence and control. If being rejected versus ignored operates in the manner we have suggested, then being ignored should increase a preference for conspicuous consumption but being rejected should not. That is, being ignored should pose threats to existence and control, which should motivate individuals to seize immediate attention and recognition through conspicuous consumption. In contrast, being actively rejected should pose threats to self-esteem, which should motivate individuals to engage in prosocial behaviors such as helping. Thus, we expect that being rejected will increase helpfulness but being ignored will not.

We tested these predictions in Experiment 1. Participants wrote about an instance in which they were ignored or rejected. Consistent with our predictions, those in ignored conditions showed a greater preference for conspicuous consumption than did those in rejected conditions, whereas those in rejected conditions showed a greater willingness to volunteer than did those in ignored conditions.

In Experiment 2, we were interested in replicating and extending the findings from Experiment 1. In particular, we were interested in testing the possibility that the effects obtained in Experiment 1 will be greater for high than for low materialists. Materialistic values may be driven by both the need to bolster self-esteem and to make one's existence meaningful (Richins & Dawson, 1992). Thus, the effect of being ignored versus being rejected on conspicuous consumption should be stronger for high than for low materialists (being ignored increases conspicuous consumption more for highs than for lows), and the effect of being rejected versus being ignored on helping behavior should also be stronger for high than for low materialists (being rejected increases helping more for highs than for lows).

Experiment 2 confirmed our predictions. Participants again wrote about an instance in which they were ignored, rejected, or went shopping. Those in ignored conditions showed a greater preference for conspicuous consumption than did those in rejected or neutral conditions, whereas those in rejected conditions showed a greater willingness to help than did those in ignored or neutral conditions. Regression analyses also confirmed that materialism moderates the relation between social exclusion and conspicuous consumption, and between social exclusion and helping. Ignored conditions produced a greater preference for conspicuous consumption than did rejected conditions, but this was true only for high materialists, and rejected conditions produced more helping behavior than did ignored conditions, but this was also true only for high materialists.

Finally, in Experiment 3, we will further test possible underlying processes for the social exclusion effects we have noted. In particular, we investigate the differential roles of power and self-esteem as consequences of social rejection. As noted, being ignored can induce feelings of lack of control and power, which in turn can lead to antisocial behaviors. If so, then providing a power boost for those who are ignored should eliminate the effects of being ignored on conspicuous consumption. In contrast, being rejected can lower self-esteem and feelings of belonging, which in turn can lead to prosocial behavior. If so, then providing a self-esteem boost to those who have been rejected should eliminate the effects of being rejected on helping behavior. To test this possibility, we manipulated social exclusion as in Experiment 1, but also manipulated self-esteem (some receive a self-esteem boost, some do not) and power (some receive a power boost, some do not). For those in rejection conditions, we expect an interaction between rejection and self-esteem. For no-boost conditions, we expect the same effects of being rejected on helping behavior (being rejected increases helping) noted in the first two experiments. For the self-esteem boost group, we expect this effect to be eliminated. For those in ignored conditions, we expect an interaction between ignoring and self-esteem. For those in no-boost conditions, we expect the same effects noted

previously (being ignored increases conspicuous consumption preference), but for those who receive a power boost, we expect this effect to be eliminated.

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Money and Mindfulness Undue Self-Regulation Deficits After Social Rejection
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People depend heavily on others for much of their well-being. With no fangs, no claws, and an extended childhood marked by dependency and vulnerability, humans are not equipped to live in isolation from others. Accordingly, people have a fundamental need to belong (Baumeister & Leary, 1995). To gain social acceptance, people must have the capacity to override selfish impulses in order to behave in accordance with standards for appropriate responses. This capacity, better known as self-regulation, is therefore intimately linked to the fundamental need to belong. If self-regulation exists in part to enable people to obtain social acceptance, then social rejection should make people unwilling to regulate themselves. The first goal of the current studies was to test the hypothesis that social rejection reduces the motivation to self-regulate. The second goal was to test whether offering rejected people a monetary incentive or cultivating mindfulness would eliminate their self-regulation deficits.

In the first experiment, participants completed a group discussion and were later told that no one (social rejection condition) or everyone (social acceptance condition) chose them as a partner for an upcoming task. Next, all participants were given the opportunity to eat unhealthy food (i.e., cookies). Results showed that rejected participants ate over twice as many cookies as accepted participants. Thus, rejection reduced the motivation to self-regulate, leading to increased consumption of fatty food.

A second experiment sought to provide converging evidence regarding the relationship between social rejection and the motivation to self-regulate. Participants completed a personality test and then received feedback that they could anticipate a lonely future (social rejection condition), a future filled with acceptance (social acceptance condition), or a future marred by physical injuries (misfortune control). All participants then completed a taste-testing task in which they had to override their impulse to avoid drinking a healthy but bad-tasting beverage. The results demonstrated that socially rejected participants drank less of the healthy, bad-tasting beverage compared to participants in the social acceptance and misfortune control conditions. These findings offer additional evidence that social rejection reduces the motivation to self-regulate, with direct implications for consumption.

A third experiment investigated whether rejected people could regain their motivation to self-regulate. Participants were exposed to a social rejection manipulation and then completed a self-regulation task. Some participants were given a cash incentive for accurate performance on an attention control task. Other participants received no cash incentive. The results showed that among participants who received no cash incentive, socially rejected participants performed worse compared to non-rejected participants. These deficits were eliminated, however, among socially rejected participants who received a cash incentive for self-regulating effectively. These findings suggest that a monetary incentive was enough to restore the motivation to self-regulate among rejected people.

The final experiment implemented a longitudinal intervention to test the hypothesis that improving mental awareness and attentional focus by practicing mindfulness activities would reduce impulsive behavior after social rejection. All participants signed up for a study on mindfulness meditation. By random assignment, half of the participants completed four weekly mindfulness meditation sessions with a trained instructor, whereas the other half of the participants were placed on a wait-list. All participants completed a final experimental session in which they expected to interact with a stranger (who was actually a confederate working for the experimenter). After trading some information with the confederate, participants were told that the confederate refused to interact with them (social rejection condition) or that the confederate might have to leave early for a forgotten appointment and would not have time to meet the participant (control condition). Hence all participants experienced some form of social rejection. Only participants in the social rejection condition experienced rejection because of something negative about themselves.

Participants were then told that since they would not be interacting with their partner, they would complete a short, competitive reaction-time task against their partner. The winner got to blast the loser with loud noise through a pair of headphones. Self-regulation was needed to override the impulse to blast the partner with unpleasant noise. The results from this study showed that among participants in the wait-list control condition, rejected participants behaved more impulsively compared to participants who had not been rejected. This effect was eliminated, however, among participants who engaged in regular mindfulness meditation activities. These findings provide additional evidence that social rejection increases impulsive behavior, but activities designed to strengthen awareness and attention focus can reduce these deficits.

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Communicating with Loners: The Effects of Message Framing

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Almost everyone experiences loneliness at certain moments, whether it is transient or chronic, therefore the feeling of loneliness has been accepted as a part of human life given its omnipresence (Cacioppo & Patrick, 2008). Almost a quarter of people frequently complain about feeling lonely, and loneliness has increased over time due to longer lifespan, increased incidents of widowhood, as well as rising single-person households in the past few decades (Jayson, 2009). Given the importance of social connection to human beings, a growing body of research has demonstrated that loneliness, defined as perceived social isolation (Cacioppo & Patrick, 2008; Vaughn, 2009), is linked to poor self-esteem, and a defensive state of cognitive deconstruction avoiding meaningful thoughts, emotions, and self-awareness (Twenge et al., 2003). In addition, lonely people tend to have negative attitudes towards the self and others (Heinrich & Gullone, 2006). For example, lonely people perceive others as less trustworthy, less supportive, less communicatively competent, less attractive, less socially desirable, and less accepting of others (Heinrich & Gullone, 2006).

On the other hand, regulatory focus theory (Higgins, 1997) distinguishes self-regulatory processes that focus on promotion versus prevention strategies for goal pursuit. A promotion-focused goal concerns attaining positive outcomes whereas a prevention-focused goal concerns avoiding negative outcomes. Previous research on regulatory focus has found that prevention-focused people are more sensitive to negative information than promotion-focused people (Higgins, 1997). For example, promotion-oriented nurturance-related parenting leads to the child experiencing pleasure or pain depending on the presence or absence of positive outcomes, whereas prevention-focused security-related parenting lead to the child experiencing pain or pleasure depending on the presence or absence of negative outcomes. Based on these findings that lonely people and prevention-focused people share the tendency to focus on negative information, we hypothesize that lonely people are more likely to be prevention focused.

H1: Loners are more prevention-focused than non-loners.

Recent research has shown that socially rejected or excluded people are more likely to show self-defeating behaviors such as reckless driving (Harrington & McBride, 1970; Harano et al., 1975), and heavy smoking (Ernst & Cacioppo, 1999). However, if lonely people tend to be prevention-focused and are sensitive to negative outcomes, why do they engage in such self-defeating behaviors? One possibility is that lonely people might have reduced self-control. For example, Baumeister et al. (2005) found that socially excluded people show impaired dichotic listening performance, but their performance was improved by offering cash incentives or placing them in front of a mirror. This suggests that socially excluded people have the ability to self-regulate, but they are not willing to make efforts needed for effective self-regulation, and are hence more susceptible to self-defeating behavior patterns.

The objective of this research is to examine another way to motivate socially excluded people to improve their self-regulating behaviors. We propose that an appropriate message framing emphasizing potential gains or losses may stimulate socially excluded people to regulate themselves more effectively. In the area of decision making, there have been considerable findings on people's reactions to gains versus losses (Idson et al., 2000). People are motivated to approach desired end-states, which could be either promotion-focused aspirations or prevention-focused responsibilities. There is ample evidence on the fit effect between consumers' regulatory focus and the nature of produce information—a promotion focus is more compatible with information focusing on gains whereas a prevention focus is more compatible with information focusing on losses (Higgins, 1997; Wang & Lee, 2006). Given the regulatory fit effect on persuasion and our first hypothesis that lonely people are more likely to be prevention-focused, we propose that loss-framed messages will be more effective for loners.

H2: Message framed in terms of potential losses (vs. gains) should be more persuasive for lonely (vs. nonlonely) people.

In Study 1, we tested our first hypothesis on the relationship between loneliness and regulatory orientation. Ninety-five undergraduate students participated in the study, where they filled out the revised UCLA loneliness scale (Russell, 1996) and the Regulatory Focus Questionnaire (Higgins et al., 2001), framed as two separate studies. We calculated regulatory focus scores by subtracting promotion scores from prevention scores. Results showed that lonely participants were indeed more prevention-focused (β = .17, t = 2.04, $p < .05$).

In Study 2, we examined how lonely versus non-lonely people respond to gain- vs. loss-framed messages in the context of anti-smoking. Participants were presented with an anti-smoking poster framed by potential gains of quitting smoking vs. losses of continuing smoking, and asked to evaluate the poster on a six-item, seven-point effectiveness scale (informative, persuasive, interesting, useful, well-written, and important; 1 = not at all, 7 = very much; α = .82). Then participants' loneliness (Russell, 1996) and regulatory focus were measured (Higgins et al., 2001). As in Study 1, lonely people were more prevention-focused (β = .22, t = 2.24, p = .03). More importantly, the results of a 2 (loneliness: lonely vs. nonlonely) × 2 (framing: gain vs. loss) ANOVA revealed a significant interaction ($F(1, 95)$ = 7.19, $p < .01$). Lonely people were more persuaded by the message when it had a gain-frame than a loss-frame (M_{gain} = 5.01, M_{loss} = 4.23; $F(1, 44)$ = 6.87, p = .01). A loss-framed appeal led to less favorable reaction for lonely people than for the nonlonely (M_{lonely} = 4.23, $M_{nonlonely}$ = 5.63; $F(1, 48)$ = 35.727, $p < .001$). In addition, we found that emotions toward the message did not mediate the effect of message framing and loneliness on persuasion.

Our results shed light on how message framing can facilitate people's self-regulatory behaviors by taking into account their chronic loneliness. It suggests that loss- (vs. gain-) framed messages are less effective to communicate with loners about risky behaviors such as smoking and drinking.

The findings were opposite to our hypothesis and previous findings on regulatory fit. One possibility is that the impaired self-regulation because of loneliness leads to cognitive deficits and impaired logical reasoning (Baumeister et al., 2002). Whether this could explain the inconsistency remains unclear and will be tested in the next study this fall, which would be presented at SCP if this session were accepted.

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High Hopes and Let Downs: The Influence of Self-Esteem on Expectations and Product Failure
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Self-esteem, defined as how worthwhile one perceives him or herself to be, plays an important role in one's self-concept (Swann et al., 2007). Marketing researchers have explored self-esteem in the context of consumer behavior, showing that it can affect overconsumption (Mandel & Smeesters, 2008), perceptions of models (Smeesters & Mandel, 2006), brand connections (Escalas & Bettman, 2003), and materialism (Chaplin & Roedder-John, 2007).

In our research, we explore how product expectations differ by self-esteem. Specifically, we explore the impact of self-esteem on a consumer's expectations of product performance, particularly given other consumers' and professionals' ratings of the product. Our central proposition is that high and low self-esteem consumers will react differently to recommendation information because they differ in their ability to adjust their expectations. Because people with high self-esteem (HSE) are more effective at adjusting their expectations, when they have information (e.g., ratings by other consumers and/or by product experts) indicating lower quality, they adjust their expectations accordingly. However, low self-esteem (LSE) consumers are not as good at making such adjustments. As such, these consumers end up with high hopes for a low quality product. Hence we predict:

H1: Consumers with LSE will have more favorable expectations of an inferior product than consumers with HSE.

We predict hypothesis 1 will hold only in the context of an inferior product. Self-esteem does not shape consumers' expectations of products rated by others as superior because no adjustments to expectations are needed in this case – high expectations are justified for superior products.

What do these differences in expectations by self-esteem and product quality mean for evaluations of the performance of the product? From the satisfaction literature, we know consumers are upset when expectations are not met, per the expectation disconfirmation model (Oliver, 1997). People with LSE are putting themselves in a position to experience negative disconfirmation because of their heightened expectations for an objectively worse product. Thus, LSE consumers are likely to judge a lower quality product even more negatively when it performs badly than will HSE consumers. By contrast, HSE people have more realistic expectations of lower quality products. Their expectations might not be met if the lower quality product does not perform, but the gap between expectations and perceived performance will be less than it is for LSE people because the expectations of HSE people are lower a priori. Formally:

H2: Consumers with LSE will have a stronger negative emotional response and will be more likely to complain about their disappointment when an inferior product fails than consumers with HSE.

We test hypothesis 1 in study 1 and hypothesis 2 in study 2. Participants in study 1 (n = 174) completed two ostensibly unrelated tasks: indicating their level of agreement/disagreement with the 10 items of the Rosenberg (1965) self-esteem scale (Cronbach's α = .80) and evaluating one of two shampoos. In the superior (inferior) shampoo condition, participants were told that average consumer rating of a hypothetical brand of shampoo was four (two) out of five stars and 75% (25%) of hairstylists recommended the shampoo. The order of the two tasks was counter-balanced for a 2 (shampoo quality) x 2 (order) design. After reading the scenario, participants rated the shampoo on the following dependent variables using nine-point scales: satisfaction, overall impression, and how well they thought it worked. These items were combined into an overall product expectations index (Cronbach's α =.90).

We conducted a 2 (shampoo quality) X measured self-esteem ANOVA. As hypothesized, there was a significant interaction between self-esteem and shampoo quality ($F(1, 170) = 6.82$, $p < .01$). Follow-up analyses in the superior product condition revealed that there was not a significant effect of self-esteem on product expectations ($p = .32$). In the inferior product condition, however, participants with LSE had significantly higher product expectations than participants with HSE ($F(1, 170) = 8.58$, $p < .01$), consistent with hypothesis 1.

In study 2, participants (n = 137) indicated their level of agreement/disagreement with the 20 items of the Heatherton and Polivy (1991) self-esteem scale (Cronbach's α = .87) and read a scenario describing a product failure. Participants were asked to imagine that the zipper on a piece of luggage they had owned for five years had broken and that the suitcase was a brand that is considered (or not considered) very high quality. The order of the two tasks was again counter-balanced for a 2 (luggage quality: superior vs. inferior) x 2 (order) design. After reading the scenario, participants rated their anticipated disappointment, anger, and likelihood of complaining to friends/family that the zipper had broken. Disappointment and anger were combined into an emotional response to product failure index (Cronbach's α =.70).

We conducted two 2 (luggage quality) X measured self-esteem ANOVAs, one predicting the emotional response to the product failure and the other predicting likelihood of negative word-of-mouth. As hypothesized, there were significant interactive effects of self-esteem and quality of luggage on both the emotional response to product failure index ($F(1, 136) = 8.31$, $p < .01$) and likelihood of complaining to friends/family ($F(1, 136) = 9.93$, p < .01). Follow-up analyses in the superior product condition revealed that participants with both HSE and LSE were equally upset ($p = .12$) and likely to complain when the superior luggage failed ($p = .09$). However, follow-up analyses in the inferior product condition showed that compared to participants with HSE, those with LSE were significantly more upset ($F(1, 136) = 6.36$, $p = .01$) and more likely to complain ($F(1, 136) = 7.51$, $p < .01$) when the zipper broke, supporting hypothesis 2.

Overall, we find that individuals' self-esteem shapes their expectations for products such that LSE consumers have higher expectations of lower quality products than do HSE consumers (study 1). These higher expectations influence subsequent evaluations of product performance, leading LSE consumers to feel more let down when a lower quality product does not perform well than are HSE consumers (study 2).

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What Makes Brands Elastic? How Brand Concept and Styles of Thinking Influence Brand Extension Evaluation
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Many of the successful new product introductions each year are brand extensions, such as Godiva coffee and Jeep strollers. Consumers tend to respond more favorably to extensions that fit with their perceptions of the parent brand, including extensions that are launched in nearby product categories (Aaker and Keller 1990; Volckner and Sattler 2006). However, it is also true that many brands are more "elastic" and are able to launch brand extensions into distant product categories, which share few attributes with existing products. For example, Ralph Lauren markets a diverse set of offerings under its brand, including sunglasses, paint, and dog leashes.

Why are some brands more elastic? Prior research suggests that characteristics of the parent brand dictate brand elasticity. Of particular importance is the nature of the brand concept associated with the parent brand—prestige versus functional (Park, Milberg, and Lawson 1991; Volckner and Sattler 2006). Prestige brands, such as Rolex, have abstract brand concepts that are more elastic and can successfully expand into many product categories. Functional brands positioned on functional attributes, such as Timex, are less elastic and are more successful if they extend to offerings that conform to the functional nature of the brand.

However, recent research finds that consumers can also influence brand elasticity by the style of thinking they use when evaluating brand extensions (Ahluwalia 2008; Monga and John 2007). Consumers might use analytic thinking, where they focus on specific attributes or products usually associated with the parent brand and try to match these features with those of the extension. Or, consumers might use a more holistic approach, where they seek out alternate ways to relate the extension to the parent brand, such as overall brand reputation, regardless of whether the extension conforms to the same attribute or product category profile as the parent brand. When consumers use a holistic style of thinking, they perceive higher brand extension fit and are more accepting of brand extensions, especially when they are distant from the parent brand.

Which of these explanations for brand elasticity is correct? We propose that both factors are important for understanding how far firms can stretch their brands. We examine distant extensions of brand extensions for prestige and functional brands. For distant extensions of prestige brands, we predict that analytic and holistic thinkers will respond in a similar way. Prestige brands have abstract concepts that can be stretched to distant product categories; thus, even analytic thinkers have an accessible way of relating the parent brand and extension. However, for functional brands, we predict that analytic thinkers will respond less favorably than holistic thinkers. Functional brands are anchored on functional attributes not readily transferable to distant extensions; thus, analytic thinkers will be unable to use attributes or product category profile to connect the parent brand and extension. Holistic thinkers, on the other hand, have an advantage in being able to generate alternate ways to relate the parent brand and extension, thereby perceiving better extension fit that forms the basis for more favorable extension evaluations.

We tested our predictions in four studies. In study 1 & 2, we used a 2 (style of thinking: analytic, holistic) x 2 (parent brand concept: prestige, functional) between subjects design. In study 1, analytic and holistic thinkers were identified using the analytic-holistic thinking scale (Choi, Koo, and Choi 2007), whereas in study 2, we primed style of thinking. Consistent with our predictions, consumers who engaged in holistic thinking evaluated far extensions of functional brands more favorably than did analytic thinkers. For prestige brands, analytic and holistic thinkers evaluated far extensions equally.

In study 3 & 4, we examined whether analytic thinkers could be encouraged to respond more favorably to far extensions of functional brands. In study 1 & 2, analytic thinkers responded poorly because their perceptions of the parent brand (attributes, product categories) were at odds with the extension category. For example, in responding to a "Toyota wallets" extension, analytic thinkers did not think a car company could make good wallets. In study 3, we reasoned that creating distance between the parent brand and extension through different brand architecture could suppress these types of objections and enhance extension evaluations. Results from a 2 (style of thinking: analytic, holistic) x 2 (brand architecture: direct, sub-brand) supported our predictions. For the direct brand, Toyota wallets, analytic thinkers responded less favorably than did holistic thinkers, consistent with our prior studies. For the sub-brand, Excera wallets by Toyota, analytic thinkers responded as favorably as did holistic thinkers. Subsequent analyses confirmed that the sub-brand architecture suppressed analytic thoughts, as expected.

In study 4, we reasoned that providing more information about a far brand extension could encourage analytic thinkers to respond more favorably. However, we predicted that information would need to be provided in a linguistic frame that matched the natural inclinations of analytic thinkers. Based on research in linguistic categories (Stapel and Semin 2007), we designed one message compatible with analytic thinking (e.g., using verbs) and a second message compatible with holistic thinking (e.g., using adjectives). Results from a 2 (styles of thinking: analytic, holistic) x 2 (linguistic frame: analytic, holistic) supported our predictions. For analytic thinkers, the message with an analytic frame resulted in more positive extension evaluations. For holistic thinkers, the message with a holistic frame resulted in more positive extension evaluations. Thus, providing more information about a far extension was successful, but only if the message matched the style of thinking of consumers.

Taken together, our findings qualify past brand research in important ways. First, we find that prestige brands are not always more elastic than functional brands. This difference emerges only for analytic thinkers, not holistic thinkers. Second, we find that brand extension evaluations are not always more favorable for holistic than analytic thinkers. Style of thinking matters for functional, but not prestige, brands. Third, sub-brand architecture and persuasive messages can increase evaluations for distant brand extensions, but much of the benefit resides in increasing acceptance among analytic rather than holistic thinkers.

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Construal and Categorization: Impacts of Psychological Distance on Brand Extensions

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The topic of brand extension has been pervasively studied in the fields of marketing and consumer psychology. Previous research suggested that brands and their affiliated products are represented in memory as different categorical representations, and consumers use those mental representations to assign a new product or service to a certain category, and draw inferences about it (Loken, Joiner & Peck, 2002). Categorical representations are flexible and malleable, and the likelihood of category inferences depends on the similarity or match between the representation of the existing brand category and the representation of a new category member (i.e. Meyvis & Janiszewski, 2004; Cowley & Mitchell, 2003). When determining whether two objects are similar, individuals try to match the features possessed by them through different matching procedures (similarity, fit, typicality, relatedness); the greater the match between the two objects, the higher the perceived similarity they are (the Fiske and Pavelchak feature-matching model, 1986). When the feature matching procedure applies to a specific exemplar and a general category, the higher the match between these two, the more likely properties typical to the category will be ascribed to the exemplar.

More recently, the construal level theory (CLT) proposed by Liberman and Trope (1998) specifies the abstraction of objects/events, and the factors (e.g. temporal, social, spatial distance) determining level of abstraction (Trope et al., 2007). In their theory, psychological distance of an object systematically changes how the object is mentally construed, which in turn influences people's thoughts and behaviors. The chronically-built association between psychological distance and abstraction in cognition results in the tendency to construe objects/events with more high-level, abstract features when they are psychologically distant vs. near, even with equivalent information.

Construal level and similarity are related in respect of categorization. Categorization itself is hieratical and with different levels of abstractness; one could construe less or more inclusive categories of objects, depending on the level of construal being used to represent the objects. In feature-based model of categorization, more inclusive categories have fewer features and therefore are simpler than concrete categories (Rosch, 1978). Objects in the same category are assumed to have greater match and are more similar than items in different categories.

Applying these two research streams on brand extensions, we propose that psychological distance will influence the level of construal people use to represent the extensions, the categorization of brand extensions, and the likelihood of category inferences from existing brand category to the extensions. Specifically, when a brand extension is represented at a higher, more abstract, and superordinate construal level, it is more likely to be included in the existing brand category, leading to greater category inferences. We report the results of three experiments that examined our propositions.

Study 1, a 2(construal level: high vs. low)✕2(distance type: temporal vs. spatial) mixed design with construal level as between-subjects factor and distance type as within-subjects factor, examined the effect of psychological distance of the brand extension on the extension acceptance. Forty-seven undergraduate students participated in this study. They were presented with eighteen hypothetical extensions (three brands, each with six extensions). In the low (high) construal level condition, people were told that the brand extensions are to be introduced either in the near (distant) future or in the US (a foreign country). For each brand, half of the extensions were manipulated by temporal distance and the other half was by spatial distance. Participants then reported their attitude toward each extension. The results in study 1 provide support for our hypothesis. When extensions were introduced in either distant future or spatially distant, participants evaluated the brand extensions more favorably (M_{high}=4.88, M_{low}=4.3; $F(1, 42)$=6.74, $p=0.013$). And the effect of construal level remained regardless of brands, extensions, and distance type ($F_{CL*brand}(2, 84)$=0.65, ns; $F_{CL*ext}(2, 84)$=1.95, ns; $F_{CL*Dtype}(1, 42)$=1.02, ns).

Study 2 is to examine the mediation effect of perceived similarity (fit). The design of study 2 is similar to study 1, except that four brands and twenty-four extensions were used, and measures of brand attitude as well as perceived similarity (fit) were included because previous research suggested that brand attitude effect on brand extension evaluation is also mediated by fit. One hundred undergraduate students participated. Results replicated the findings of study 1(M_{high}=4.73, M_{low}=4.28; $F(1, 83)$=9.87, $p<0.01$), and extended Study 1 by demonstrating that the influence of psychological

distance on brand extension evaluation was mediated by the perceived similarity (fit) (β_{CL} decreases from 0.42 to 0.12 after including similarity in the model, Sobel's Test: $p_{1-tailed}$=0.01).

Study 3 adopted a 2 (temporal distance: far vs. near) x 2 (social distance: far vs. near) between-subject design. Participants were presented with ten domestic (US-based) vs. foreign (foreign country of origin) brand extensions to be introduced in temporally near vs. distant future. We matched the brands in terms of their product class and brand strength. We hypothesize that although all the brands are available in the US markets, foreign brands should be perceived more socially distant than domestic brands. Results showed a significant social distance main effect (F_{social}(1, 62)=8.78, p<0.01) on liking and purchase intention toward brand extension, and a marginal significant two-way interaction effect ($F_{temporal*social}$(1, 62)= 2.47, $p=0.12$) on purchase intention.

Kim & John's paper (2008) proposed construal level as a moderator of the importance of perceived fit in brand extension evaluations. They suggested that consumers use perceived fit information only when stimuli are construed at high level. Different from their study, the present study, building upon the linkage between construal level theory and categorization theory, suggests that the perceived fit changes with construal levels. We suggest that brand extensions being represented at higher level construal are more likely to be included in the affiliated parent brand category, and thus are perceived fitter (mediation effect of perceived fit). The present study contributes to the brand extension literature by providing construal level as another route to understand how a brand extension is perceived, and its likelihood of acceptance by consumers. This study also extends previous research by examining the effect of other psychological distance dimensions (spatial and social) and their interplay on brand extension evaluation.

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Whence Loyalty? From Satisfaction, to Attachment, to Forgiveness

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Previous research has shown that satisfaction leads to brand loyalty and longer relationships with brands (Bolton 1998). While satisfaction is notable in brand loyalty, little research has investigated the mechanism(s) by which satisfaction engenders brand loyalty. We propose and provide evidence of underlying psychological processes which lead to brand loyalty and future behavioral intentions following a brand failure.

We hypothesize that satisfaction$\rightarrow$ brand attachment$\rightarrow$ brand forgiveness$\rightarrow$ willingness to repurchase, following a brand failure. We examine this hypothesis in three studies. Studies 1 and 2 provide a scenario where a brand fails. Study 3 asks participants to recall an actual brand failure.

Study 1
We investigate how brand attachment affects satisfaction following brand transgressions versus normal product experiences. When individuals encounter a brand failure, we propose the level of attachment the individual has to the brand will influence the level of satisfaction with the product experience. Specifically, we predict those who are high in attachment will be less affected by the transgression, than those who are low or moderate in attachment. We show brand attachment differentially affects satisfaction following a brand transgression (F(2, 67)= 21.40, p< .001). In addition, the contrasts show those who maintain a high attachment to the brand are just as satisfied following a transgression versus a non-transgression (p > .15). Whereas the transgression significantly affects the satisfaction with the experience for those who are low (p<.005) and moderate in attachment (p < .005). We also show these same significant and non-significant contrasts for willingness to repurchase. We believe that these results show brand attachment moderates the effect of brand failure on loyalty and satisfaction. We propose that those individuals who are high in attachment are more likely to forgive the brand following the transgression.

We are interested in understanding when and why are consumers likely to remain loyal after a dis-satisfying brand encounter. We believe that the brand relationship leads to forgiveness. To explore this issue, we turned to the research on interpersonal relationships which shows attachment is a critical factor in relationship commitment and also a predictor of forgiveness in interpersonal relationships (van Lange, et al. 1997). Thus, we sought to investigate whether similar processes underlie brand relationships. Specifically, to what extent does attachment lead to forgiveness which leads to repurchase intentions. People are willing to forgive interpersonal transgressions to save their interpersonal relationships, are they willing to forgive brand transgressions to salvage brand relationships?

Study 2
We presented 170 participants with a failure scenario: their Starbucks beverage order is unsatisfactory. Then, participants answered questions assessing their satisfaction, brand attachment, forgiveness, and future behavioral intentions.

Results
As expected, we show that attachment mediates the influence of satisfaction on loyalty: Attachment (p < .0001), Satisfaction is reduced from t = 9.22 to t = 3.16 (p = .0019), in comparison to the reduction in attachment t =15.23 to t =10.62, Sobel= 7.2, (p=< .0001). The relationship between satisfaction and future behavioral intentions is mediated by brand attachment: brand attachment (p <.0001) and satisfaction (p=.18), Sobel= 4.45, (p < .0001). See Figure 1.

We hypothesized that attachment should be a key mediator of the influence of satisfaction on forgiveness. To investigate hypothesis, we first regressed attachment and satisfaction on forgiveness. While both satisfaction and attachment were able to predict brand forgiveness independently, when simultaneously regressed, brand attachment remains a significant predictor of forgiveness ($p < .0001$) whereas satisfaction is no longer a significant predictor ($p = .31$). Sobel = 4.41, ($p < .0001$). See Figure 2. This analysis suggests that the influence of satisfaction on forgiveness is mediated by attachment.

We also examined the meditational role of forgiveness on the influence of attachment on intent to repurchase. While both attachment and forgiveness were able to predict intent to repurchase each on their own, only brand forgiveness remains a significant predictor of intent to repurchase in the mediation analysis ($p < .0001$) whereas attachment is not as predictive ($p = .0007$), Sobel= 5.8, ($p<.0001$).

Discussion
This study supports our hypothesis that the future behavioral intentions are predicted only by brand forgiveness and not by satisfaction or brand attachment. These results resemble the findings on interpersonal forgiveness. There are many reasons why people would want to save their relationship with the brand: they believe it is the only brand that can fulfill their needs, they feel they have to forgive the brand because they are in a tying relationship, and often they really like or love the brand. Moreover, this study also provides evidence that forgiveness mediates the influence of attachment on intent to repurchase.

As compelling as these results are, we cannot rule out that they might be the way individuals *think* they would behave, rather than actual behavior, because they are based upon scenarios. To rule out this alternative explanation and to show how people really do react and behave towards a brand that has failed, we conducted Study 3.

Study 3
We asked 50 participants to list an experience with a brand that failed and how they reacted. We then asked about their satisfaction, attachment, forgiveness, and future behavioral intentions, towards the brand.   If the results are replicated, it provides evidence that our hypothesized model reflects the psychological processes underlying the influence of satisfaction on loyalty and the importance of brand forgiveness.

Results
These results replicate our previous findings that brand forgiveness is the critical predictor in future behavioral intentions towards a brand that failed ($p< .0001$). We find that forgiveness mediates the relationship between attachment and future behavioral intentions Sobel= 2.4 ($p= .016$).

Discussion
Together, we believe that these studies begin to provide a meaningful answer to the question posed by Oliver (1999): Whence Loyalty? This research suggests a complex, but comprehensible answer. Satisfaction engenders attachment. Attachment engenders the motivation to maintain the relationship. Following relationship transgressions, attachment leads to forgiveness, which in turn, leads to loyalty.

Figure 1

Attachment mediates the relationship between satisfaction and forgiveness
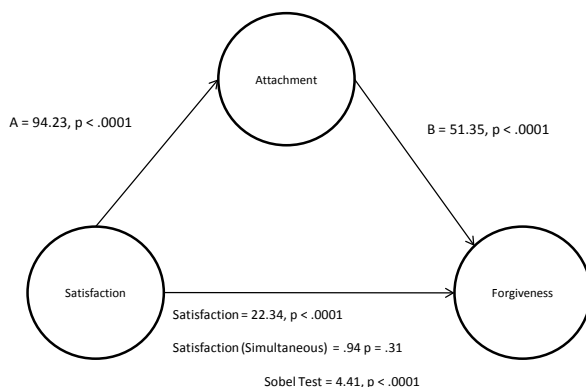
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Session 2.2

The Curious Case of Behavioral Backlash: Nonconscious Reactance to Marketing Slogans

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Marketing practitioners rely on an impressive arsenal of persuasion tools, including brands, salespeople, prices, and slogans, in their attempt to influence consumer spending. A solid foundation of research in psychology and marketing would suggest that these tools can "persuade" consumers under the radar of consciousness. This research would further suggest a process whereby marketing tools have a positive impact on consumers' responses, with incidental exposure to, say, a brand or slogan triggering behaviors that are consistent with that brand or slogan. However, while this priming process may occur in most environments, it may not generalize to marketing environments. Marketing environments have idiosyncrasies that could dampen or even reverse the intended effects of marketers' tools.

One idiosyncrasy of marketing stimuli is that, unlike other environmental stimuli, people believe marketing stimuli exist to persuade them. That being said, this belief exists to varying degrees as a function of the marketing stimuli themselves. For instance, while people may relate to brands as innocuous relationship partners, the persuasive intent of slogans is much clearer. To address this issue empirically, we conducted a pretest examining consumers' perceptions about the persuasive intent of two common persuasion tools: marketing slogans and brands. For this pretest, 50 participants were shown a series of five slogans, brands, or sentences, and asked to rate on a 7-point scale the extent to which they perceived each stimulus as an attempt to persuade them. The purpose of asking about the persuasive intent of sentences was simply to establish a baseline. Results showed that participants perceived the persuasive intent of brands (M = 3.20) to be only trivially higher than that of sentences (M = 3.00), while the persuasive intent of slogans was perceived to be quite high (M = 5.13), and significantly higher than that of brands (F (2, 44) = 3.47, p < .05). Thus, while brands were perceived to be innocuous (no different than common sentences in their persuasive intent), slogans were perceived more clearly as persuasive appeals.

The perception that marketing tools are persuasive appeals sets these stimuli apart from other environmental stimuli. However, it is unclear how consumers respond to persuasive tools on a nonconscious level. One might argue that because the impact of priming on behavior is nonconscious (or, at least, people are not sufficiently aware to verbalize it), any defense mechanism against persuasion tools should not work. On the other hand, perhaps people can react against a persuasion tool without awareness of its presence or potential influence. This response could develop in the same way that other processes become automatic. That is, if people repeatedly and consistently responded to a persuasion tool with conscious reactance, over time they should come to nonconsciously react against it. In the context of the current research, we would therefore predict nonconscious reactance against slogans because consumers consciously perceive that slogans are persuasion tools. We would not, however, predict nonconscious reactance against brands because consumers lack the perception that brands are persuasion tools. These predictions were tested in study 1.

Study 1 used a 3 X 3 design (N = 435), with prime tool (brand, slogan, or sentence) and prime message (save, spend, or neutral) manipulated between-subjects. Participants' first task was a bogus memorization task in which we presented sentences, brands, or slogans that were related to either saving money (e.g., "He wore cheap attire", "Dollar Store", "The Best Deals Are Always Here!"), spending money (e.g., "He wore high-end attire", "Tiffany", "Luxury, you deserve it"), or were neutral (e.g., "He wore blue pants", "Barnes and Noble", "Time is what you make of it"). In a supposedly unrelated second experiment on shopping tendencies, we asked participants to imagine that they went shopping with $500, and indicate how much of the $500 they would like to spend. Their response was our dependent variable.

We included the sentences as a control condition and predicted that participants who were exposed to sentences would show prime-consistent behavior. This is precisely what we found. Relative to neutral sentences (M = $145.93), sentences with a message to save decreased spending (M = $105.91) and sentences with a message to spend increased spending (M = $185.18). As predicted, the same pattern of results was obtained among participants primed with brands. Willingness to spend in the neutral brands condition (M = $150.70) fell in between the savings brands condition (M = $94.29) and the spending brands condition (M = $189.27). Importantly, however, this pattern of results failed to hold among participants primed with slogans, who actually showed the exact opposite pattern of spending. Relative to slogans with a neutral message (M = $142.93), slogans with messages to save increased spending (M = $184.58) and slogans with messages to spend decreased spending (M = $105.23), all p's < .05. Thus, while priming with brands (and sentences) produced prime-consistent behavior, priming with slogans produced prime-inconsistent behavior – a behavioral backlash.

We propose that consumers need not be consciously aware of a marketing tool's persuasive intent for this behavioral backlash to occur. However, because participants in study 1 were exposed to prime tools supraliminally, conscious responses could have influenced consumer spending. Extensive debriefing suggested this was unlikely; nevertheless, in study 2, we used a more conservative, subliminal priming procedure to minimize conscious mediation, demand effects or hypothesis guessing. In addition, we dropped the brand condition and controlled for the stimuli presented by using the exact same phrases in both the sentence and slogan conditions. Therefore, the only difference between the conditions was subliminal priming of the word "sentence" or "slogan".

Study 2 used a 2 X 3 design, with prime tool (slogan or sentence) and prime message (save, spend, or neutral) manipulated between-subjects (N = 229). Participants were instructed to memorize the same sentences used in study 1's bogus memorization task. However, while the sentences were presented in the center of the screen, the word "sentence" or "slogan" was presented for 60 ms in alternating, randomly-determined quadrants. Participants indicated whether each "flash" appeared on the left or right. Results revealed that among participants subliminally primed with the word "sentence", messages to save reduced spending (M = \$115.94) and messages to spend increased spending (M = \$211.68) relative to neutral messages (M = \$156.82). Conversely, among participants subliminally primed with the word "slogan", messages to save increased spending (M = \$197.22) and messages to spend decreased spending (M = \$106.68) relative to neutral messages (M = \$151.06), all p's < .05. Thus, while activating the concept "sentence" produced prime-consistent behavior, "slogan" produced prime-inconsistent behavior.

In summary, certain persuasion tools may backfire and generate effects opposite to those intended by marketers. Our results provide an initial demonstration of this phenomenon by showing that stimuli structured as slogans (study 1) or represented as slogans (study 2) can incite a nonconscious behavioral backlash. Our findings suggest that this behavioral backlash is rooted in consumers' conscious beliefs about the persuasive intent of marketing tools. These results underscore the necessity of understanding marketing's idiosyncrasies before we can fully understanding priming effects in marketing environments.

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Ironic Effects of Goal Activation on Choice
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Consider a consumer who is choosing between two indulgent desserts. Further imagine that prior to choosing a dessert she notices a health magazine on a nearby table. How would exposure to the health magazine affect her choice? While it is now well established that consumer choice is goal driven, relatively little is known about how the incidental activation of a goal that conflicts with the goal associated with a choice task (hereafter referred to as the "choice goal") will affect the choices that people make. For example, would this person be more or less likely to choose a more indulgent and less healthy dessert in comparison to a person for whom the health goal was not activated?

This paper explores how choice between two options is impacted when these alternatives pose a violation to another goal that has been activated prior to the choice. We draw from research on goal systems theory and behavioral decision theory to propose that when an incidental goal (e.g., health) that conflicts with the choice goal (e.g., to enjoy an indulgent treat) becomes activated prior to the choice, all available choice options will present a violation of the incidental goal. Thus when making their choice, consumers will experience the need to justify their incidental goal violation. As a consequence, consumers will be *more* likely to choose the option in the set that offers maximum attainment of the choice goal (e.g., a more indulgent special treat) than when the conflicting goal is not activated. Options providing maximum goal attainment may be easier to justify, when they offer the consumer a special or unique experience. Thus we predict an ironic effect of goal activation on choice: Goal activation can *increase* choice of the option that conflicts *most* with that goal.

Our predictions are tested in a series of six studies. Study 1 demonstrates the proposed effect. Using non-conscious goal priming, we manipulate if a conflicting goal (e.g., savings) is incidentally activated prior to choice (e.g., a choice between two expensive, luxury rental cars). The results demonstrate that the activation of a conflicting goal can ironically increase choice of the option the presents a greater conflict to that goal (e.g., the more expensive, luxury rental car). Study 2 demonstrates an important boundary condition. By manipulating both incidental goal activation (health goal vs. control) and goal conflict (a choice between two high calorie options that conflict with a health goal vs. a choice between two low calorie options that do not conflict), we show that goal activation leads to ironic effects only when none of the options in the choice set allow for pursuit of the incidentally activated goal. Study 3 rules out an alternate account for the pattern of results, replicating the choice effect and demonstrating that the incidental goal prime increases the accessibility of that goal, as intended. Testing for the mechanism behind this effect, Study 4 replicates these ironic effects with real choices (e.g., a choice between two unhealthy donuts for consumption), and assesses how goal conflict affects consumers' interests in special or unique options. The results demonstrate that goal conflict increases interest in special or unique options, and further that this increase in interest in special or unique options mediates the effect of goal conflict on choice. Study 5 further examines the underlying process and rules out a second alternate account for the pattern of results by showing that these results cannot be explained by goal conflict increasing interest in options that offer "maximum violations". Finally, in Study 6, we test if external prompts to justify a choice result in similar effects, by manipulating both goal conflict and an additional need for justification. The results show that goal conflict and the additional need for justification have an analogous effect on choice.

As the need for justification can affect consumer decisions and shift preference towards options that are supported by the best reasons, this research has clear implications for marketers seeking to maximize their understanding of consumer decision processes at the point of choice. For example, in an additional study we manipulated if a savings goal was incidentally activated (vs. a control), then gave participants a choice between two expensive, luxury suitcases that were priced equally (\$695), one of which was labeled "only two left." The results of this study showed that participants experiencing goal conflict (savings goal prime) were significantly more likely to choose whichever option was labeled as "only two left." Building on the current set of studies, these results suggest that goal conflict and the need for justification may increase interest in products supported by many different reasons (e.g., limited availability). We hope that the current research will prompt future inquiry into this area.

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Catching Goals in the Act of Decision Making
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Although consumers may prefer to think that their decisions are guided by conscious thought, accumulating evidence suggests that many choices are influenced by subtle and unrecognized environmental cues. Perhaps nowhere is the relevance for understanding consumer behavior more profound than in the advances that have been made in the area of nonconscious goal pursuit (Bargh 2002; Chartrand and Bargh 1996). Though the very idea of a parallel nonconscious goal system opens the door to new directions for research, many of these directions are challenged by the complexities of studying goals of which consumers are not aware. This paper introduces and validates a method for measuring goal activation levels during the consumer choice process. Rather than using free-form responses, or all-or-none measures of goal activation, we use a goal log that requires participants to assess the activation of a set of goals on an 11-point scale. Assessment happens midway through the decision to align assessment with the period of maximal goal activation. The method is tested across three studies.

In study 1, two goal primes, Memorize or Form an Impression, and the priming task (sentence completion) were borrowed from Chartrand and Bargh (1996). After the priming task, participants (N = 51) made a choice between two scholarship applicants. Midway through the choice process, participants were interrupted and reported how active nine different goals were at that moment. Goal activation levels were recorded on an 11-point scale (0 =not at all active; 10 = maximally active). Participants then resumed reading the remaining information about the candidates, and selected the one they preferred. After their choice they reported whether the focal goals had been active (yes/no) during the choice process. If participants were aware of their goal activation levels, the difference in goal activation (Form an Impression – Memorize) should have been greater when the Form an Impression goal was primed than when Memorize was primed. This comparison revealed a greater difference when the Form an Impression goal was primed (M = 5.08) than when the Memorize goal was primed (M = 2.71, p < .05). However, post-choice measures revealed such no difference—the same proportion of Ps indicated that the Memorize goal was active (68%) in both conditions, and slightly more indicated the Form an Impression goal was active in the Memorize condition (91%) than in the Form an Impression condition (88%). Whereas the mid-choice continuous assessment revealed prime consistent differences in goal activation, the post-choice measure produced the null result found repeatedly in prior research (e.g., Chartrand and Bargh 1996).

Other research has established that the consistency goal can be activated subliminally and that its activation influences consumer choice processes (Russo, Carlson, Meloy and Yong 2008). In study 2, we follow Russo et al. (2008) by activating the Consistency goal via parafoveal priming. We then measure goal activation levels for several goals, including the Consistency goal. We do so twice, once midway through and once just before the end of the choice. After the choice, participants (N = 110) were debriefed for awareness (Chartrand and Bargh 1996).

Similar to study 1, activation of the consistency goal measured midway through the choice was greater for participants who had been subliminally primed with consistency words (M = 7.27) than it was for participants who were exposed to goal-neutral words (M = 6.58; p < .05). The same was true for the measure of consistency taken after participants had seen all six of the attributes ($M_{consistency}$ = 7.58; $M_{neutral}$ = 6.89; p < .05). Importantly, the activation levels of the other goals did not differ across condition for the early assessment (all p > .38) or the late assessment (all p > .24).

To deal with difficult tradeoffs, consumers often seek out choice alternatives that allow them to avoid making those painful tradeoffs (Luce 1998). When no such alternatives are available, the desire to avoid negative emotions "in-process" can become active (p. 21, Luce, Bettman, and Payne 2001). That is, difficult tradeoffs can activate the goal to avoid negative emotions. Following this logic, we reasoned that making tradeoffs salient would cause the Avoid Negative Feelings goal to increase in activation. We posited that having participants engage in attribute-based processing of non-alignable information for three appealing alternatives (hotels), would make the difficulty of the tradeoffs salient, which would lead to substantial activation of the Avoid Negative Emotions goal. In contrast presenting the alternatives serially (thereby requiring alternative-based processing), would not highlight tradeoffs across the alternatives, which would keep the Avoid Negative Emotions goal relatively inactive (i.e., at something like its chronic or background level of activation during a typical choice).

In Study 3, participants (N = 50) decided between three hotels described by three attributes (Location, Pool, Services) in one of two information conditions, attribute-based or alternative-based processing. After reading all of the information, but before selecting their preferred hotel, participants reported the activation levels for 11 processing goals, including Avoid Negative Emotions.

As expected, participants in the attribute-based processing condition reported higher activation of the Avoid Negative Emotion goal (M = 6.96 on the 0-to-10 scale) than participants in the alternative-based processing condition (M = 2.92, p < .01). This result shows that the choice architecture, with no change in information content, can influence the activation of processing goals.

In conclusion, this research explores whether consumers can report goals that have been activated outside of their awareness. Perhaps the key takeaway is that even though consumers are typically unaware of what factor(s) in the environment caused a goal to become active, they can report if that goal is active when a sensitive assessment method is used. Our hope is that this method for catching goals in the act of decision making will help researchers identify goals that (a) underlie important consumer behaviors, (b) are activated by common contextual factors, and (c) are related to each other either through causal activation or through simple relatedness to a higher order goal.

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Session 2.3

Why New York is Closer to Ithacans than Ithaca is to New Yorkers: The Familiarity Effect in Distance Judgments
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The burgeoning literature on the role of psychological distance in everyday decisions has prompted researchers to examine factors that influence distance judgments. Psychological distance—the subjective experience of distance from a target stimulus—influences many important judgments and decisions, including how objects in the environment are represented mentally, and which of two future monetary rewards people prefer. In this research we focus on the role of metacognitive experience in distance judgments. First, we test whether the metacognitive experience induced by familiarity increases perceived geographical proximity. Some cities are more familiar than other ones. So distance judgments will feel easier for the familiar than for the unfamiliar cities. Will the metacognitive experience induced by familiarity with cities affect peoples' judgments of distance from the city? The first two experiments (Experiments 1A and 1B) reported in this research were designed to address this question. Our hypothesis is that people will judge familiar cities to be more proximal than unfamiliar cities and further, the familiarity effect in distance judgments will affect their economic decisions.

Second, we examine when and why familiarity affects distance judgments. Although metacognitive experience is a pervasive cue available for most judgments, it is not clear when people will use it when they will not. One hypothesis is that, like the "fast and frugal" recognition heuristic (Goldstein and Gigerenzer, 1996, 2002), people use familiarity as a non-compensatory cue in distance judgments. An alternative hypothesis suggests that familiarity will influence distance judgments only when the metacognitive experience defies expectation and thus induces surprise – the discrepancy misattribution account (Schwarz, 2004; Whittlesea, 1993). Only under such conditions people infer the criterion variable (i.e., distance) from their metacognitive experience and it is this nonconscious substitution that biases their distance judgments. Experiments 2 and 3 were designed to test this discrepancy misattribution hypothesis.

Experiment 1A: Distance Judgments. The purpose of this study was to test the hypothesis that familiarity of a city can bias participants' distance judgments. In this experiment participants were asked to judge the distance between a famous US city (New York) and a relatively less known city (Ithaca). The same question was asked to resident of Ithaca as well as to residents of New York City. Participants were students recruited from university campuses in Ithaca and New York City were paid $5 for completing a short questionnaire. As predicted participants in NYC judged the distance between the two cities to be longer than those in Ithaca did. *Experiment 1B* demonstrates that such familiarity-induced bias could also affect participants WTP for products.

Experiment 2 and 3. Recognition or Discrepancy Attribution? These experiments were designed to investigate whether the familiarity effect in distance judgments is better characterized by the recognition heuristic account or by the discrepancy misattribution account. Participants were asked to judge the relative distance to 24 US cities. We selected 12 pairs of US cities such that each pair was equidistant from the experimental location, but one city was relatively better known than the other (e.g., Los Angeles, CA and Hemet, CA are equidistant from the experimental location but the latter is unfamiliar). Some of these pairs were in the same state as the experimental location, while the other pairs were in far-flung states. If participants use the familiarity cue in a non-compensatory manner as predicted by the recognition heuristic account, then we would expect the familiarity effect for all pairs irrespective of their actual distance from the experimental location. In contrast, the discrepancy misattribution hypothesis suggests that people expect themselves to be familiar with proximal but not distant cities. Therefore, they will find unfamiliarity to be discrepant only for the proximal cities. Results support the discrepancy misattribution hypothesis. The familiarity effect manifested only for proximal cities. Further, in Experiment 3, we added a control condition and found that the bias in distant judgments manifested for unfamiliar cities but not for the familiar cities.

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Fluency and Psychological Distance: Consequences for Construal and Discounting

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Researchers typically study the effect of psychological distance by manipulating how far the target stimuli are from the perceiver. In contrast, we suggest that people make such distance calculations spontaneously, even without explicit instruction. In particular, we argue that a stimulus feels psychologically close to the extent that it is easy to process. In Studies 1 and 2, we began by showing that people use processing fluency—the ease with which they process a stimulus—as a cue to determine the psychological distance of a stimulus.

In Study 1, participants believed that cities printed in a disfluent font were farther away than cities printed in a fluent font. Replicating this effect using a different instantiation of fluency, participants in Study 2 estimated the distance of cities whose names they either had or had not read in an earlier, ostensibly unrelated phase of the study. As expected, participants rated the cities as nearer when their names had been primed, and were therefore more fluent.

Having shown that fluency influences distance estimates, we examined the effects of fluency on mental construal, and future reward preferences. As we move further away, we focus on its abstract, global properties. Participants in Study 3 were asked to write a one-sentence description of New York city. The request was printed in either an easy to read or a difficult to read font. As expected, participants generated more abstract descriptions of New York when the request was printed in the difficult to read font.

Study 4 replicate this effect using the conceptual fluency priming paradigm described in Study 2. Participants in Study 4 preferred concrete descriptions of Los Angeles when they had earlier been primed with the name of the city, but relatively preferred abstract descriptions when they were not earlier primed.

In Study 5, we showed that this effect also holds in a naturalistic environment, using a third instantiation of fluency: linguistic fluency. We collected archival data from a web-based community of Balderdash contestants. In the game of Balderdash, players attempt to generate plausible definitions for obscure English words. Consistent with Studies 3 and 4, participants generated more abstract definitions for words that were difficult to pronounce.

Psychological distance has similarly profound effects on intertemporal choice. When making intertemporal choices, people often discount the value of delayed rewards. For example, a person choosing between $10 immediately versus $15 in one week might prefer the immediate reward. However, when choosing between $10 in ten weeks versus $15 in 11 weeks this person might prefer the later reward, even though the absolute time difference between the two rewards is still one week.

Consistent with these findings, in Study 6, we found that participants were more likely to choose a larger, later reward (LL) than a shorter, sooner reward (SS) when the questionnaire was printed in a disfluent font rather than a fluent font. Since disfluency made both rewards seem more psychologically remote, the displeasure of waiting for the larger reward figured less prominently in participants' choices. In contrast to this result, we might expect disfluency to lead to diminish preferences for the LL reward, because it would be perceived as farther away while the perception of the immediate reward would not change.

To test this prediction, participants in Study 7 imagined receiving a $75 Visa gift card that had no expiration date. The gift card was presented in a 2 x 2 between-subjects design; it could be used either immediately or a year later and the study instructions were printed in either a fluent font or disfluent font. Participants were then asked to imagine having to wait an additional two months before using the gift card and asked how much more they would need to be paid in order to wait. As expected, when considering the immediately available gift card, participants in the disfluent condition asked for more money to wait than did participants in the fluent condition, whereas, when considering the delayed gift card, participants in the disfluent condition asked for less money to wait than did participants in the fluent condition.

This research therefore suggests that processing fluency is one plausible mechanism behind several fundamental processes in human cognition. Since fluency is cheap and easy to manipulate, these studies have useful implications for marketing researchers and practitioners who seek to shape how people construe goods and services.

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The Effects of Fluency and Construal Level on Confidence Judgments

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This paper explores the influence of fluency on consumers' confidence in their choices and proposes construal level as an important moderator for the fluency effect. We find that when consumers adopt a low construal level, which highlights the feasibility of an outcome, fluency increases confidence. However, when consumers adopt a high construal level, which highlights the desirability of an outcome, fluency decreases confidence. We trace this latter effect, a reversal of prior findings regarding the role of fluency, to lay theories regarding the relationship between outcome desirability and effort.

According to construal level theory, lower-level construals highlight the means and the feasibility of an event, and so induce a "how" processing mindset. By contrast, higher-level construals highlight the central goals and the desirability associated with the event, and so induce a "why" processing mindset. In light of this research, we hypothesize that people will interpret feelings of ease in one of two ways depending on their construal level. Specifically, we propose that at lower construal levels (LCL), subjective experiences of ease naturally signal feasibility and likelihood of achievement thereby bolstering confidence. By contrast, at higher construal levels (HCL), consumers are focused on the desirability of their choice, rather than feasibility, and in this case, feelings of ease experienced during the decision process provide information about the consumers' own investment in desirability (i.e., due diligence performed to verify desirability). Ease may imply little effort on the part of the consumer, and so limited confidence in the choice. For example, when deciding on a vacation destination or shopping for a camera, consumers might have misgivings about their decision if they feel they had barely thought about it. Subjective experiences of difficulty imply greater effort – a sense of having done what they should to ensure desirability – and thus greater confidence. These hypotheses imply an interaction of fluency and construal level on confidence.

We tested our proposition in two ways. In studies 1 and 3, we manipulated retrieval fluency by asking participants to generate either a few (easy) or many (difficult) reasons for their choice. In study 2, we manipulated processing fluency and presented a choice set using either an easy or a difficult to read typeface. Across all studies, we manipulated people's construal levels by using a priming task that appears to be irrelevant to the main choice task.

In study 1, participants first completed the priming task. They then proceeded to the main choice task where they were presented descriptions of two digital cameras and generated either two or ten reasons for preferring one camera to the other. They then chose a camera and indicated their confidence in their choice. As predicted, LCL participants reported greater confidence when thought listing was easy (two reasons) than when it was difficult (ten reasons). On the contrary, HCL participants reversed the fluency effect and reported greater confidence when thought listing was difficult than when thought listing was hard. Study 2 replicated the results of study 1 by manipulating processing fluency (font), a technique that allowed us to control for thought content and assess the extent to which choice confidence is subject to the interpretation of the ease or difficulty experienced during processing. Two sets of mediation analyses further supported our hypotheses.

Study 3 was designed to obtain direct evidence for the role of retrieval fluency and construal level. We used a misattribution paradigm and showed that when participants attributed ease to background music rather than the decision, the effects of retrieval fluency on confidence were eliminated. Study 3 not only generalized the findings of study 1 in a different product category (movie) but also showed that the effects of retrieval fluency and construal level on confidence were moderated by the interpretation of that feeling.

These findings provide a clearer picture of how fluency affects confidence judgments and identify construal level as an important moderator. To the extent that choices vary in their mode of presentation and that consumers vary in their internal states, the fluency experienced during choice and levels of construal will also vary. This variation will induce changes in confidence in choice and thus affect actual purchase decisions and the amount that consumers are willing to pay for an item.

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Inferring Extremity from Memory: The Effects of Temporal Distance and Metacognitive Inference on Word-Of-Mouth

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A growing body of research shows that consumers make inferences from their own metacognitive experiences (Lee, 2004; Schwarz, 2004), like the subjective ease or difficulty of recall (Schwarz et. al., 1991). What consumers conclude from these experiences depends on their naïve theories of mental processes. Most people assume, for example, that recent or important events are easier to remember than distant and unimportant ones. Hence, they conclude from ease of recall that the event was recent or important (Schwarz, 2004). We extend this research by showing that consumers also make inferences based on the memory performance of others, an observation that is particularly important for the impact of word-of-mouth (WOM) information.

When evaluating WOM information, consumers consider much more than what is being explicitly reported. For example, consumers consider the history of past agreement with the agent (Gershoff, Broniarcyk, and West 2001) and the strength of the relationship (Brown and Reingen 1987). Here, we explore what consumers infer from the temporal distance since the recounted event occurred; we do so in the context of restaurant service. Normatively, recent service experiences are more diagnostic with regard to what a consumer expects than distant service experiences – the unfriendly staff from last year may long have left, but the staff from last weekend will probably still be there. Experiment 1 shows that consumers understand this principle – yet they may not heed it when they hear a vivid account (experiment 2).

In experiment 1, participants imagined that they consider going to a restaurant. They were then asked whether they would rather talk to someone who went to the restaurant a week ago or to someone who went there a year ago, to see how their experience was. The participants nearly unanimously chose that they would rather talk to someone who went there a week ago. Quite obviously, consumers understand that recent service experiences are more diagnostic than distant ones.

However, do consumers heed this insight when they read a vivid and detailed account of what happened in the restaurant one year ago? Or would they be impressed that the person still remembers all these details a full year later? Would they infer from this feast of memory that the event must have been really extreme or else it would no longer be vividly remembered? To test this possibility, participants in experiment 2 read a highly detailed paragraph about an experience at a restaurant, and were told to imagine that it was from a friend telling them about his experience there. The WOM account of the restaurant experience was presented in a 2 X 2 between-subjects design; it was either a good or bad experience that occurred either a week ago or a year ago.

Participants first answered several questions about how their "friend" felt about his restaurant experience. When the event was negative, participants inferred that the experience was worse if it occurred a year ago rather than a week ago. Thus, they inferred that a negative event that was remembered a full year later was probably worse than the otherwise identical negative event from a week ago, consistent with a naïve theory of memory that holds that more extreme events are better remembered. However, the influence of temporal distance was less pronounced, and not significant, when the event was positive. Next, participants reported the likelihood that they would go to this restaurant. Consistent with their impression of the event, they reported that they would be less likely to go to the restaurant if the recounted negative event occurred a year ago than if it occurred a week ago. However, their intention to visit the restaurant was unaffected by temporal distance when the event was positive.

On the theoretical side, these findings extend the analysis of metacognitive inferences from the use of one's own memory performance to the use of others' memory performance as a source of information. They show, first, that consumers do indeed attend to others' memory performance as a source of information. However, second, they may only engage in this additional inferential step when the declarative information signals a problem that warrants extensive thought, that is, when the information is negative. In contrast, the experiential quality of one's own memory performance captures attention under all conditions and affects judgment when it pertains to positive as well as negative events (Schwarz, 2004). This self-other asymmetry deserves further investigation. Third, the findings add to a growing body of WOM research that shows that negative WOM has more impact than positive WOM (Ahluwalia, 2002), even to the extent of eliciting additional inferential steps, as reflected in participants' metacognitive inferences. Finally, it is worth emphasizing that vivid distant information of negative valence had more impact than vivid recent information (experiment 2) even though consumers generally understand that distant events are less diagnostic than recent ones (experiment 1). On the managerial side, these findings highlight the importance of service recoveries, stressing the counterintuitive notion that service errors that occurred long ago might actually do more damage through WOM than recent service errors.

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Session 2.4

Meeting the Right Person at the Right Time: The Role of Time Perspective in Interpersonal Communication
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The notion that consumers greatly influence each other is at the heart of various marketing practices such as word-of-mouth, viral buzz, and blog marketing. Companies go out of their ways attempting to recruit "influentials" - consumers who can exert strong influence on others (Dye 2001, Rand 2006). However, fewer resources are directed at characterizing those consumers who hold a promising potential to be affected by others.

The current paper examines how consumers' time perspective (i.e. whether they perceive future time to be limited or expansive; Carstensen 2006) affects their susceptibility to social influence by others. For example, are older adults, whose time perspective is relatively limited, more or less likely to be persuaded by WOM than young adults (whose time perspective is relatively expansive)? Are people more or less likely to conform to group norms when they approach the end of a significant period in life (and their time perspective becomes limited)?

We hypothesize that when people hold an expansive time (ET) perspective, they experience strong needs to prepare for an uncertain future (Carstensen, Isaacowitz and Charles, 1999). To that effect, they are concerned with banking information about the world and sustaining a social safety network of friends, family and acquaintances. The needs to gather information and to be socially connected increase the individual's attraction to other people and enhance one's openness to messages obtained from others (Festinger 1950, Deutsch and Gerard 1955, Kelman 1961). However, holding a limited time (LT) perspective alleviates some of the concerns about the future and thus decreases the need for information and social connectivity. As a result, we expect people to demonstrate decreased susceptibility to social influence when they hold a limited time perspective.

Study 1 tested the prediction that people are less likely to conform or compare to others when they hold a LT rather than ET perspective. We manipulated participants' time perspective by asking them to describe important life projects that they can achieve either in an unbounded future or in a short future. Subsequently participants completed the Attention to Social Comparison Information Scale (Bearden and Rose 1990), which measures people's tendency to conform to social norms and to compare themselves with others. As expected, participants reported greater tendencies to conform and compare when they were induced to perceive time as expansive rather than limited.

Study 2 focused on influence through conformity. We manipulated time perspective and subsequently presented six dessert options to participants. We further told participants that other students either from their school (in-group) or outside their school (out-group) preferred a certain dessert. When asked to rate each dessert, participants in the ET condition showed greater preference for the target dessert when it was their in-group's favorite. This group effect was not obtained for participants in the LT condition. In other words, ET participants conformed to their in-group's norms while LT participants did not.

Study 3 examined the effect of time perspective on people's interest in listening to WOM about a product. We primed participants' time perspective through print advertisements for a fictitious coffee-shop. The ads either started with the sentence "Because time has no limits…" (ET condition) or with "Because time is limited…" (LT condition). Then participants indicated their interest to receive WOM about the coffee-shop either from a close friend (familiar source) or from a stranger (unfamiliar source). Consistent with out predictions, ET participants showed greater preference to hear about coffee shop from a close friend than from a stranger. In contrast, LT participants were not sensitive to the source manipulation.

In sum, we find across studies with different settings, different products and different sources, that people become less sensitive to social influence when they are induced to perceive time as limited.

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Why Do Consumers Talk, Does Anyone Listen, and What Happens?

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Despite the large amount of research on word-of-mouth (WOM) and social contagion in marketing, sociology, physics and elsewhere, surprisingly little is known about the individual-level talking, listening, and impact processes. We know little about the underlying individual-level processes that drive WOM. Why do consumers transmit WOM about products to their peers? When do they listen to these messages? And when and in what ways are they impacted by WOM? In this research we study transmission, reception and impact. We address the following questions: (1) what are consumers motivations or reasons for transmitting information to others, (2) what factors related to recipients affect transmitters likelihoods of talking, (3) what factors related to transmitters affect recipients likelihoods of listening, and (4) what types of WOM are likely to be more impactful on recipients brand/product-related attitudes and subsequent consumption behaviors?

For transmission, in the first study (N = 110) we asked participants to recall times when they actually transmitted WOM, asked them why? and asked them to give information on the characteristics of the people who they talked to (recipients). We found that transmission motives were predominantly self-focused and centered on needs to either express opinions or to in fact solicit (not give) information. When participants were sharing their own experiences with products the former was the only motive. However when they were passing-on information about others' experiences (retransmitting) they not only wanted to express this opinion but also sought information from the recipient (possibly to validate or verify the previously-received information).

In study 2 (N = 200), participants were in a hypothetical situation where they had to select recipients who they would transmit WOM to, given knowledge of recipients characteristics (interest in topic, track-history of being receptive, tie strength, and social connectivity). We found that transmitters preferred recipients who were likely to listen (e.g., strong topic interest, past receptivity, strong friendship tie). This was all that mattered when transmitting own information, and is consistent with just wanting to express one's opinion to people who would actually listen. However, when retransmitting information from others the social connectivity (many versus few friends) of the recipient also mattered. Well-connected people have access to more sources of information and, all else equal, should themselves be better sources. Indeed, in study 3 (N = 28) we found that transmitters expected well-connected people to be sources of high quality information. Based on these studies, transmission is associated more with using the social capital embedded in one's social ties than it is for building social capital (e.g., by transmitting in order to give advice). However, transmitters use social capital in different ways: when sharing own information recipients are used as a receptive audience for one's opinions, and when passing-on others information recipients are used for validating, verifying or elaborating the existing information.

In a fourth transmission-related study (N = 920,770) we examined a different type of transmission sharing information in an online social network using data from a popular Facebook app. App users can share the app itself with friends and can share results from quizzes that they take within the app (they take personality and psychological tests). We find the probability of sharing the app or of sharing various quiz results decreases exponentially as a person's number of friends (social connectivity) increases. Also, as a person's social connectivity (and hence their stock of social capital) increases, people become more strongly focused on using their network connections for seeking information. Related to the previous three studies, having more social capital means a stronger desire to use it for self-focused purposes.

We then consider reception/impact with three studies (participants are recipients). In the first study (N = 127) we examine listening decisions as functions of transmitter characteristics (expertise, social tie strength, connectivity) and message characteristics (valence) in a hypothetical situation where participants imagined themselves exposed to WOM from certain people. Participants indicated who they would listen to. Although transmitters who are perceived to be "experts" are more likely to be listened to, we found high reception probabilities under various other combinations of transmitter and message characteristics, including cases where transmitters lack any objective credibility or expertise. In the two other studies (Ns = 276 and 272; also hypothetical), participants were given uninformative product information and exposed to WOM about that product. We measured attitudes toward the product and purchase intentions pre- and post-WOM. The message varied on valence and tone (factual versus emotional), and the transmitter varied on objective credibility (category expertise) and tie strength (friend, acquaintance, or stranger). Instead of measuring only dispositional attitude, we also measured certainty (i.e., confidence in disposition toward the product). Capturing certainty changes were important: e.g., in 45% of the cases where dispositions did not change post-WOM, certainties did change (indicating that WOM had an impact, just not on disposition). Disposition and certainty changes (individual or combined) affected purchase intentions. Moreover, although objectively-credible transmitters are influential, low-credibility transmitters (e.g., strangers, novices) sometimes impact attitudes and purchasing, provided the message makes recipients feel more certain about their existing opinion. Thus, under the right conditions almost any transmitter has a good chance of being influential.

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The Dual Effect of Social Signaling on Regret in On-Line Auctions

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Consumers' everyday purchase behavior has been commonly documented to be influenced by the presence of others, both in their daily surroundings, such as while shopping at brick and mortar stores (Argo, Dahl and Manchanda 2005; Sommer, Wynes and Brinkley 1992); and in on-line settings, such as when engaging in on-line purchases (Cameron and Galloway 2005; Dholakia, Basuroy and Soltysinski 2002; Herschlag and Zwick 2000).

The current research aims to shed light on the effect of the presence of others in on-line auctions. The presence of others could serve as either a favorable or unfavorable *signal* reflective of product quality. In the former case, an increased interest in the product enhances the perceived quality of the product by constituting a positive indicator on product popularity through the simple heuristic that "the more people who want it, the better it must be" (Cialdini 2001; Katz and Shapiro 1985; Hellofs and Jacobson 1999). This is a notion which Hellofs and Jacobson (1999) term as a "bandwagon" effect. In the latter case, an increased interest in the product may reflect a decline in product quality due to loss of exclusivity (Aaker 1991; Hellofs and Jacobson 1999, Kennedy 1989). Specifically, we contend that the direction of the *signaling effect* as it relates to the presence of others, is regulated by product uniqueness. That is, it is expected to have a favorable effect when the auction deals with a standard item which everyone is known to want; versus an unfavorable effect when the auction offers a unique item.

The current research examines the differential effect of *signaling* via the number of others present in on-line auctions on the degree of interest toward the item and on the magnitude of two forms of regret: the regret of bidding too much, which is coined as the "winner's curse" (Capen, Clapp and Campbell 1971; Foreman and Murnighan 1996; Thaler 1992) and the regret of bidding too little, which is labeled as the "loser's curse" (Ariely and Simonson 2003).

If the item is perceived as a standard item desired by many, the presence of others is proposed to have a positive effect on consumer's choices, acting as a reinforcement to the belief that many individuals desire the item and the item is popular. This should result in an elevated "loser's curse" compared to the "winner's curse". Thus, consumers' would increase their interest in the product and therefore are anticipated to be more concerned not paying high enough to win the product than winning it at a high price. On the other hand, in the case where the item is perceived as unique, the presence of others is proposed to have an unfavorable effect on consumer's choices. Quite simply the desire of many others to own the product may take away from its cache, in that many individuals are now on to the value of owning it. The bidder may feel a loss of exclusivity attached to the item (Hellofs and Jacobson 1999). Accordingly, the "winner's curse" is expected to be higher than the "loser's curse". Thus, consumers are expected to be more concerned with paying too much for the product than of losing the product since the mere interest of others in the product makes it seemingly less unique.

The research consists of three studies. The first study tests the positive effect of signaling. It is based on an on-line simulated auction on a standard product (i.e. a thermo glass). It confirms that the extent of interest toward a standard product increases in the presence of others compared to the absence of others. It further demonstrates that in the presence (absence) of others the regret of bidding too low (too much) is higher than the regret of bidding too much (too low).

The second study further explores the negative effect of signaling. It is based on an-line study which measures the magnitude of regret of bidding too much or too little as a function of the number of others interested in the item, and of the product's perceived uniqueness. The actual product in the second study is identical in all conditions (i.e. t-shirt); however, it is either described as a unique one or a standard one. Its findings replicated the ones in the first study, regarding the standard description of the product. However, when the product was described as unique, bidders decrease their interest toward the product, reported greater regret of bidding too little and lesser regret of bidding too much in the presence of other potential bidders compared to their absence.

The third study, examines the dual effect of signaling as a function of the number of others and the bidders' primed uniqueness. As in the second study; an identical product was offered to bidders in an on-line auction (i.e. a USB rubber bracelet) having either many or no others interested in the product. However, instead of using different descriptions for the same product to induce its uniqueness; the bidders' need for uniqueness was primed before the auction. We found that bidders with high uniqueness orientation perceived the product to be more unique in the absence of others than in the presence of others. Furthermore, the perceived uniqueness of the product was found to mediate the direction of the signaling effect.

In sum, the present research provides new insights into the nature of the impact of the presence of others on consumers' decision making. In light of these findings it would be interesting to re-examine the herding effect in the context of on-line auctions, as a function of the product perceived uniqueness. In practical terms, when the number of others is expected to be high, it is better to describe the product in common terms; however when not expecting many others to be interested in the product, it is strategically better to describe it in unique terms.

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Session 2.5

Differentiating the "I" in "In-Group": How Identity-Signaling and Uniqueness Motives Combine to Drive Consumer Choice

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Consumers concerned with conveying their social identity may often experience tension between communicating their group membership and communicating what makes them unique. Different research streams have separately examined these identity motives. Work on uniqueness suggests that people want to be (at least somewhat) unique (Snyder and Fromkin 1980). Individuals with higher needs for differentiation, for example, prefer products owned by fewer others (Tian, Bearden, and Hunter 2001). Work on identity-signaling, in contrast, suggests that people behave similarly to in-group members to effectively communicate social identity. By converging on in-group preferences (and diverging on out-group preferences), individuals can signal group affiliation (Berger and Heath 2007).

Because uniqueness and identity-signaling are studied independently, little is known about how people integrate these motives through consumer choice. Are there systematic ways in which people simultaneously signal identity while differentiating themselves? Optimal Distinctiveness (Brewer 1991) suggests that by activating social identities, individuals simultaneously meet needs for assimilation (by identification with an in-group) and differentiation (by comparisons to out-groups). People do not behave identically to in-group members, however, and thus we argue the need for distinctiveness continues at the within-group level.

We propose that consumers can simultaneously satisfy desires for identity-signaling and uniqueness at different levels of choice. Consumers may select the same brand as their in-group, for example, but pick a differentiating product. Most research has taken a one-dimensional view of similarity and differentiation: people either select the same product as another person, or a different one. Real choice, however, is more nuanced and we explicitly allow for this. We argue that while consumers generally conform to in-group members on one level to effectively communicate social identity, they often simultaneously diverge at another level allowing them to also feel unique.

Experiment 1 provided a preliminary investigation of how people satisfy these different motives through consumer choice. First, we asked participants to identify an in-group. Then, across five consumer domains (e.g. cars and shoes), we asked them to list two brands: one that was strongly associated with their in-group (Brand A), and one that was also liked by the group, but was not as closely linked to the group (Brand B). They were next given information about the distribution of preferences of their in-group and asked to choose among four options. Specifically, they were told to imagine that out of 100 group members, 60 preferred Product 1 from Brand A, 17 preferred Product 2 from Brand A, 17 preferred Product 3 from Brand B, and 6 preferred Product 4 from Brand B. Thus, there was a majority (Product 1 and 3) and minority (Product 2 and 4) option from both a brand that would signal group identity, and a brand that would not. Participants also completed the Consumer Need for Uniqueness scale (Tian et al. 2001).

As predicted, we found that people conformed on markers of group membership but differentiated within their group. At the brand level, people tended to choose brands that were more strongly associated with their in-group (i.e., Brand A). At the product level, however, individuals with higher needs for uniqueness strategically chose the less popular product from that brand (i.e., Product 2 from Brand A).

In Experiment 2, we examined how social identity and between-group comparisons influence choice by having participants list both an in-group and an out-group. They completed a choice task similar to the one used in Experiment 1. This time, however, they were told to imagine that of the four options, 70 people from their in-group preferred Product 1 from Brand A and 30 preferred Product 2 from Brand A, while 70 people from their out-group preferred Product 3 from Brand B and 30 preferred Product 4 from Brand B. Participants also completed the Consumer Need for Uniqueness scale (Tian et al. 2001). We found that participants were more likely to select brands linked to an in-group than an out-group. Our results also showed that participants with higher needs for uniqueness tended to select products preferred by fewer in-group members. This finding contrasts with prior work which would suggest that making out-groups salient should satisfy needs for differentiation. Instead, we found that desires for within-group differentiation persisted even though choosing a Brand A option provided differentiation from an out-group.

In Experiment 3, we examined whether choice at the brand level is driven by desires to communicate particular social identities. We asked participants to list either an in-group or an out-group, and to rate how much they wanted others to associate them with the group they listed (the rest of the study was similar to Experiment 1). Consistent with an identity-signaling perspective, at the brand level, participants only tended to choose brands linked to their reference group when that group was their in-group, and this was mediated by their desire to signal that identity to others. People who had a greater desire to be associated with their reference group were more likely to choose options from brands linked to that group. At the product level, we again found that participants with higher individual needs for uniqueness preferred the less popular product from the brand associated with their in-group.

Rather than measuring individual differences, Experiment 4 directly manipulated uniqueness seeking with an image exposure task (adapted from Maimaran and Wheeler 2008) that primed half of participants with uniqueness. They then completed the same choice task as in Experiments 1 and 3. As predicted, uniqueness priming did not affect choices at the brand level—this was again driven by group associations and how much they wanted others to associate them with that group. Instead, the uniqueness prime influenced product choice. Among participants who had conformed to the in-group at the brand level, those primed with uniqueness were more likely to select differentiating options at the product level.

Overall, these results provide insight into how people integrate identity-signaling and uniqueness motives through consumer choice. Importantly, these motives need not act in competition; by strategically conforming on one level while differentiating on another, people can effectively communicate social identity while also being unique.

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The Lingering Consequences of Fleeting Selves: The Influence of Identity Salience on Choice and Post-Choice Satisfaction

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People alternate among different roles and identities. For example, a working woman might see herself as a mother while with her children, but as a professional while at work. The existence of these multiple identities suggests that people may express contradictory preferences depending upon which identity happens, at the moment of decision, to be most salient. For example, a woman whose professional identity is salient might spend a bookstore gift certificate on professionally oriented books, even though she may have chosen children's books were her maternal identity salient instead. Furthermore, her subsequent satisfaction with her new, professionally oriented books might depend on which of her identities is salient when she later evaluates her purchase: She may be less satisfied with that purchase if the maternal, instead of professional, identity is salient at the time of evaluation.

Thus, this work first examines whether changes in the salient self-concept lead to changes in expressed preferences. In particular, this paper examines the impact of evoking one identity versus another conflicting identity on choice. We suggest that preferences will assimilate to an evoked identity (e.g., "lawyer") even when this entails expressing preferences that fundamentally conflict with the preferences people would express were another identity (e.g., "mother") salient. Furthermore, this research examines the consequences of identity-congruent choices for post-choice satisfaction. That is, choices, once made, may be binding, but identity salience will continue to fluctuate after choice, leading to the possibility that the "self" who experiences the consequences of a choice may have very different preferences from the "self" who made the choice. We thus suggest that fluctuations in identity salience will influence post-choice evaluations: People may be less satisfied with their choices if the identity salient after choice entails preferences that conflict with the identity salient during choice, compared to when those identities are congruent.

Study 1 examined two conflicting identities in college students: the "scholar" (concerned with learning) and the "socialite" (concerned with friendships and fun). We manipulated the salience of these identities, asking some participants about serious world issues (to evoke the scholar) and asking others about campus socializing (to evoke the socialite). Next, in an ostensibly unrelated task, participants chose between periodicals and movies, with each choice pitting a scholar-congruent item (e.g., *The Economist*) against a socialite-congruent item (e.g., *Cosmopolitan*). Identity salience reliably affected these choices, with scholar-salient participants choosing scholarly options more frequently than socialite-salient participants, suggesting that eliciting conflicting identities can yield conflicting choices. A follow-up study showed that these effects were strongest for participants who identified highly with the elicited identities.

Study 2 extended this research to a different set of identities—cultural identities—building on the finding that East Asian cultures tend to place a greater emphasis on collectivism and conformity than do more individualistic Western cultures (Markus and Kitayama 1991). Our Chinese-American participants held both an Eastern (Chinese) and a Western (American) identity. We manipulated the salience of these identities by asking some participants about life in America while asking others about life in China. We then assessed participants' preferences for individualistic/independent versus collectivistic/conforming options via four scenarios (e.g., choosing between a uniquely or traditionally colored car, and between defecting or cooperating in a prisoner's dilemma).   Participants chose significantly more individualistic options when an American, instead of Chinese, identity was evoked, further showing how conflicting identities can yield conflicting choices.

Studies 3 and 4 explored consequences of these effects, building on the idea that, although identity salience is inherently fluid, choices, once made, tend to be fixed. Study 3 examined whether people evaluate their choices less favorably when the identity salient after choice conflicts with the identity salient during choice, compared to when those identities match. We began by evoking participants' identities as scholars or socialites. Participants then made a series of ostensibly unrelated choices, with each choice pitting scholar-congruent versus socialite-congruent items. After a filler task, participants were exposed to another identity elicitation which evoked either the same identity as before or the contrasting identity. Finally, participants were reminded of their prior choices. They rated their satisfaction with each choice and the likelihood that they would make the same choice again in the future. Participants rated their choices less favorably (and were less inclined to choose similar items again) when the identity salient after choice contrasted with the identity salient during choice, compared to when those identities matched.

Finally, Study 4 examined whether post-choice fluctuations in identity salience influence actual consumption experiences. Following a scholar versus socialite identity manipulation, participants chose between two video clips to watch later in the session. One clip was congruent with the scholar identity (a professor talked about persuasion), whereas the other was more congruent with the socialite identity (a clip from the television show "Friends" about persuasion). Participants then completed a filler task, after which we elicited for participants either the same identity as before or the conflicting identity. Participants then watched the chosen clip. They rated their enjoyment and dislike of the clip, as well as their satisfaction and regret of having chosen the clip. People reported a more positive viewing experience (more enjoyment, more satisfaction, less dislike, less regret) when the identity salient at consumption matched the identity salient at choice, compared to when these identities conflicted. Thus, post-choice identity-salience fluctuations influence the evaluation of earlier choices both prior to (Study 3) and after (Study 4) consumption.

In sum, choices assimilate to the momentarily salient identity, with people expressing preferences while one identity is salient that conflict with the preferences they express while another identity is salient. Interestingly, while choices are fixed, identity salience may continue to fluctuate even after choice, and thus, identity-congruent choices have consequences for post-choice satisfaction. These findings have implications for research on preference construction and preference consistency, and may even shed light on hypocrisy and "weakness of will," as it seems that preferences quite naturally and starkly shift as people alternate among their many roles and identities.

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It's Not Me, It's You: The Downstream Effects of Identity Restriction in the Context of Gift-Giving

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In this research, we examine how choosing a gift that is incongruent with the gift giver's identity can threaten important self-views and drive the giver to re-assert his/her identity in a subsequent decision. We consider the gift registry context for our inquiry as it presents a circumstance in which the giver may choose an item that is not reflective of his/her identity in order to honor the recipient's preferences. Compiled by recipients, registries act as choice agents that provide perfect information about a recipient's preferences and expectations for an occasion. However, a registry constrains the giver by proscribing the gift choice rather than allowing the giver to choose a gift freely. We predict that the social proximity between the giver and recipient influences the degree to which the giver feels the need to self verify after choosing an identity threatening gift. Specifically, we expect that choosing an identity-inconsistent gift for an individual who is an integral part of self would be more of an identity threat than purchasing the same inconsistent product for a recipient who does not play a large role in the self. To resolve this identity threat, we propose that the gift-giver will reassert his/her identity by choosing an identity-expressive (vs. non-expressive) product in a subsequent choice. The results of four studies support our thesis.

In Study 1A, we test whether choosing an identity threatening (vs. identity-verifying) gift for a close (vs. distant) friend, influences the gift giver's desire to assert the relevant identity (i.e. school identity) at his/her next opportunity. Participants acted as gift givers and chose a gift (i.e. a coffee mug) from a registry. In the identity threatening conditions the recipient attends the rival school and has chosen a mug for registry that displays the rival school's mascot, (posing an identity-threat to the giver). Conversely, in verifying conditions the recipient attends the giver's school and the mug on the registry is verifying to the giver. To see how choosing a threatening vs. verifying gift affects giver's need to self verify, we compare participants' scale measures of their school identity before and after the experimental conditions.

We find that participants' pre-experimental school identity measures indicate no significant differences by condition. However, after purchasing the gift a close friend, they are more likely to self-verify by indicating a strong alignment with their school identity when their identities are threatened (vs. verified) by their chosen gift. Conversely, when participants are choosing for a distant acquaintance, after choosing an identity-threatening (vs. verifying) product, there is no difference in their stated school identity.

Study 1B has an almost identical procedure to study 1A but the dependant variable is a product choice (rather than the scale measure). After choosing the registry gift, participants were presented with an ostensibly unrelated choice (for themselves) between a less-liked but more verifying product and an objectively more appealing product. We find that after givers choose the threatening (vs. verifying) gift for a close friend (vs. distant acquaintance), they are more likely to choose the less appealing but more identity-verifying pen.

In Study 2, we examine how an identity-incongruent gift purchase affects both the two prior dependent measures of identity scale and product choice serially. In a 2 (Product Identity Congruence: Verifying vs. Threatening product) x 2 (Self-Verification Task Order: identity measure first vs. product choice first) experiment, participants chose a threatening (vs. verifying) gift for a close friend's birthday. After making the gift choice from a registry for the close friend, participants made two more consecutive decisions. The two decisions were the pre-experimental identity scale measures from study 1A and product choice in Study 1B.

Our results indicate a significant Identity Congruence x Self-Verification Task Order interaction for both the identity scale measure and pen choice indicating that the initial task enabled subjects to self-verify and resolve their identity threat, consequently muting identity verification in the second task.

Finally, in our fourth study, we replicated the study design in study 1B but changed the relevant identity to participants' political identities (i.e. Democrat vs. Republican). Givers chose a mug for a close (vs. distant) friend's birthday from a registry. In identity-verifying scenarios, participants were told that the recipient has the same political leanings as the participant, whereas in threatening scenarios, the recipient has the opposite political affiliation. Two of the mugs available were explicitly politically affiliated. In identity-threatening conditions, the mug from the threatening political party is the registry gift; in verifying conditions, the mug from the verifying political party is the registry gift. After making the mug choice, participants chose between two magazine subscriptions (one of which is less preferred but more identity-verifying).

We find that when choosing for a close friend after choosing an identity threatening (vs. verifying) product, participants were more likely in their next choice to choose an identity-expressive subscription. Conversely, when participants were choosing for a distant acquaintance, after choosing an identity threatening (vs. verifying) product there was no difference in their next choice of an identity-expressive subscription.

In sum, four studies show that a gift purchase for a close friend may threaten the giver's self-concept resulting in the giver verifying his/her identity in a subsequent choice. Specifically, we find that after experiencing a threat, participants were more inclined to choose a product that was symbolic of the shaken identity (even if they like the product less than the verifying alternative). Our data indicates once an individual's need desire to verify following an identity-incongruent product has been satiated, they will not seek to express their identity as strongly in future decisions.

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Session 2.6

Financial Incentives and Consumer Product Choices
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A cardinal argument in managerial economics is that individuals respond to financial incentives. Presumably, money affects effort and performance such that rewards reinforce desired behaviors while penalties mitigate undesired ones. However, findings in social and cognitive psychology suggest that behavior is primarily driven by intrinsic motivations (e.g., altruism), and that compensation, an extrinsic motivation, can crowd out the first to the point that the activity becomes less appealing (Deci Koestner and Ryan 1999). Similarly, researchers have also suggested that financial incentives undermine performance because they violate social norms of approval (Fehr and Falk 2002) and reciprocity (Fehr Gächter and Kirchsteiger 1997), or because they induce behavioral justifications that damage interpersonal judgments (Bem 1967).

The ongoing debate on the merits and shortcomings of economic concessions has important implications in the field of marketing, where consumers are constantly offered discounts in exchange for buying certain products or quantities. As recently as 2004, for example, approximately 30% of marketing mix budgets in the United States (US) was spent on promotional activities.[1] In the United Kingdom (UK), £19 billion was spent in 2007 alone, with up to 60% of the population responding to one or more campaigns in any given month (Mullin and Cummins 2008).

Building on the notion that providing incentives undermines an individual's intrinsic motivation and arouses reactance and suspicion, we propose that the mere presence of promotional instruments (all involving a lower purchase price) induces more price-sensitive, cautious consumer decision-making among existing (but not new) customers of a firm. This proposition was supported four laboratory experiments and two field studies across a variety of contexts. Specifically, we studied the effects of five common marketing tactics: (1) bundling products at a lower aggregate price, (2) offering a quantity discount on larger purchases, (3) providing an initial payment to consumers that switch suppliers and become customers, (4) giving a price reduction for transactions made through a low-cost channel (e.g., the Internet), and (5) giving a referral discount to customers for signing up their family, friends, or coworkers. In each of these cases we found that the monetary incentive "backfired."

In study 1, the addition of bundled offers to a line of individual products decreased the likelihood that participants elected to purchase from this store, and significantly decreased spending per transaction. In study 2, selling two different sizes (small and large) of the same branded products led to an increase in the proportion of respondents preferring the lower priced, lower quality option. We also observed a shift in attention from quality attributes (quality ratings) to price during decision-making. In study 3, cellular phone services with either a short (3 months) or long (2 years) contract term were offered to new customers who contacted the firm on their own initiative or were given $75 to switch providers. In the latter case, participants were more likely to choose a less expensive plan and spend less on add-on services, but only for the contract of longer duration. Finally, in study 4 we examined the effect of offering a discount for using an online channel to sign up for cable TV and Internet service. In this experiment, participants that were offered an incentive were less likely to pick a premium (more expensive) channel package and also more likely to select a lower-speed Internet connection. Study 4 also included two different tests of referral discounts. Participants offered a financial incentive (vs. control participants) entered a lower maximum bid in an eBay CD auction, and were less likely to apply for and like a pre-approved credit card offer.

These laboratory results provide initial evidence that firms may in fact be better off not offering monetary incentives to existing consumers. In an effort to provide real-life evidence to support this claim, we then conducted two longitudinal field studies and found consistent results. One was conducted in cooperation with an automotive services firm and revealed that the detrimental effects of being given a coupon were limited to the firm's existing customers; new customers exhibited no adverse effects. The last field study was conducted in cooperation with a major bank and showed that the preferences of its existing customers for incentive-based promotions foreshadowed their relational behaviors towards the firm over the course of a year afterward. Taken together, the results of these varied tests provide convergent evidence for our proposition and provide new insights into the role of reactance in customer decision making. In our presentation at the conference, we plan to present the results for a selection of these studies and discuss the theoretical and practical implications of our research.

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[1] Promotion Marketing Association (2005), *7th Annual State-of-the-Promotion Industry – 2005 Report.*

Seeking Freedom Through Variety

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Psychological reactance arises when an individual's freedom is curtailed, evoking behaviors aimed at regaining freedom. In this paper we investigate an important source of reactance: physical confinement. We propose that asking individuals to make choices in (relative) physical confinement will evoke reactance. In four studies and one market demonstration, we show that a unique consequence of this reactance is that people seek variety in their choices as an expression of freedom (Kim and Drolet 2003).

Study 1 tests the hypothesis that a relatively confining space will lead to greater variety-seeking. We assigned participants either to a Wide Aisle (7ft) or a Narrow Aisle (3.5ft) condition, and placed a table at the end of the aisle with bowls containing six different candy bars. Participants were instructed to proceed down the aisle and choose three candy bars in any combination they pleased. As anticipated, Narrow Aisle participants chose a greater variety of candy bars than Wide Aisle participants.

In study 2 we reasoned that where people seek variety they will be more likely to choose less familiar brands. We used familiar and unfamiliar charities as "brands." Participants completed a series of studies either in a narrow or a wide aisle, as in study 1, and were paid $10. In the target task, participants were presented with a short description of three familiar and three unfamiliar charities. They were asked: 1) whether they would be willing to donate any or all of their $10 to any of the charities; 2) if so, how much they would donate; and, 3) how they would allocate their donation among the six charities in the event that they elected to make a donation. We found a significant effect of aisle width on donation intentions to the less familiar charities, such that participants in the Narrow Aisle condition were more likely to donate to the less familiar charities than their Wide Aisle counterparts. Although both groups were equally likely to make a donation, Wide Aisle participants donated slightly more to the familiar charities. In contrast—and most interestingly—Narrow Aisle participants donated significantly more money to the unfamiliar charities.

In our third study we replicate the procedures (this time participants are asked to choose five of nine chocolates) of study one but also measure people's chronic reactance tendencies using the Hong reactance scale. We find that our main effect of aisle width is qualified by an interaction with people's chronic reactance. Those who indicated have greater reactance were more likely to be affected by our manipulation.

Our fourth study examines whether feelings of confinement give rise to our variety effect even when actual confinement is not manipulated. We held constant the aisle width, but evoked a sense of confinement (and reactance) by prompting participants think about how narrow the aisle was (confinement condition) or not (control). After completing a series of unrelated measures, participants were asked to choose three highlighter pens out of six possible colors, in any combination they pleased. We found that participants in the confinement prime condition were more likely to choose a greater variety of pen colors than those in the control condition.

Finally, we present a field demonstration of our effect using sales data based on a sample of transactions over a single month from a chain of 455 U.S. supermarkets. We use customer density, i.e., the number of customer divided by store square footage, as a proxy for confinement. We regress the variety in each category of an individual's basket on a series of control variables and customer density. We find a positive relationship between customer density and variety-seeking for approximately 70% of the categories sold by the stores.

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Escaping the Crosshairs: Reactance to Identity Marketing

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Researchers and practitioners alike have long acknowledged the importance and potential of marketing appeals based on identity. A sizeable literature has established that the identities consumers hold drive them to select constellations of products and services that maintain, strengthen, and express those identities (e.g., Berger & Heath 2007; Forehand Deshpande and Reed 2002). Accordingly, brand managers and marketers are presumably smart to attempt to position brands and products in order to reflect particular social identities: achieving this sense of congruence is seen as mutually beneficial, helping both the firm and the consumer (Reed 2004; Sirgy 1982). But can targeted identity marketing messages have a dark side? The current research examines when identity marketing may backfire. In particular, we suggest that if targeted messages are too strong, consumers may react against them, leading to decreased evaluation and choice.

Consumers are motivated to protect their sense of individual agency, such that they can ensure that expressions of identity are intrinsically motivated and not influenced by external factors (Kivetz 2005; Lepper 1981). The theory of psychological reactance concerns freedom of choice (Brehm 1966), and contends that when an existing freedom is threatened, people are motivated to reassert the freedom. Thus, the present research proposes that targeted identity marketing messages that are too strong—that is, messages that infringe on the consumer's ownership of the identity, or that threaten the intrinsic nature of the expression of that identity—may threaten the ability of consumers to freely express the targeted identity, resulting in consumer reactance. As a result, consumers may turn on the brand, leading to lower evaluation and purchase likelihood. In other words, the identity literature predicts that the effectiveness of targeted identity marketing appeals should increase monotonically in message strength. Instead, our theory proposes an inverted-U-shaped pattern, whereby effectiveness declines when messages are too strong.

Three experiments begin to test this theorizing. An initial field study investigated the possibility of reactance to identity marketing at a Philadelphia Eagles football game. Eagles fan passersby were shown one of three messages (one strong targeted message: "Real Eagles fans put on their game face!", one moderate targeted message: "Eagles fans, put on your game face!", and one untargeted message: "Put on your game face!") for an identity-relevant product—a facial sticker with the Eagles logo. Results indicated that actual purchase incidence declined significantly when fans viewed the strong message relative to the moderate messaged, supporting the inverted-U pattern that our theory predicts.

Presumably, these findings might pose no problem if managers were fully aware of this possibility and chose messages that would not provoke reactance. The second study thus tested managerial intuition about potential reactance to identity marketing in a lab setting. Participants were shown three marketing messages (one strong targeted message: "You're not green unless you clean with Charlie's!", one moderate targeted message: "Two green thumbs up for Charlie's!", and one message with no targeting: "Two thumbs up for Charlie's!") for a biodegradable cleaning product identity-relevant to "green", environmentally friendly consumers, and told to choose the most effective one to reach this segment. Results revealed that the strongly targeted message was favored over the nontargeted message and the moderately targeted message, and was predicted to result in the highest purchase likelihood.

But while these results are consistent with the thrust of the identity literature, study 3 demonstrates that stronger is not always better. Participants were primed with green versus neutral identities, and viewed the advertisement for a biodegradable cleaning product from the study 2, accompanied by one of the three identity marketing messages. Results indicated that participants with activated green identities felt significantly less freedom to express their identities, and indicated lower purchase likelihood when they had viewed the strongly targeted advertisement, relative to participants who viewed the other messages.

In addition to these managerial consequences, study 3 provides initial evidence that identity marketing reactance alters the way in which consumers see themselves: consumers targeted with the strong identity marketing appeal subsequently de-emphasized the identity, reducing its centrality.

Together, study 1 and study 3 demonstrate that targeted identity marketing appeals may have a dark side. Strong targeted identity messages can restrict consumer freedom, provoking consumer reactance and resulting in unfavorable outcomes for both the brand and the consumer. Furthermore, study 2 indicates that managers may not anticipate reactance, and may unwittingly prefer those messages most likely to provoke this response in consumers. Finally, consistent with research suggesting that individuals shift identities strategically in response to threat (Mussweiler Gabriel and Bodenhausen 2000), study 3 suggests that identity marketing reactance may have important downstream consequences. The current research underscores the importance of crafting promotions and advertisements that maintain a sense of consumer agency, particularly for products and domains relevant to the way in which consumers see themselves.

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How Asking "Who Am I?" Affects What You Buy: The Influence of Self-Discovery on Consumption

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For most consumers, self-discovery is an integral part of everyday life. Researchers have argued that we each have an innate desire to learn about our own selves (Baumeister 1998; Trope 1980) and that we often actively seek out self-related information to satisfy that need (Swan and Read 1981; Trope 1975). Popular sources of self-related information include such consumption items as fitness assessments, makeup color consultations, and self-help books.

Logically, this drive towards self-discovery makes sense—the better we understand ourselves, the more likely we are to make appropriate consumption decisions. For self-discovery to be helpful, however, consumers must accept and incorporate the newly learned self-knowledge into their self-concepts and daily behavior. Interestingly, the process of discovering and defining the self can also be seen as a way of limiting what the self can be. For instance, one who is Type A by definition cannot also be Type B. For consumers sensitive to limitation, the findings from self-discovery may represent a constraint on who they can be. This is true even when self-discovery results have neutral or positive implications for self-esteem. Thus, these consumers may actually reject self-discovery findings instead of incorporating them into the self-concept and relying on them to make more informed life choices.

In this paper, we explore how the urge to accumulate self-knowledge might have unexpected effects on consumption behavior. Specifically, we investigate when consumers will accept and incorporate self-discovery conclusions into their consumption choices and when they will reject them. We argue that the degree to which consumers accept what they learn depends on whether the knowledge is ultimately perceived as a tool for understanding the self or a constraint on the self. We suggest that for consumers characterized by independent self-construals and chronically high levels of reactance, the very act of defining the self is inconsistent with their conception of an indefinable self. Thus, we expect that independents and high reactants will reject and make consumption choices inconsistent with self-discovery findings, even as they actively seek to learn about themselves. For consumers low in reactance and characterized by interdependent self-construals, however, defining the self is not inconsistent with their self-conceptions. Accordingly, we expect interdependents and low reactants to accept and incorporate self-discovery findings into subsequent consumption decisions.

A first study explores how differences in self-construal lead to dissimilarities in how consumers respond to the acquisition of self-knowledge in the form of personality quiz feedback. Participants are first offered the opportunity to participate in several studies, and thus freely choose the present one. Next, we assign participants to one of two conditions in which they are given (false) feedback suggesting that they are either high in excitement and low in competence, or low in excitement and high in competence. Participants are then asked to choose between two magazines that are consistent with each of these personality descriptions. We find that because independents greatly value being autonomous and free to do what they want, they tend to reject the conclusions of the quiz and choose the magazine that is inconsistent with what might be expected based on the newly acquired self-knowledge. Interdependents, in contrast, do not value autonomy as independents do and therefore accept and utilize their self-discovery findings in making their consumption decisions. In a follow-up study, we rule out the possibility that independents are responding to potential threat from negative self-information rather than the limitations inherent in self-definition by replicating our results using only positive quiz feedback.

In a third study, we demonstrate that it is indeed the restrictions created by self-discovery that may cause individuals to reject self-discovery conclusions, even when those conclusions have neutral or even positive implications for self-esteem. Participants first complete a quiz regarding their product preferences and receive false feedback suggesting that they are either highly brand-conscious or not at all brand-conscious. They are then asked to complete a choice exercise in which our dependent variable is the number of branded versus generic products chosen. We find that high reactants reject their quiz results and make consumption choices that are inconsistent with them (i.e., they choose branded products when they discover that they are not brand-conscious or choose generic products when they discover that they are highly brand-conscious). Low reactants accept and incorporate their newly acquired self-knowledge into their consumption choices.

Taken together, our results suggest that though self-discovery findings have the potential to influence our consumption choices and to help us make more informed decisions for ourselves, their effects depend on the way in which consumers view self-knowledge and freedom of choice. Knowledge of the self may have surprising and unintended consequences.

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Session 2.7

Evoked Emotions in Counterfeit Usage: Employing "Desire Collages" to Reveal Unexplored Dimensions of Consumers' Emotional States
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Counterfeiting has emerged as a major problem for global marketers, rising dramatically over the past years. The economic facts substantiate these worries: the business with counterfeit products is said to amount to 5-8% of total world trade (Balfour 2005; Freedman 1999; Hunt 2002; IACC 2002). Increasingly, criminal organizations appear to shift from drug trafficking to producing and selling counterfeits, as this business is more lucrative and less risky (e.g. Huband 2004).

Academic research has approached this phenomenon from various angles (see Eisend and Schuchert-Güler 2006, for an excellent summary). In the quest to establish demand drivers, past work investigated why consumers buy originals and what could prevent them from buying its "fake sibling". Factors such as perceived price benefits (e.g. Albers-Miller 1999; Bloch, Bush, and Campbell 1993), product characteristics (e.g. Cordell, Wongtada, and Kieschnick 1996; Penz and Stöttinger 2008; Wee, Tan, and Cheok 1995), demographic variables (e.g. Solomon and O'Brien 1991), social influences (e.g. Ang et al. 2001) or psychographic characteristics of the buyer (e.g. Cordell et al. 1996; Penz, Schlegelmilch, and Stöttinger 2005; Swinyard, Rinne, and Keng Kau 1990; Wee et al. 1995) were explored.

Despite all these efforts, the factors explored so far do not fully capture the phenomenon. The dominance of attitude-behavior models has provided substantial insights and thus merits high appreciation. The explanations provided on why consumers buy fakes are not capable of fully covering this behavior. Recently, the discussion has shifted more towards the situational context and emotional aspects of counterfeit purchases (Allen, Machleit, and Kleine 1992; Eisend and Schuchert-Güler 2006; Gentry, Putrevu, and Shultz II 2006).

Emotions represent key components of consumer experiences (Bagozzi, Gopinath, and Nyer 1999; Holbrook and Hirschman 1982; Leone, Perugini, and Bagozzi 2005). Holbrook (1986) suggests to view the consumption experience as a system that includes consciousness, emotion and value. From this view, emotions play a central role in the study of consumer behavior and interact with physiological, cognitive, behavioral and experiential components (Holbrook 1986). The key role emotions play in consumer behavior highlight the inadequacy of rational choice models which fail "to recognize the importance of affective and other non-rational influences" (Harrist 2006, p. 86). Thus, researchers have long been challenged to move beyond explanations of consumer decision-making based entirely on rational choices (Holbrook and Hirschman 1982).

This is where our paper sets in and aims to provide a contribution: using an innovative, rarely used methodological approach, i.e., desire collages (Belk, Ger, and Askegaard 2003), we explore the nature and importance of emotions that occur while using original and fake products. This unique methodological approach has the potential to reveal unexplored dimensions of consumers' emotional states when using the respective brands. This might help to understand why consumers choose the fake over the original. For illustration purposes, a widely sought after and counterfeited product category, handbags was selected. Respondents were asked to describe the emotions involved in purchasing the original vs. the fake brand from the perspective of a fictitious third person and to produce a comprehensive collage. The data obtained was analyzed using qualitative software and the support of a psychoanalyst and dream researcher.

Results show that emotions surrounding the use of counterfeits and brands play an important role. Already when talking about their collages, respondents got highly emotional and involved. More specifically, emotions became manifest when specifically directed to the collage contents. When it came to original brands, respondents predominantly voiced positive, ego-focused emotions, such as joy, happiness or pride of owning and showing the original brand. In line with theory, the social environment has a strong influence on how people feel about their brand ownership. It positively sets them apart from others who cannot afford the original. At the same time, using brands should not separate them too far from their peers so as not to alienate them and turn peers against one self. In the descriptions, these opposite emotions appeared quite equal in strength and extent (e.g., happiness and joy vs. anger and shame). More ego-related, negative emotions, such as guilt for spending too much money on an original, were less prominent in the collages.

As to the ownership of fakes, initially similar – ego-related – emotions (joy, happiness, pride) emerged. However, pride took up an additional facet: buying a fake means being smarter than fellow consumers who pay much more for the original product. When it comes to negative emotions, fear, shame, regret or disdain emerged and were much stronger in terms of degree and variety. This somehow contradicts Nia and Zaichkowsky (Nia and Zaichkowsky 2000, p. 490) who stress the fun aspect of owning fakes, or more specifically, complements their work. Actually, these findings may rather be an indication for different consumer segments: those who strongly perceive the positive emotions of counterfeits, and those who fear the negative emotions. Taken collectively, our approach unveiled differentiated pictures of emotions involved in the ownership of original and fake brands. The strong emotionality displayed by respondents not only in their collages, but also when talking about them, clearly demonstrates that emotions strongly influence the purchase decision for fakes. Moreover, these findings display strong managerial implications: apart from well researched attitude-behavior models, emotions strongly contribute to explain purchasing of fake products; in addition, results describe the variety of emotional patterns with different magnitudes of positive and negative emotions, which may help to better understand the consumption experience.

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How Materialism Moderates the Labeling Effect in the Quality Evaluation of Products

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In a series of three experiments, we investigated the impact of materialism on the strength of labeling effects in the quality evaluation of products. We argue that materialism - the importance a consumer attaches to worldly possessions - may moderate the strength of this effect and therefore people's tendency to rely more on extrinsic cues such as brands, prices or packaging when rating the quality of products than on intrinsic cues such as the taste. The explanation for this effect is based on the idea that for people who judge their own and others' happiness and success by the number and quality of possessions, labels suggesting premium quality should be an even more valuable cue and therefore serve even more as an indicator of quality than for people scoring low on materialism.

In our first study, 298 participants had to rate the taste of the same red wine that was labeled either as low (3€ per bottle) or high (20€) priced. Additionally, participants had to fill in the Material Value Scale by Richins and Dawson (1992). The results suggest that a higher price leads to a higher mean rating of 64.06, SD = 19.29 compared to a lower price, M = 49.39, SD 20.70, t(296) = 6.32, p < .01, which confirmed the existence of a labeling effect. It was further found that materialism moderated the strength of this effect, ΔR^2 = .016, F (1, 294) = 5.468, p < .01 (one-tailed). The more materialistic participants were, the more vulnerable they were to the labeling effect.

Study 2 was conducted in order to replicate the findings from Study 1 and to analyze whether differences in high- and low-materialism consumers result from a differing ability to detect actual quality differences between products. It was assumed that materialism as a set of centrally held beliefs about the importance of possessions to achievement and enjoyment values could foster biased information processing in a way that value or belief congruent extrinsic label information (represented by a premium label) is weighted more than potentially value or belief incongruent intrinsic product information. To this end, 386 subjects (aged 18-82) participated in a 3 x 2 (label x product) between subjects study, tasting milk chocolate either labeled as the premium brand "Lindt" or as a private label. The control group did not see any label. Independent from the given label, participants either tasted the premium brand "Lindt" or the private label. The labeling effect was replicated by showing that the quality judgment was influenced by the label, F (2, 380) = 18.00, p < .01, not by the actual product, F (1, 380) = 0.95, ns. Ratings for the premium label (M = 73.22, SD = 17.56) were significantly higher than for the control group (M = 62.45, SD = 17.86) and the non-premium label (M = 59.60, SD = 22.35), whereas ratings of the actual products did not differ significantly.

Additionally, the moderation effect of materialism was replicated, ΔR^2 = .013, F (1, 256) = 3.649, p < .05, (one-tailed). The more materialistic participants were, the higher they rated the premium brand "Lindt". When looking at the ability to detect the quality differences between products, however, no differences between high- and low-materialism consumers were observed. Hence, materialism did not moderate the ratings of the actual products; thus materialists' stronger vulnerability to the labeling effect was not due to a lower ability to detect quality differences.

Finally, Study 3 again applied a 3 x 2 (label x product) between subjects design in order to test the explanation that high materialism consumers may expect a higher quality for premium labels than low materialism consumers, which in turn may influence perceived quality. Therefore, the pretrial quality expectancies in addition to the post trial judgments were collected. 201 subjects (aged 18-90) tasted carbonated water which was either labeled as premium ("San Pellegrino") or as tap water with added CO_2, or non-labeled for the control group. Independent from what participants thought they were drinking; they were actually given the premium brand "San Pellegrino" or tap water with added CO_2. It was found that the label had influence on the quality evaluation given by the participants after they had tasted the water, F (2, 195) = 9.11, p < .01, while the actual product did not, F (1, 195) = 0.04, ns. Comparing the given labels, the premium brand "San Pellegrino" was rated to be of much better quality (M = 70.90, SD = 23.08) than the "tap water" label (M = 58.75, SD = 26.02). Results further showed that the relation between label and quality judgment was mediated by expectancies. Hence, after controlling for the pretrial quality expectancies, the influence of the label on the quality judgments was significantly reduced from β = .24, p < .01, to β = .03, ns, Sobel Z = 4.15, p < .01. Furthermore, the significant interaction of materialism and label from Study 1 and 2 was replicated, which again underlines the moderating function of materialism, ΔR^2 = .032, F (1, 141) = 4.940, p < .05 (one-tailed). Participants high in materialism rated the premium label higher and the private label lower than participants low in materialism. Similar to the findings from Study 2, it was further found that the materialists' stronger vulnerability to the labeling effect was independent from the ability to detect objective quality differences.

In sum, our findings indicate that high-materialism consumers are more vulnerable to the labeling effect in the quality evaluation of products due to the tendency to expect larger quality differences between labels suggesting premium or low quality, respectively.

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The Impact of Regulatory Focus on Affective Responses to the Consumption of Counterfeit Luxury Brands
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The luxury goods industry is affected the most by the counterfeiting of goods. Counterfeiters unlawfully take advantage of the prestige of luxury brands and undermine their identity and image, and in some cases their equity. Be that as it may, consumers often knowingly purchase counterfeit brands (Nia and Zaichkowsky 2000). Wilcox et al. (2009) found that consumers' desire for counterfeit brands rests on the extent to which such brands fulfill the social goals guiding their luxury brand preferences. These social goals are much more influential than quality considerations of counterfeit luxury brands; a finding that highlights the importance of self-regulation in counterfeit consumption. Moving beyond social motives, efforts to understand counterfeit consumption should focus on the self-regulatory behavior of consumers who are satisfying these motives within the frame of self-regulation, and relative affective needs the brand may for fulfill for the consumer. Yet, a clear and understanding of how counterfeit brands are employed to achieve self-regulatory goals remains elusive. For consumers who are prevention focused, counterfeit consumption may lead to enhanced self-expression. Whereas, consumers who are promotion focus may also consume counterfeit luxury brands to show their accomplishments. However, when considering the social motivations of counterfeit consumption, a social-adjustive motivation suggests consumers are fulfilling needs for external recognition and a promotion focus may be more relevant. However, a value-expressive social motivation suggests that consumers will be more like to reveal to others their true and authentic self and counterfeit consumption may threaten their authentic self-expression, leading to threat and embarrassment. Given that regulatory focus has been shown to differentially influence the ways in which individuals respond toward goal and objects in their environment, it follows that these regulatory distinctions also may apply to consumer's evaluations, feelings, and interactions with counterfeit luxury brands. The central premise of this article is that these social motivations guide consumers' propensity to consume counterfeit brands. Specifically, we draw on self-regulatory focus theory (Higgins 1987) to propose that both consumers' desire for counterfeit brands and the extent to which the availability of such counterfeits alters their preference for the real brands are determined by regulatory focus goals underlying their self-expressive needs.

Regulatory focus theory (Higgins 1987) proposed two distinct types of regulatory systems concerned with meeting an individual's need for nurturance and gain and for security and safety. The two self-regulation systems, promotion and prevention result in fundamental difference in self-regulation, evaluations and affective experiences. In addressing their needs for nurturance and accomplishment, a promotion focus involves the pursuit of hopes, wishes, and aspiration. It also involves sensitivity to the presence or absence of gain and employs behavioral approach strategies (e.g. eagerness). Thus, consumers who employ this focus, show a tendency to pursue their ideal state, by actively pursuing opportunities for advancement towards this goal. In contrast, a prevention focus involves the pursuit of duties, obligations, or responsibilities (e.g. oughts); a concern with the presence or absence of loss and behavioral avoidance strategies (e.g. vigilance). Thus, if consumers viewed advancement as an obligation, they may consequently pursue this obligation by avoiding situations that would deter them.

As it relates to consumer's likelihood to engage in counterfeit consumption, it is expected that counterfeit consumption will be influenced by a consumer's self-regulatory focus. Promotion-focused consumers will attempt to show others how successful and accomplished they are by engaging in the consumption of counterfeit brands. However in contrast, prevention-focused consumers will tend to avoid consumption behaviors that threaten their sense of accomplishment. Thus, prevention-focused consumers are likely to avoid consumption behaviors that threaten their self-esteem. Thus, we offer the following hypotheses:

H1: The likelihood of consumer's purchasing counterfeit luxury brands will be greater when their self regulatory goal is promotion focused compared to when it is prevention focused.
H2a: Consumers whose luxury brand attitudes serve a value expressive function will be more influenced by prevention versus promotion -based counterfeit advertising.
H2b: Consumers whose luxury brand attitudes serve a social adjustive function will be more influenced by promotion versus prevention-based counterfeit advertising.

One hundred and forty-two undergraduates at a large North Eastern university took part in the study as part of a course requirement. First, participants completed the Regulatory Focus Questionnaire. Participants' attitude functions towards luxury brands were taken to assess the extent to which their attitudes served value- and social-adjustive functions. Next, participants entered their favorite fashion brands. Similar to Wilcox et al. (2009), participants' responses were limited to fashion brands to prevent them from selecting a luxury brand from an infrequently counterfeited category such as luxury cars. Participants were then asked to rate how likely they would be to purchase a counterfeit version of a product by their favorite luxury fashion brand.

In line with hypothesis 1, promotion-focus was a significant positive (b = .38; t = 2.21, p < .05) predictor of Purchase Intent whereas prevention-focus was not (b = - .12; t = .56, ns). The results of a 2 (regulatory focus) x 2 (social motivation) between subjects ANOVA yielded a significant interaction ($F(1,90)$ = 7.01; p<.02, consistent with hypothesis 2. A series of planned contrasts using one-tailed test provide support for hypotheses 2a and 2b. Consumers who were prevention-focused formed more favorable attitudes towards the advertisements when their luxury brand attitude was more value-expressive than socially-adjustive-focused (M = 4.66 vs. 4.14, t(90)=2.09; p<.03. In contrast, consumers who were promotion-focused, formed more favorable attitudes towards the advertisements when their luxury brand attitude was more socially-adjustive than value-expressive (M = 4.35 vs. 3.25, t(90)=1.74; p<.05.

The findings indicate regulatory focus offers a motivational distinction with particular evaluative and behavioral consequences and is useful for specifying the various responses to counterfeit luxury brands. It was shown here that differences in regulatory focus provides a better understanding

of how we come to evaluate, feel about, and behave toward counterfeit brands. Specifically although both a promotion and prevention focus influence counterfeit brand consumption, they do so in different ways.

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Exploring the Motivations Underlying Material Values: The Roles of Regulatory Focus, Self-Esteem, and Extrinsic Goal Pursuit

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Materialism refers to a value system in which material goods and their acquisition are a central determinant of a successful, happy life (Richins & Dawson, 1992). Although a number of studies have documented characteristics of materialists and the consequences of materialism, relatively little research has investigated the underlying motivations of materialistic goal pursuit. Filling this gap, two studies are presented that test the proposition that regulatory focus (Higgins, 1997) influences materialism. More specifically, we test the proposition that both promotion and prevention foci are related to materialism, but through different mechanisms. Moreover, we also show that these different mechanisms involve different aspects or dimensions of materialism (success, happiness, and centrality).

Research suggests that prevention and promotion foci are differentially related to self-esteem. Whereas prevention is negatively related to it, promotion is positively related to self-esteem (McGregor et al., 2007; Moss, 2009). Because low self-esteem may lead to a more materialistic orientation (Chaplin & John, 2007; Kasser, 2002) promotion and prevention foci may thus have opposite effects on materialism. Second, promotion-oriented consumers may also differ from prevention-oriented consumers in their pursuit of extrinsic goals. In fact, given their concern with success, achievement (Higgins, 1997), and realizing their ideal self (Lockwood, Jordan, & Kunda, 2002), promotion-focused individuals may be more likely to adopt culturally promoted, extrinsic goals than are prevention-focused individuals. This is to some extent evidenced in the preference for luxury and hedonic consumption that promotion-focused individuals demonstrate (Wang & Lee, 2006; Werth & Föster, 2007). Because striving for extrinsic goals like money and status is related to materialism (Kasser, 2002), a promotion-orientation may lead to an increased materialism while a prevention-orientation may not. Taken together, promotion may be related to materialism through two routes, a positive one (mediated by extrinsic goal pursuit) and a negative one (mediated by self-esteem). The net valence of the relation between promotion focus and materialism then depends on the relative strength of the two routes. In contrast, prevention is related to materialism through one route only: Prevention is negatively related to self-esteem, which in turn is negatively related to materialism (net positive relation between prevention and materialism). In addition to investigating the underlying mechanism, we were also interested in investigating whether promotion and prevention foci are differentially related to the specific dimensions of materialism. First, promotion may be particularly highly correlated with the *success* subscale of materialism, consistent with promotion-focused individuals' evaluation and pursuit of achievement and success. Second, prevention focus may be particularly highly correlated with the *happiness* subscale. Because of their lower self-esteem, prevention-focused individuals may be very prone to think that money would buy them happiness. Finally, no specific hypothesis is formulated with respect to the *centrality* subscale of materialism.

Study 1 tests the hypothesis that regulatory focus is related to materialism in an American student sample. Regulatory focus was assessed with the Regulatory Focus Questionnaire (Lockwood et al., 2002), materialism was measured with the Material Values Scale (Richins & Dawson, 1992) and self-esteem was measured using the Rosenberg (1965) trait measure for self-esteem. The predicted relationships between overall levels materialism, prevention-, and promotion focus, were estimated with a structural equation model; each latent concept was measured through parcels of 3 or 4 items. To explain part of the relationship between *happiness* and *success* that is not captured in the model, we allowed the errors of *happiness* and *success* to covary. We fitted a model in which *happiness* and *success* are precursors of *centrality*, as the latter refers more to behaviours while the former two aspects refer more to beliefs. The model adequately fits the data. Study 1 confirms that prevention focus is positively related to materialism through low self-esteem and promotion focus is both negatively (through high self-esteem) and positively related to materialism.

Study 2 replicates the findings of Study 1 in a non-student sample and extends the previous study by explicitly measuring extrinsic goal pursuit (Aspiration Index; Kasser & Ryan, 1993, 1996) in order to explain the positive relation between promotion focus and materialism. Again, the estimated structural equation model fits the data well. Prevention focus is positively correlated with the *happiness* dimension of materialism, through the mediating role of self-esteem. Promotion focus is positively related to *success* though the mediating role of extrinsic goal pursuit, but also negatively related to *happiness* and to *success* through self-esteem. In addition, self-esteem is more strongly related to *happiness* than to *success,* whereas extrinsic goal pursuit is more strongly related to *success* than to *happiness.*

Somewhat unexpected, in both studies, the *centrality* subscale is directly related to the *success* subscale but not to the *happiness* subscale. Subsequent analyses, however, indicated that *happiness* did predict *centrality* once household income was controlled for. This suggests that lower income consumers may more readily believe that money buys happiness (i.e. that they would be happier if only they had more money). Consistent with this idea, the *happiness* subscale and household income were negatively related.

Thus far, the extensive research stream on regulatory focus has mostly dealt with "neutral" topics, such as its impact on the processing of persuasive messages (e.g., Avnet & Higgins, 2006; Cesario, Grant, & Higgins, 2004). The current project is novel in its focus on (potentially) harmful effects of regulatory focus for self and society, such as materialism. In addition, a promising avenue for future materialism research is the insight that different consumers may adopt different "types" of materialism, and through different mechanisms, as suggested by the fact that promotion- and prevention-focused consumers tend to value different aspects of materialism congruent with their regulatory focus.

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Plenary Session: Distinguished Speaker Paul Slovic, Decision Research

"Adventures with the Affect Heuristic"

Session 3.1
SCP Dissertation Proposal Competition Award Winners

The Role of Accessibility Experiences in Attitude Formation: Effects of On-Line versus Memory-Based Processing
Hélène Deval, University of Cincinnati* (Frank Kardes, Chair) (Honorable Mention)

Most models of judgment and decision making focus primarily on the implications of the information that comes most readily to mind (for reviews, see Higgins, 1996; Wyer & Srull, 1989). This focus on "what comes to mind" fails to take into account that human thinking is accompanied by accessibility experiences such as the ease or difficulty with which information can be retrieved from memory or the fluency with which a piece of information can be processed (Schwarz, 2005). Research has shown that accessibility experiences are informative in their own right. People use the ease or difficulty of the experience as important input in judgment tasks. For instance, if information is difficult to recall, it may be inferred that it is limited, of poor quality, or insufficient. These experiences can qualify and even override the effect of the actual thought content (Schwarz, 2004).

Although the effect of subjective ease or difficulty has been demonstrated in a variety of domains, the underlying process involved is less clear. Schwarz (e.g. 2004) drawing on the availability heuristic (Tversky & Kahneman, 1973) proposes that accessibility experiences operate as heuristic cues. This suggests that the effect of accessibility experiences should be attenuated under high elaboration conditions (the heuristic cue hypothesis). In contrast, Petty and colleagues (e.g. Petty, Briñol, Tormala, & Wegener, 2007) find stronger effects when people attend to their own thoughts and try to assess their validity (the self-validation hypothesis). This implies that the subjective feelings of ease or difficulty require greater elaboration to have an impact on judgments. Both positions have been supported empirically, indicating that each may operate under a different set of boundary conditions.

The focus of this dissertation is to investigate the possible moderating role of processing style on the accessibility experience effect. A review of the literature revealed experimental design differences when ease is used as heuristic cue or when it is part of a self-validation process. These differences seem to map the distinction established by Hastie and Park (1986) between memory-based processing and on-line (or stimulus-based) processing. Designs favoring memory-based processing align with the heuristic cue explanation and those favoring on-line processing align with the self-validation hypothesis. Two experiments designed to investigate these differences found strong support for a processing style explanation of the accessibility experience effect.

Experiment 1 tested the above expectations using a vacation package to Mexico. Memory-based vs. on-line processing was manipulated using an instruction set adapted from (Mackie & Asuncion, 1990). Instructions asked participants to either form attitude about the stimulus (eliciting an evaluative mindset) or memorize as much as they could (eliciting a non evaluative mindset). The level of elaboration was manipulated using an involvement manipulation. In the high involvement condition, participants were told that their answers were important and that they would have to justify them to the experimenter. In the low involvement condition, participants were informed that their individual answers would be averaged across large number of participants making them less accountable. Ease vs. difficulty of retrieval was manipulated using a generation task: give two reasons (easy) vs. give eight reasons (difficult). The results showed that when people had to perform a memory-based task, ease of retrieval was used as a heuristic cue. The ease effect (two reasons are better than eight) was observed under low involvement whereas a content effect (eight reasons are better than two) was observed under high involvement. For on-line processing, the effects were reversed: under low involvement condition a content effect was observed while an ease effect was observed under high involvement. Overall, these results supported the self-validation hypothesis for on-line processing and the heuristic cue hypothesis for memory-based processing.

Experiment 2 aimed at extending these results to motivational states. Memory-based vs. on-line was manipulated in a way consistent with Experiment 1 in order to elicit or prevent an evaluative mindset. In order to test the robustness of the ease effect a manipulation providing a larger difference between subjective experiences was be used. Participants were asked to provide one vs. ten reasons to choose the stimulus (instead of two vs. eight). A motivational manipulation of elaboration was implemented by manipulating the expectations about an alleged Study 2 (Webster, 1993). "Study 2" was either an attractive task, resulting in people paying less attention to the first task (low elaboration condition) or a boring task encouraging people to focus on the first task (high elaboration condition). A theoretical replication of the pattern of results observed in Experiment 1 was observed.

Overall, these two experiments support a processing style explanation for the ease of retrieval effect. For memory-based processing, subjective ease or difficulty appear to play the role of heuristic cues, consistent with the heuristic cue hypothesis. For on-line processing, ease or difficulty of retrieval seemed to have an impact on judgment only when participants had the motivation and ability to attend their own thoughts as the self validation hypothesis suggests it.

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Mirror, Mirror on the Wall: Can Brands Make Me the Fairest of Them All?
Ji Kyung Park, University of Minnesota* (Deborah Roedder John, Chair) (Honorable Mention)

Consumers often use brands as an instrument to create a more positive self-image. In particular, brands with appealing personalities, such as Cartier (sophisticated) and Harley-Davidson (adventurous), are particularly useful for consumers wanting to enhance a self-image in line with a brand's personality (Escalas and Bettman 2003). In this research, I ask the question, "*Does using a brand with an appealing personality enhance the way consumers view themselves*?" Prior research documents that consumers often prefer and choose brands in an effort to affirm and enhance their sense of self, but what happens when consumers actually have an opportunity to use these brands?

I propose that *only* consumers with certain implicit theories view brand experiences as opportunities to signal that they possess the same appealing traits as the brand, and *only* these consumers actually perceive themselves more positively after a brand experience. Implicit self-theories are lay beliefs people hold about the malleability of their personalities. Two types have been identified: entity versus incremental theory (Dweck 2000). Individuals who endorse incremental theory ("incremental theorists") view their personal qualities as something they can enhance through their own direct efforts at self-improvement. In contrast, individuals who endorse entity theory ("entity theorists") view their personal qualities as something they cannot improve their own direct efforts. Instead, they seek out opportunities to signal their positive qualities to the self or others. I predict and find that entity theorists (not incremental theorists) are responsive to the signaling value of brands with appealing personalities. They use a brand associated with an appealing personality to signal that they possess the same appealing personality as the brand, resulting in more positive self-perceptions.

Study 1: Does Victoria's Secret Make You Feel Better-Looking?
Consumers at a local shopping mall were asked to use a Victoria's Secret shopping bag (*brand experience*) or a plain pink shopping bag (*no brand experience*) during their shopping trip. This setting provided an initial test of our proposition in a natural environment where consumers could experience the signaling value of a brand through a common activity of carrying a shopping bag. Victoria's Secret was selected because of its appealing brand personality, associated with traits such as good-looking, feminine, and glamorous. Implicit beliefs about personality were measured (Implicit Persons Theory Measure: Levy et. al. 1998) prior to the shopping trip, with self-perceptions regarding personality traits (including those associated with Victoria's Secret) measured after the shopping trip.

After carrying the Victoria's Secret shopping bag (vs. plain pink shopping bag), entity theorists perceived themselves to be better-looking, more feminine, and more glamorous. However, incremental theorists were not influenced by their brand experience. Differences between these groups were not evident for personality traits unconnected to the Victoria's Secret brand, which rules out response biases, general affective states, and contextual factors as possible alternative explanations.

Study 2: Does MIT Make You Feel More Intelligent?
MBA students were asked to use an MIT pen or a regular pen for an extended period of six weeks. This context allowed us to replicate and extend our prior findings using a different brand (MIT), different brand personality (intelligent, leader, hard-working), and different brand usage context (repeated brand experience). Measures were similar to those of study 1.

After using the MIT pen (vs. a regular pen), entity theorists perceived themselves to be more intelligent, more of a leader, and harder-working. However, incremental theorists were not influenced by their brand experience.

Study 3: Why Do Entity Theorists Feel More Positive about the Self?
Study 3 extends prior findings by: (1) manipulating implicit self-theories to rule out the possibility that individuals who endorse entity or incremental theories may also vary on other dimensions that influence response to brand experiences; and (2) examining the mediating process for why entity theorists, but not incremental theorists, are affected by brand experiences. Female undergraduate students were asked to participate in treasure hunt. To collect items during the treasure hunt, they used a Victoria's Secret shopping bag or a plain pink shopping bag. After using the shopping bag, participants were asked about their self-perceptions on traits associated with Victoria's Secret and were also asked how much they used Victoria's Secret as signals of one's identity.

The results replicated the findings from studies 1 & 2. Further, a mediation analysis revealed that relative to incremental theorists, entity theorists are more responsive to the signaling value of the Victoria's Secret brand experience and this difference mediates the influence of implicit self-theory on self-perceptions.

Study 4: Do Entity Theorists Benefit from Brand Experiences?

Entity theorists view personal qualities as something that they cannot directly improve through their own direct efforts. Dweck and her colleagues suggest that such pessimistic thinking about self-improvement reduces emotional and psychological resources available to cope with negative feedback on personal qualities. In study 4, I examined whether or not entity theorists can recover a threatened self through experiences with a brand associated with an appealing personality in a threat-related domain. After receiving negative feedback on a GRE test, participants were asked to use either a MIT pen or a regular pen, and then completed the self-perception measure.

The results showed that entity theorists recovered negative self-views after brand experiences; they perceived themselves to be more intelligent, harder-working, and more of a leader after using the MIT pen (vs. the regular pen).

Summary

I identify implicit self-theories as an important moderator of the influence of brand experiences on consumer self-perceptions. Only entity theorists view use a brand associated with an appealing personality to signal that they possess the same appealing personality as the brand, resulting in more positive self-perceptions.

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The Dark Side of Product Attachment: Reactivity of Addicted Users and Non-Users to Ad Cues
Dante Pirouz, UC Irvine, USA* (Connie Pechmann, Chair) (Winner)

Advertising is a ubiquitous and pervasive environmental cue. The average consumer, for example, is exposed on average to three thousand ads per day (Schwartz 2004). Under normal circumstances, consumers choose which advertising cues to attend to both consciously and non-consciously (Bargh 2002; Grunert 1996). However for addicted consumers, environmental cues may elicit a unique type of response affecting decision making and driving behavior (Bernheim and Rangel 2004). Non-users may also be vulnerable to exposure to these cues but this effect is not well understood. The aim of this dissertation is to explore how environmental cues affect addictive product users and non-users. It will include two types of studies, one using a brain imaging technique developed in cognitive science and neuroscience called functional magnetic resonance imaging (fMRI) and the other using laboratory experiments involving several behavioral tasks with cue-exposed addicted users and non-users.

While addiction has been traditionally defined as a psychological dependence on one or more illegal drugs, the definition has expanded over the past 20 years to include "any substance use or reinforcing behavior that has an appetitive nature, has a compulsive and repetitive quality, is self-destructive, and is experienced as difficult to modify or stop" (DiClemente 2006; Orford 1985). This includes both illicit and legal substances and can include a wide range of behaviors such as overeating, overspending, credit card usage, and gambling (Goodman 1990; Hirschman 1992; O'Guinn and Faber 1989). In fact, millions of people engage in the addictive consumption of legal, advertised substances such as cigarettes and alcohol (Office of Applied Studies 2006). Thus, understanding if and how addictive product cues may affect addicted users and non-users differently is both an important contribution to consumer behavior theoretical models and to the improvement of regulatory measures to minimize consumer harm (Pechmann et al. 2005).

A long history of addiction studies demonstrates how drug cues elicit craving via reactivity to the cue (for reviews see Carter and Tiffany 1999; Childress et al. 1993; Stritzke et al. 2004). There has also been evidence of attentional bias toward addictive cues in addicted users (Robinson and Berridge 2003; Robinson and Berridge 2001; Robinson and Berridge 1993). Some studies have shown that this response may result in increased attentional bias and increased arousal (Bradley et al. 2004; Drobes 2002; Johnsen et al. 1997; Mogg and Bradley 2002; Munafo et al. 2003). However cue-induced craving may activate nonautomatic information processing systems, which require cognitive processing, mental effort and that have a limited capacity (Tiffany 1999). Thus, subsequent cognitive tasks can be impeded (Cepeda-Benito and Tiffany 1996; Sayette and Hufford 1994) including encoding in working memory (Heishman et al. 2006). In addition, when cognitive resources are used up, the ability to resist unrelated temptations declines as well and may lead to increased impulsive and risky behaviors (Baumeister et al. 2008; Vohs and Faber 2007).

fMRI data collected for Study 1 indicates neural activation of brain regions that are related to key cognitive functions such as craving and self-control. For example, there is differential activation in regions associated with craving including the insula, implicated in conscious urges and craving (Naqvi et al. 2007), the amygdala, critical in emotion and stress response processing (Bechara et al. 2003; Martin 2003), and the thalamus, related to sensory integration. Regions associated with self-control including the dorsolateral prefrontal cortex which is related to executive control, attention and memory integration (Banich et al. 2000; Kane and Engle 2002; Smith and Jonides 1999) and the anterior cingulate cortex, related to arousal, conflict monitoring, self-control and cognitive depletion (Carter et al. 1998; Cohen et al. 2005; Richeson et al. 2003) are also differentially activated. Study 2 results indicate that for non-smokers under high load, exposure to cigarette ads (vs. non-cigarette ads) results in higher self-reported urge to smoke in addition to an increase in intent to drink alcohol and a greater preference for unhealthy over healthy snacks consistent with a cognitive resource depletion effect. Interestingly, smokers seem resistant to this effect, demonstrating lower urge and intent to smoke when exposed to cigarette ads (vs. non-cigarette ads).

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Session 3.2

It Costs Whaaat?? Risk Perception Revision in the Face of High Prices
Adriana Samper, Duke University*
Janet Schwartz, Duke University

Consumer-driven healthcare is one strategy designed to curb rising healthcare costs by making consumers more engaged in their health decisions and more aware of the costs of their medical care. Increased cost-sharing, increased availability of price information and greater consumer involvement in health plan design have all served to make costs more transparent. A key assumption is that if individuals are provided with price information, they will make better medical choices, possibly reducing unnecessary care. However, this rationale fails to consider that consumers often reject the idea of making trade-offs that treat "sacred values," such as health, as fungible (Fiske & Tetlock, 1997). These taboo trade-offs lead to moral outrage (Tetlock, Kristel, Elson, Green, & Lerner, 2000) and evoke negative emotion (e.g., Haidt & Algoe, 2004). We suggest that, as a result of this discomfort, price information in a health context has the unintended consequence of influencing consumers' risk perceptions, and does so in a manner distinct from other contexts. Consistent with consumers' desire to avoid negative emotion (Luce, 1998), we propose that, in the face of high prices for preventive care, consumers avoid making trade-offs between health and money by downwardly revising their risk of disease, obviating the need to choose between saving money and possibly saving their own lives.

To first test this hypothesis we presented a web-based sample of adults with a short passage about the swine flu pandemic and the development of a new vaccine. Participants were told that the vaccine would cost them either $10 or $250 and were then asked to rate their likelihood of contracting swine flu. Participants in the $250 condition rated their likelihood of getting the disease as significantly lower than those in the $10 condition, demonstrating that price influences the perceived risk of a negative health event.

In Study 2, we examined whether this pattern of risk revision was driven by a reluctance to confront taboo trade-offs by asking people about their risk perceptions at different price points across "taboo" (health) and "non-taboo" (electronics) domains. We also examined the extent to which risk perceptions were influenced by whether or not consumers were responsible for the cost. A web-based sample of adults participated in this 2 (preventive tool: swine flu vaccine vs. surge protector) x 2 (payor: self vs. insurance) x 2 (price: $250 vs. $10) experiment. Participants read either the same passage about the threat of swine flu or a passage about the threat of electronics damage due to strong summer thunderstorms. They were told that the vaccine (high powered surge protector) was available for either $10 or $250 and that this prevention device was either covered or not covered by insurance. Participants then rated their likelihood of getting swine flu (experiencing storm-induced electronics damage), the extent to which swine flu (storm-induced electronics damage) was a threat, and the extent to which they felt that the price for the vaccine (surge protector) was fair. The first two dependent measures (likelihood and threat) were highly correlated and combined to form a "risk" index variable.

Results revealed a 3-way interaction on risk and price fairness. While those in the swine flu condition downgraded their risk from $10 to $250 regardless of the payor, those in the electronics damage condition only downgraded their risk when they bore the cost. In fact, individuals in this electronics damage condition directionally increased their risk when insurance took on the cost. Perceived price fairness revealed a similar pattern of results whereby individuals in the swine flu condition found the $250 cost equally unfair regardless of the payor, while individuals in the electronics condition found the $250 to be less unfair if insurance was paying. Further analyses revealed that the interaction on risk was mediated by price fairness. These results are consistent with research suggesting that even the contemplation of making a taboo tradeoff, regardless of payor, is contaminating (Tetlock, 2003), and hence avoided. Moreover, this study demonstrates that for routine purchases (e.g., a surge protector), individuals only reduce risk when they are personally responsible for the cost, implying a motivated cognition or dissonance response (Festinger, 1957).

Given participants' apparent aversion to the mere mention of trade-offs between health (vs. ordinary consumer goods) and money, in Study 3 we examined whether *any* price information led to avoidance, or if only high price information did so. In a 2 (preventive tool: swine flu vaccine vs. surge protector) x 3 (protective cost: no cost vs. $10 paid by insurance vs. $250 paid by insurance) design, participants were again presented with swine flu (electronics damage) passages, yet were either informed that the vaccine (surge protector) was being provided at no cost, for $10 covered by insurance, or for $250 covered by insurance. Risk and the perceived prevalence of swine flu (storm-induced electronics damage) were dependent variables. There were no differences in anticipated risk of swine flu when the vaccine was provided at no cost or for $10, yet a $250 cost significantly reduced risk relative to these price points. Alternatively, for the electronics damage conditions, participants directionally increased their risk from no cost to $10 and then from $10 to $250, with risk being significantly higher at $250 relative to the no cost condition. These effects were mirrored in the perceived prevalence of the swine flu (storm-induced electronics damage), whereby individuals made assessments of decreased prevalence of swine flu at $250 (increased prevalence of storm-induced electronics damage at $250). Thus, we see that the mere presence of cost information does not influence perceived risk relative to low cost information; rather it is the high cost that instigates the avoidance of a taboo trade-off.

These findings have important implications for health communications and pricing. We see that high price may actually lead to falsely deflated vulnerability to illness, regardless of payor. Given that perceived risk is often a key driver of both preventive action and medical treatment, it is important to understand the influences on this risk to improve consumer health outcomes.

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Is Price a Devil to be Disguised? The Effects of Price Visibility on the Anticipated Utility of Consumer Products

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Consumer decision making is often conceptualized as a multi-attribute choice process in which utility is maximized over a number of product attributes (e.g., Keeney and Raiffa 1993). Because higher-priced products reduce a consumer's wealth and impose boundaries on future expenditures, the price at which a product can be acquired is usually considered to be a negative product attribute (Lancaster 1966, 1971). Thus, the utility anticipated from the acquisition of any product involves a trade-off between the perceived costs and the perceived benefits of product acquisition (Dodds, Monroe, and Grewal 1991; Grewal, Monroe, and Krishnan 1998; Lichtenstein and Bearden 1989; Lichtenstein, Netemeyer, and Burton 1990; Lichtenstein, Ridgway, and Netemeyer 1993; Thaler 1985; Urbany, Bearden, and Weilbaker 1988; Zeithaml 1988).

Because a focus on budgetary constraints reduces the influence of anticipated benefits on utility (Prelec and Loewenstein 1998), *ceteris paribus* marketers have vested interests in decreasing consumers' focus on the cost dimension. For instance, it has been found that consumers tend to spend more when they are encouraged to pay by credit cards rather than cash or check, presumably because it is less transparent how much money is being spent when paying by credit (Prelec and Simester 2001; Soman 2001, 2003). A common technique to decrease attention to budgetary constraints is making price information less easy to identify. The use of this technique can be traced to early decision research theorizing that human beings are limited in the amount of information they can process (e.g., Bettman, Luce, and Payne 1998; Payne, Bettman, and Johnson 1993; Russo and Dosher 1983; Shugan 1980), thus selectively and conservatively distribute their attention over different decision inputs. Since perceptually clear information is easier to access it tends to be weighted more heavily in final decisions and assessments (e.g., Shah and Oppenheimer 2006, 2007). For example, less visible product dimensions receive less weight during consumer decision processes (Hutchinson and Alba 1991), and attributes appearing less prominently in advertisements for are weighted less by consumers when they are evaluating products (Gardner 1983). Accordingly, it is generally advised to decrease the visibility of selling prices in order not to highlight the cost of product acquisition.

Crucially, the success of this technique hinges on a decrease in consumers' attention to costs relative to benefits, while assuming an invariant interpretation of the affective valence of those costs and benefits. However, this assumption of invariance may not be tenable as recent findings in psychology are providing increasing evidence that processing ease (difficulty) triggers a positive (negative) affective reaction which gets attributed to the intrinsic properties of a target under consideration. With regard to price perception, this suggests that prices that are easier to identify may actually be perceived more positively and thereby reduce the perceived pain of paying. If this is the case, it introduces a previously ignored paradox in the pricing literature: increasing price visibility is undesirable because it increases consumers' general attention to the monetary sacrifices involved in buying decisions (i.e., the visibility-attention link), but at the same time clearly visible prices are desirable because they trigger a more positive affective response towards the price information (i.e., the visibility-affect link). Four experimental studies provide insight in how the latter part of this paradox determines consumers' utility assessments.

Study 1 shows that the affective response to objectively identical selling prices is relatively more negative when perceptual clarity of the price information is impaired. This is irrespective of whether a product is relatively cheap or, is relatively utilitarian or hedonic, quickly consumed or long lasting.

Study 2 used a 2 (reference price: high vs. low) × 2 (price visibility: high vs. low) between-subjects design, in which respondents were asked to indicate their anticipated utility of acquiring a $15.00 bottle of wine. The results show that, irrespective of whether a deal is considered good or bad, the attractiveness of buying a product can be significantly increased by making the price information on the product easier to identify. This pattern of results cannot be explained by the traditional visibility-attention framework. In fact, in the context of low reference prices the effect of price visibility on anticipated utility is opposite from what would be predicted based on that account. However, the data do fit in a visibility-affect framework according to which a price that is perceptually more difficult to process elicits a more intense negative affective reaction, which in turn reduces the utility of product acquisition.

Study 3 used a 2 (price visibility: high vs. low) × 2 (focus: costs vs. benefits) between-subjects design. Half of the participants were asked explicitly to imagine the actual experience of consuming the product under consideration before assessing utility (i.e. focus on benefits), while the other participants were focused on the costs. Because bringing to mind consumption benefits buffers the impact of price on utility (Prelec and Loewenstein, 1998), the disadvantageous effects of difficult-to-process prices for utility should be reduced when consumption is in the focus of attention. Even stronger, because benefits have a greater impact on utility assessments when participants are focused on product consumption, and because some consumers believe that price is positively related to quality (e.g., Huber and McCann 1982; Rao and Monroe 1989), the overall effect of price visibility on utility may reverse when participants are focused on consumption. In other words, based on the belief that a greater pain of paying is predictive of greater consumption benefits, some consumers might infer that more (less) benefits can be expected from products with less (more) visible prices, which increases utility when focused on consumption benefits. In line with this, Study 3 established that costs-focused participants valued acquiring the wine more when the price label was easy to read while benefits-focused consumers valued acquiring the wine less when the price information was more visible versus less visible. Corroborating the underlying process, Study 4 showed that the reversal of the effect of price visibility on utility is only found among consumers who believe in a positive association between price and quality.

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On the Dangers of "Pulling a Fast One": The Effects of Advertisement Disclaimer Speed and Consumer Brand Familiarity on Product Trust and Purchase Intention

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An advertisement comes on the radio. It captures your attention and makes the product seem appealing. The advertisement closes, however, with a speedy disclaimer. Does the speed of this disclaimer make you distrustful? We suggest that fast disclaimers have deleterious effects because they provide consumers with a cue that the advertising team may be attempting to conceal negative information about the product thereby reducing consumer trust in the product.

We propose that an important feature of trust is that its effects play out differently as a function of how familiar the brand is to the consumer. Building on research in the interpersonal relationships domain (Holmes and Rempel 1989; Simpson 2007), we suggest that product trust develops in two distinct stages. In the first stage, called *evaluation*, trust is an open question: Consumers are influenced by trust-relevant cues (e.g., whether a particular advertisement or disclaimer has a manipulative feel). In the second stage, called *faith*, consumers turn off their evaluative mechanisms, becoming insensitive to trust-relevant cues; by this stage, trust has already been firmly established.

The evaluation-faith model suggests that habitual decision-making for familiar products causes consumers to become less sensitive to trust-relevant cues. Consumers recognize, for example, when a given advertisement included a fast disclaimer, but this recognition does not influence the degree to which they perceive the product as trustworthy. For unfamiliar products, in contrast, consumers are likely influenced by such trust-relevant cues. Consumers first ask themselves *Question #1*: "Am I familiar enough with this product to feel confident that it reliably provides good value?" If the answer to Question #1 is yes, then consumers *are less* influenced by trust-relevant cues; they have already arrived at the faith stage of product trust. If the answer is no, however, then they *are more* influenced by trust-relevant cues and ask themselves *Question #2*: "Do the cues related to this product indicate that it is trustworthy?" If the answer to Question #2 is yes, then the consumer trusts the product and, consequently, is more likely to purchase it. If the answer is no, then the consumer does not trust the product and, consequently, is less likely to purchase it. We suggest that this process frequently transpires outside of awareness, with consumers asking and answering these questions rapidly and implicitly.

In the present research, we test the hypotheses (a) that fast (relative to normal-paced) end-of-advertisement disclaimers make consumers distrustful and, consequently, unlikely to purchase the product; (b) that these adverse effects of disclaimer speed are stronger when consumers are unfamiliar with the advertised product than when they are familiar with it; and (c) that this Disclaimer Speed × Brand Familiarity interaction effect occurs even when disclaimers are positive in valence.

In Experiment 1, we manipulated disclaimer speed and brand familiarity in the domain of breakfast cereals using a familiar and an unfamiliar brand. We predicted that participants would exhibit greater distrust and weaker purchase intention after listening to the advertisement with the fast relative to the slow disclaimer, and that this effect of disclaimer speed would be stronger for the unfamiliar brand than for the familiar brand. Finally, we predicted the Disclaimer Speed × Brand Familiarity interaction effect on Purchase Intention would be significantly mediated through Product Trust.

Results indicated that participants were more influenced by trust-relevant cues (i.e., the speed of the disclaimer) when they listened to advertisements for unfamiliar brands. The familiar brand appeared not to differ in its ability to engender product trust as a function of disclaimer speed, whereas the unfamiliar brand engendered reduced product trust when the disclaimer was fast rather than normal-paced. Results also revealed that product trust predicted purchase intention, and that the effect of the disclaimer speed × brand familiarity interaction effect on purchase intention seemed to be driven in part by product trust. For unfamiliar brands (but not for familiar brands), fast disclaimers produce distrust and ultimately weaken purchase intention, whereas normal-paced disclaimers may act as a buffer against the distrust fostered by fast disclaimers and thereby mitigate against declining purchase intention.

In Experiment 2, using a familiar and an unfamiliar brand of chocolate bars, we teased apart these two possibilities by adding a no-disclaimer-advertisement control condition to examine where the mediation by product trust occurs. Does the fast disclaimer cause consumers to become distrustful and ultimately unlikely to purchase the product, or does the normal-paced disclaimer cause consumers to become trusting and ultimately likely to purchase the product?

We demonstrated that relative to an advertisement for an unfamiliar brand either with a normal-paced disclaimer or with no disclaimer, an advertisement for such a product with a fast disclaimer impairs consumers' trust, thereby curtailing consumers' purchase intention. Advertisements with normal-paced disclaimers, however, did not engender significantly less product trust or purchase intention than advertisements without disclaimers. This null effect for normal-paced disclaimers presents preliminary support for the idea that disclaimer *speed* influences consumers' trust and purchase intention independent of disclaimer *valence* (positive vs. negative content about the advertised product), an idea we explore in greater detail in Experiment 3.

In Experiment 3, using a familiar and an unfamiliar brand of energy drinks, we investigated whether our effects applied also to positive disclaimers (which are much rarer than negative disclaimers). We wanted to determine if the disclaimer speed × brand familiarity interaction was moderated by disclaimer valence. If so, this would imply a three-way interaction effect, such that the disclaimer speed × brand familiarity interaction effect would be significant for negative disclaimers (as demonstrated in Experiments 1 and 2), but not for positive disclaimers.

In Experiment 3, we provided more conclusive evidence of our effects by showing that the fast disclaimer causes participants to become distrustful of the unfamiliar brand regardless of the valence of the disclaimer. That is, we found support for our hypothesized process that fast disclaimers lead to lower trust and purchase intention levels (i.e., fast speed is a negative heuristic cue for trust and purchase intention) even when the disclaimer valence is positive.

Taken together, the results support a conceptualization of product trust as a two-stage process. Before consumers have established familiarity with a given product, they attend closely to trust cues to evaluate whether a given product is trustworthy. In contrast, once they have established familiarity with the brand, they no longer attend as closely to trust cues; they have already concluded that this product is trustworthy, so trust is no longer an open question.

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Never Trust a Doctor Who Advertises: How Notions of the Sacred Impact Reactions to the Use of Advertising

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It has been suggested that advertising for professional services can backfire (e.g., Bloom and Krips 1982; Bloom 1984). Indeed, Bloom and Krips (1982) found that some consumers do respond negatively to advertisements by professionals, inferring that professionals who advertise should be avoided. Why do consumers respond negatively to such advertising?

Much prior research has examined this issue from an economics of information perspective. According to this view, consumers will be more skeptical of advertising claims which cannot be easily verified (Ford et al. 1990). Most services can be classified as experience or credence goods (Nelson 1970; Zeithaml 1981). Thus, consumers often rely on cues to help them assess the quality of such services. Advertising is one such cue which can be perceived either positively (e.g., provider must be good because it can afford to advertise) or negatively (e.g., provider must be desperate for customers because it needs to advertise; Bloom and Pailin 1995). If it is viewed as a negative cue, consumers should be wary of providers who advertise and respond negatively to such advertisements. Beliefs that the provider is desperate or that false claims/poor quality will not negatively impact the provider can lead consumers to perceive advertising negatively (Kirmani 1990). Given the difficulty of evaluating the quality of many services, even after consumption, these criteria may be met, which may explain consumers' negative reactions to ads.

In contrast to this view, we propose that it is not the credence qualities of these service providers which lead consumers to perceive advertising negatively, but rather the perception that the provider-client relationship is sacred. Belk et al. (1991) define "sacred" as "that which is regarded as more significant, powerful, or extraordinary than the self," and identify people as one potentially sacred consumer domain. Indeed, Miner (1956) highlights that people often perceive doctors as priests (i.e., sacred). As such, consumers may perceive their relationships with certain service providers, such as doctors, as sacred. If so, they should strive to protect these relationships and react negatively when they perceive that this sacredness is being threatened. Durkheim (1953) argued that the sacred cannot be mixed with the profane without destroying its essential attributes. Because advertising is associated with the profane, e.g., commercialization, the common or everyday, and many secular values (e.g., money; Fiske and Tetlock 1997), advertising in these domains is likely to be perceived negatively.

If this view holds, then we should see negative reactions to advertising by service providers in sacred domains (e.g., medicine), but not by service providers in non-sacred domains (e.g., travel). In addition, we should see more negative reactions to advertising by individuals versus advertising by firms, even though they share the same credence qualities, because relationships with individuals are perceived as more sacred than those with firms. In addition, because organizations are associated more with business and profit, organizations may be more likely to be perceived as part of the "profane" (versus "sacred"), again suggesting that advertising should be perceived as acceptable in these cases. We test these hypotheses across three studies.

In Study 1, we examine consumers' responses to a doctor (sacred) versus a travel agent (non-sacred) advertising. Participants were asked to imagine looking for a new doctor or a new travel agent; they were assigned to one of three information conditions – an ad only condition (told they had seen an ad for a particular doctor/ travel agent); a word-of-mouth only condition (told that someone had told them s/he uses a particular doctor/ travel agent); and an ad plus word-of-mouth condition. Those who saw the ad only rated the doctor as significantly worse than those in the other two conditions (M_{ad} = 3.9, M_w = 5.9, M_{a+w} = 5.4, p's < .0001); however, the ad did not negatively impact ratings for the travel agent (M_{ad} = 5.2, M_w = 5.6, M_{a+w} = 5.7). These results are consistent with our hypotheses and demonstrate that consumers respond negatively to advertising by a service provider in a sacred domain (doctor), but not in a non-sacred domain (travel agent).

In Study 2, we replicate the study 1 results across a wider range of categories, while also demonstrating differences in perceived appropriateness of advertising for individuals versus organizations. Participants learned about three specific service providers either through an advertisement, word-of-mouth, or internet search. The first provider was a dry cleaner (control category), and the others were one of the following provider pairs: individuals (doctor, lawyer); organizations (hospital, law firm); or a cosmetic surgeon and place of worship (expected counter-examples: "sacred" organization; "profane" individual). Advertising led to decreased quality perceptions, lower likelihood of information search, and lower use likelihood for doctors, lawyers, law firms, and places of worship, but not cosmetic surgeons or hospitals (see Figure 1). Further, participants viewed advertising by organizations in sacred domains (i.e., hospitals, law firms) as more appropriate than advertising by individuals in sacred domains (i.e., doctors, lawyers); in non-sacred domains (e.g., cosmetic surgeon), advertising for individuals was seen as appropriate. These findings replicate Study 1,

while providing additional evidence that the sacredness of the service or provider, rather than the credence qualities of the category, drives reactions to advertising.

A third study will manipulate the sacred and credence qualities of the advertiser while keeping the domain (dentists) constant. Credence quality will be manipulated through the service needed (routine cleaning – credence; whitening – experience). Sacredness will be manipulated through type of dentist (cosmetic – profane; family – sacred). We expect participants will view the use of advertising negatively in the sacred conditions, but not the profane conditions, while the specific service (credence/ experience) will not impact judgments.

Taken as a whole, these findings demonstrate that advertisements by certain service providers can backfire and these negative reactions stem from the perceived sacredness of the relationship or organization. Marketers need to recognize when they are operating in sacred domains and expect that consumers' responses to marketing tactics used in these domains may differ from those in non-sacred domains.

Figure 1. Likelihood of Use Ratings (Study 2)
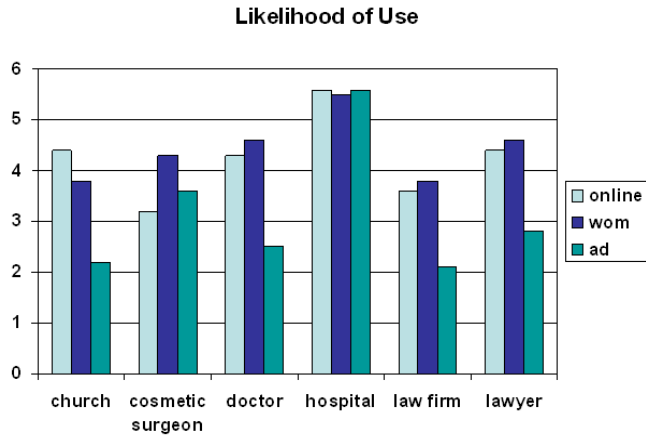
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Session 3.3

Fruit on Cake and Dressing on Salad: the Asymmetric Effect of Food Toppings on Calorie Estimation

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Food toppings (e.g., frosting, dressing) are small amounts of garnishes placed on the top of food (refer to as base food) for decoration or flavor. However, many of these seemingly harmless "add-ons" (e.g., nuts and chocolate sauce) have a high calorie density and may significantly increase the calorie content of the base food. Therefore, an important question here is whether consumers are aware of this fact and how they estimate the calorie content of food items with toppings. Do they simply rely on the heuristics (e.g., size; healthiness) of the base food to infer calorie content of the augmented food (base food plus topping), or do they systematically add the estimate of each part (base and topping) to derive the total calorie estimate? The objectives of this research are to investigate how different types of toppings (healthy vs. unhealthy) influence consumers' calorie estimate of the augmented food, and whether this impact varies between different types of base food (healthy vs. unhealthy).

Previous research suggests that consumers tend to underestimate the calorie content of a food combination comprised of multiple items (Chandon and Wansink 2007a), especially when it consists of both healthy (virtue) and indulgent (vice) options (Cherneve and Gal, forthcoming). In this research we show that consumers do not always underestimate the calorie content of an augmented food consisting of a base and a topping representing opposite categories (e.g., virtues and vices). Instead, it depends on whether consumers employ heuristic or systematic processing in calorie estimation, and the mode of processing (heuristic or systematic) differs when the base food conflicts or reinforces consumers' long term health goal. Drawing from the self-control literature (e.g., Baumeister 2002) and the heuristic-systematic model (e.g., Chaiken 1980), we propose a theoretical framework (Figure 1) that illustrates how consumers estimate the calorie content of food items with toppings.

Theoretical Background

Consumers often face two conflicting goals in food consumption: the short-term goal of taste pleasure and the long-term goal of maintaining good health (Dhar and Simonson 1999). As the pleasure goal only offers short term indulgence whereas the health goal offers long term benefits (Fishbach and Zhang 2008), this goal conflict is considered to be more salient when consumers eat hedonic food such as chocolate cake than when they eat utilitarian food such as salad (Oakada 2005; Wertenbroch 1998). We propose that this initial difference in goal conflict leads to different modes of processing (heuristic or systematic) in consumers' calorie estimation of the augmented food.

First, research suggests that a tempting but unhealthy base food (e.g., chocolate cake) can automatically activate consumers' health goal (Fishbach, Friedman and Kruglanski 2003), resulting in goal conflict. This conflict leads to consumers' feeling of guilt, urging them to seek justifications to alleviate such "guilty pleasure" (Okada 2005). Under such circumstances, consumers are likely to prioritize the justification seeking task and therefore are less motivated to employ systematic processing in calorie estimation. Meanwhile, the high priority justification task may keep consumers cognitively busy, making the systematic processing less plausible (Ratneshwar and Chaiken 1991). Therefore, in this case, consumers are likely to employ heuristic processing and rely on heuristics that allow them to formulate the desired judgments and conclusions (Eagly and Chaiken 1993).

In the context of calorie estimation, a commonly applied judgment heuristics is that "healthy equals low-calorie" (Chandon and Wansink 2007b). For most consumers, "healthy" connotes low-fat content, and "low-fat" food is believed to have fewer calories (Wansink and Chandon 2006). Therefore, when a healthy topping (e.g., fresh fruits) is added to an unhealthy base (e.g., chocolate cake), consumers may perceive the augmented food to be healthier than the base food alone. This is because consumers often assign more weight to the attribute which can justify their choices than other attributes (Barlas 2003). Therefore, although the topping is only a small part of the food and mainly used as a garnish, it may receive more weight in the evaluation of food healthiness than the base food, leading to the perception that the augmented food is healthier than the base food alone. Thus, we predict that consumers may perceive an unhealthy base food with a healthy topping to contain fewer calories than the base food alone.

On the other hand, this biased calorie estimation discussed above is less likely to happen when an unhealthy topping (e.g., creamy dressing) is added to a healthy base (e.g., salad). This is because a healthy base is compatible with consumers' long term health goal and makes them believe that they are on their way to achieve this goal. Previous research suggests that this feeling of temporary goal achievement signals that the goal is desirable and feasible, motivating consumers to commit to the goal (Koo and Fishbach 2008). When consumers are committed to the health goal, they would prioritize tasks that can help them achieve the goal. In this case, consumers are likely to employ systematic processing that allows them to accurately estimate and monitor the calorie content of the food. Meanwhile, as the healthy base food causes little goal conflict demanding justifications, consumers have sufficient cognitive capacity to perform systematic processing. Therefore, we predict that adding an unhealthy topping to a healthy base would not bias consumers' calorie estimation of the augmented food.

Findings and Implications

We test the above predictions in four experiments. In Experiment 1, we found that adding a healthy topping to an unhealthy base food made consumers estimate fewer calories in the augmented food than in the base food alone, but adding an unhealthy topping to a healthy base does not lead to the same bias. In Experiment 2 we replicated the findings of Experiment 1 by examining the impact of food toppings on consumers' portion-size choice. In Experiment 3 we validated the findings of Experiment 2 in an actual consumption scenario. In the last experiment, we found that the underestimation bias discovered in Experiment 1 can be curbed by asking consumers to dissociate the calorie estimation task from the consumption decision (i.e., eliminating goal conflict).

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The Tempting Nature of Feeling Right: Regulatory Fit Between Mindsets and Chronic Shopping Motivations Increases Consumers' Propensity for Unplanned Purchases

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Arnd Florack, Zeppelin University
Anja S. Göritz, University of Würzburg

Shopping behavior can be driven by different goals. For instance, consumers might want to get their weekly grocery purchase done, or they might just want to go window-shopping. The different goals result into two fundamental motivational orientations (Babin, Darden, & Griffin, 1994): a utilitarian shopping motivation (shopping as task to be done) and a hedonic shopping motivation (shopping as fun). The current shopping motivation may be influenced by the context (Kaltcheva & Weitz, 2006) and by consumers' chronic preferences (Westbrook & Black, 1985). In this research, we focus on the interplay between chronic shopping motivations and currently activated cognitive procedures, i.e., consumers' mindset. We assume that a fit between chronic shopping motivation and activated mindset increases consumers' propensity for unplanned purchases.

Mindsets reflect a set of cognitive procedures that are currently active and that influence *how* individuals process information (Gollwitzer & Bayer, 1999). Mindset theory posits two fundamental mindsets: In a deliberative mindset, consumers weigh the pros and cons of a decision; in an implemental mindset, the decision has already been made and consumers think about how and where to implement the necessary actions. We assume that a hedonic shopping motivation is linked to a deliberative mindset (as hedonic shoppers browse and think about wishes and desires), and a utilitarian shopping motivation is linked to an implemental mindset (as utilitarian shoppers focus on realizing their goals). This assumption is supported by a field study that analyzed verbal protocols from shoppers with different shopping motivations (Büttner, 2008). Regarding chronic preferences, this implies that shoppers usually incline to the mindset that corresponds to their chronic shopping motivation.

Mindsets, however, may also be activated by various features of the shopping situation (e.g., Dhar, Huber, & Khan, 2007). Moreover, mindsets can carry over from unrelated tasks (e.g., Bayer & Gollwitzer, 2005). Hence, the activated mindset either fits consumers' chronic shopping motivation or not. What are the effects of such a fit versus a non-fit on consumer behavior? According to regulatory fit theory, people experience value when they are able to "pursue goals in a strategic manner that fits their regulatory orientation" (Higgins, Idson, Freitas, Spiegel, & Molden, 2003, p. 1150). This value from fit transfers to evaluations of objects, and to the persuasiveness of messages (Cesario, Grant, & Higgins, 2004; Higgins, et al., 2003).

We argue that such a fit effect also occurs between activated mindset and chronic shopping motivation. The effect is driven by the cognitive procedures that constitute the mindset and either support (fit) or disrupt (non-fit) consumers' shopping motivation. Utilitarian shoppers have a preference for getting things done in a shopping context. Hence, when an implemental mindset is evoked, they should experience fit. On the contrary, hedonic shoppers have a preference for browsing and evaluating products. They should experience fit when in a deliberative mindset while shopping. If consumers experience a fit between shopping motivation and active mindset, the value from "feeling right" should render evaluations more positive. This should elicit unplanned purchases as it increases the subjective value of products encountered at the point of purchase. We examined this proposition within three experiments.

Study 1 examined the effect of regulatory fit in a 2 (chronic shopping motivation: utilitarian vs. hedonic) $\times$ 2 (deliberative vs. implemental mindset) between-subjects design ($N = 66$). Chronic shopping motivation was measured using a seven-item scale. Activated mindset was manipulated by the personal problem versus project paradigm (e.g., Gollwitzer, Heckhausen, & Steller, 1990). We measured willingness to comply with a product-sampling request in a shopping scenario that followed the mindset manipulation. Results from moderated regression support the fit hypothesis: in an implemental mindset, participants' willingness to taste the product was higher for utilitarian than for hedonic shoppers; in a deliberative mindset, this relationship was reversed: willingness to taste was higher for hedonic than for utilitarian shoppers. Study 2 and 3 used the same design and the same measure for chronic shopping motivation, but used different scenarios and mindset manipulations. In Study 2 ($N = 140$), activated mindset was manipulated by either writing down the pros and cons of buying a new car (deliberative mindset), or by listing five important steps when planning to buy a new car (implemental mindset) (Dhar, et al., 2007). In a subsequent product-sampling scenario, fit effects emerged for the desire to eat a piece of the chocolate right now and for the price participants were willing to pay: In a deliberative mindset, hedonic participants were willing to pay a higher price and indicated a stronger desire to eat a piece of chocolate. In an implemental mindset, on the contrary, hedonic participants' desire to eat a piece of chocolate, as well as the price they were willing to pay were lower for hedonic than for utilitarian participants.

In Study 3 ($N = 62$), mindsets were evoked by either writing down the pros and cons of preparing an Italian dinner (deliberative mindset), or by naming the five most important steps when preparing an Italian dinner (implemental mindset). In a subsequent impulse-purchasing scenario, participants were asked for their willingness to pay a premium for a product that they incidentally found and that they had been wanting for a long time. Again, the results support the fit hypothesis: In a deliberative mindset, hedonic participants were more willing to pay a premium than utilitarian shoppers; in the implemental mindset group, we found no relationship between shopping motivation and willingness to purchase.

In sum, we have established the fit effect between activated mindset and chronic shopping motivation across different shopping scenarios and mindset manipulations. We showed that the propensity to conduct unplanned purchases and the subjective value of products increase when the active mindset fits consumers' chronic shopping motivation (i.e., deliberative mindset/hedonic motivation, implemental mindset/utilitarian motivation). These findings extend research on regulatory fit: While Higgins et al (2003) speculated about fit effects concerning mindsets, this link had not yet been empirically demonstrated. As an implication for marketing and retailing, the results suggest that tailoring persuasive strategies to consumers' shopping motivation can enhance the success of in-store promotions.

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If it is Familiar, it Must Taste Better: The Familiarity Effect in Taste Tests

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While purchasing food items, how do consumers determine whether a national brand will taste better than a store brand? The answer matters because consumers make this judgment when deciding whether to purchase a national brand that costs more but *presumably* tastes better. In product categories where the products taste similar, consumers may find themselves better off choosing the less expensive store brand. However, in other categories, the national brand may taste much better and thus justify its higher price. Whether consumers make the best choice across categories critically depends on their ability to predict their taste preference.

We propose that predictions of taste preference are based on two types of memory outputs – previous consumption experience and feeling of familiarity. We expect previous experience to be a generally useful cue. More frequent consumption helps develop expertise which improves the ability to discriminate options and leads to more consistent and predictable preferences.

In contrast, we predict that relying on feelings of familiarity as a heuristic cue leads to biased judgments for two reasons. First, familiarity and taste are not perfectly correlated. Familiarity is influenced by such things as advertisements, news stories, and usage by others. Because consumers know more about a national brand than a store brand, they might mistakenly infer that the national brand tastes better. Second, feelings of familiarity can be influenced by contextual factors (Whittlesea 1993). For example, a recognizable package may create feelings of familiarity even though the packaging does not directly affect taste. Both of these reasons underlie the notion that consumers rely on a heuristic of "if it is familiar, it must taste better". We predict that this heuristic is not diagnostic of actual taste preference and leads people to systematically over predict preference for highly familiar brands versus largely similar store brands. Results from three experiments support these predictions.

Study 1 shows that people rely on brand familiarity as a cue for taste preference. Brand familiarity was manipulated by exposing people to visual images of a brand in an ostensibly unrelated task. When they had previously seen the brand, people were more likely to choose that beverage product, presumably because it seemed more familiar. This happened whether the beverage was generally liked or disliked suggesting that usage of the familiarity cue is robust.

Study 2 establishes that the usage of the familiarity cue generalizes across twelve common food categories. People were asked to predict the outcome of an upcoming blind taste test – prefer national brand, prefer store brand, or prefer two brands equally. People were more likely to predict a preference for the national brand as they (a) consumed the national brand more often or (b) were more familiar with the national brand. Frequency of consumption was somewhat diagnostic in that heavy users tended to prefer the national brand more often in the blind taste test. In contrast, familiarity with the brand did not predict actual taste preference. This led to a poor calibration between predicted and actual preference. Overall, even though people generally preferred the national brand, they had no insight into which product categories this would hold. This suggests that consumers may be paying more for a national brand in many categories even though they will not enjoy it any more.

Study 3 demonstrates that feelings of familiarity are susceptible to contextual cues. More specifically, we show that the presence of a brand logo is a moderating factor for usage of the familiarity cue. When predicting the outcome of a future blind taste test, people were shown either just the brand names or the brand names with a small logo. People who saw the brand logos relied on familiarity as a cue more than people not seeing the logos. We attribute this to the ability of a brand logo to generate feelings of familiarity and make familiarity more salient.

The results of these studies provide four important insights. First, researchers should not generalize about whether people prefer a national brand over a store brand. In these studies, this percentage varied from 22% to 93% across twelve product categories. Second, although actual preference for the national brand varies across categories, people appear to have little insight into when they prefer a national brand over a store brand. This suggests that people often pay more for national brands that they will not enjoy more than the store brand. Third, one reason for this miscalibration is that people rely on familiarity as a cue for preference, and this cue is not very diagnostic. Put another way, people assume that a store brand will not taste very good because they are not familiar with it, yet they often enjoy it as much as the name brand. Fourth, consumer predictions about whether they will like a national brand over a store brand are easily manipulated. Here, we did so by simply exposing them to visual images or brand logos.

This research has recommendations for both marketers and consumers. Marketers of national brands should focus on increasing feelings of familiarity so that consumers will predict greater liking of their brand and presumably be willing to pay a higher price. For similar reasons, marketers of store brands should also work on increasing people's familiarity with their brands (which grocery stores seem to be doing). However, marketers of store brands might also help consumers learn their preferences through in-store blind taste tests like those used here. Finally, consumers might also consider performing their own blind taste tests. There will be some categories where they prefer the national brand and should be willing to pay more; however, there will likely be other categories where they could get an equally enjoyable product for a much lower price. Unfortunately, natural consumption patterns do not allow people to learn whether the former or latter is true across different categories. Learning this information and the reasons for miscalibration could lead to better purchasing decisions by consumers.

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Can Color Enhance Message Persuasiveness? The Role of Color in Processing Fluency

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Debra Scammon, University of Utah

Although color is an essential element of marketing communications, we do not know much about the role of color in marketing (Garber & Hyatt 2003). For example, can color as part of an information presentation enhance message persuasiveness? Or does color have only aesthetic value with little impact on message persuasiveness? If there is an effect, how can that be explained? The current literature does not provide clear answers to these questions. We address these issues by linking processing fluency theory to the color literature.

Research on processing fluency suggests that consumer judgments are often influenced by the ease or difficulty with which new information can be processed (Schwarz 2004). Building on this research, we propose that one potential source of processing fluency is color. There is little research that explores whether and how color can influence the fluency with which people process target information. We propose that background color that matches the content of target information makes the information easier to process conceptually, thereby increasing the appeal of the target information. We investigated this in the context of pro-environmental messages, specifically testing the role of green color in pro-environmental messages and its impact upon evaluations of the target information.

Experiment 1

We examined the effect of different background colors (green and yellow) on attitudes toward household recycling tips. We hypothesized that a green background would lead to more favorable attitudes towards the recycling tips, presumably because the conceptual relatedness between the color green and recycling will facilitate processing of the information. Participants read household recycling tips on either a green or yellow background. They then evaluated the information on multiple items. Participants also reported their liking of the background color and current mood. As predicted, evaluations of the recycling tips were more positive in the green (vs. yellow) condition. There were no differences between the two conditions in color preference or mood. These results suggest that color can enhance ease of processing, which in turn leads to more favorable attitudes toward the target information.

Experiment 2

In experiment 1, the green background led to more positive evaluations of the recycling tips. To show that this effect is driven by the conceptual fit between the target information and the background color, in experiment 2 we tested whether this effect is limited to the evaluations of target information that is conceptually related to the color green. Further, we provide more direct evidence of conceptual fluency. We hypothesized that participants would experience more conceptual fluency when there is conceptual fit (vs. non-fit) between target information and a background color. A 2 (green vs. red) X 2 (environmental vs. non-environmental message) between-subjects design was used. Participants first read energy saving tips on either a green or red background. For some participants the goal of energy saving was protecting the environment (i.e., environmental message) while for others it was saving money (i.e., non-environmental message). Protecting the environment is assumed to be more conceptually related to the color green than is saving money. To measure conceptually fluency, participants reported how much effort they spent to understand the article, how clear the meaning of the article was, and how quickly they got the idea from the article.

Participants experienced more conceptual fluency with the environmental message in the green (vs. red) condition, but not with the non-environmental message. The 2 way interaction was significant. Consistent with these results, participants' willingness to follow the energy saving tips was higher with the green (vs. red) background in the environmental message condition, but not in the non-environmental message condition. These results provide additional evidence that conceptual fluency can enhance message persuasiveness, ruling out other explanations such as the influence of color on mood or perceptual fluency.

Experiment 3

Color research suggests that longer wavelength colors (e.g., red, yellow) are arousing and evoke a prevention focus, whereas shorter wavelength colors (e.g., green, blue) are calming and induce a promotion focus (Stone & English 1997; Mehta & Zhu 2009). These findings suggest the possibility that the results from experiments 1 and 2 were driven by regulatory fit, rather than conceptual fluency. To test this possibility, we used the revised New Environmental Paradigm (NEP) Scale (Dunlap et al. 2000). This scale measures attitudes toward the environment and consists of two dimensions that map onto different regulatory foci: promotion- and prevention-focus. Participants completed items representing both dimensions on either a green or yellow background, resulting in a 2 (green vs. yellow: between-subjects) X 2 (prevention- and promotion-focused items: within-subject) design. If regulatory fit drives participants' responses, scores on promotion-focused (prevention-focused) items will be higher in the green (yellow) condition, because there is better regulatory fit between promotion-focus (prevention-focus) and the color green (yellow). According to the conceptual fluency account, however, scores will be higher in the green (vs. yellow) condition regardless of regulatory fit, because the natural environment should be more easily associated with the color green than yellow.

Supporting the conceptual fluency account, participants' scores on both dimensions were higher in the green (vs. yellow) condition. There was no interaction effect, ruling out the regulatory fit account.

In summary, we proposed and demonstrated that the conceptual fit between target information and background color can make target information easier to process, resulting in higher message persuasiveness. We also show that this effect can be explained by conceptual fluency (i.e., ease of understanding), but not by the influence of color on mood, perceptual fluency (i.e., ease of reading), or regulatory focus. Our research adds to the color and processing fluency literature in important ways. First, we suggest a previously unexplored route by which conceptual fluency confers favorable attitudes on the target information, namely, the conceptual fit between the target information and background color. Second, prior research

suggests that visual features of information can enhance perceptual fluency (e.g., ease of reading). Our research is the first to demonstrate that color as a physical feature can also enhance conceptual fluency (e.g., ease of understanding). The finding that consumer perceptions of pro-environmental tips are significantly influenced by the color green has important implications for public policy and social marketing. Importantly, our findings suggest that the role of color in marketing is not limited to aesthetic values. Rather, they show that a carefully chosen color can enhance message persuasiveness.

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Metacognitive Learning and Lock-in: Why Faulty Decision Parameters Persist
Jeffrey Larson, Brigham Young University*

Effective decision making requires accurate metacognition, or knowledge about the effects of decision-related thought, such as the decision's processing requirements, the importance of accuracy versus efficiency, available decision strategies, etc. Some research on decision making suggests that metacognitive learning can sometimes inhibit, rather than aid, decision making. For example, both Luchins and Luchins (1959) and Bröder and Schiffer (2006) showed that previous learning of an appropriate decision strategy caused participants to continue to use that decision strategy later, when that decision strategy was no longer optimal.

This overuse of previously learned metacognition is a phenomenon I call "Metacognitive Lock-in". In short, Metacognitive Lock-in is a phenomenon whereby metacognition that decision makers learn to associate with a given decision environment gets "locked in" and continues to be applied to that decision environment after obsolescence. The previous findings are examples of Metacognitive Lock-in acting specifically on the decision strategy domain of metacognition. The current research shows that Metacognitive Lock-in is a general phenomenon that acts on all domains of metacognition, and not only on the decision strategy domain.

At least two other domains of decision metacognition exist. The first is goal-related metacognition. When decision makers approach a decision, they must assess both the self-imposed and environment-imposed constraints and set effort and accuracy goals according to their evaluation of these constraints. The second domain is outcome evaluation. After decision makers complete a decision, they must evaluate the outcome on effort and/or accuracy, and adjust their goals and/or decision strategy accordingly.

Study 1 demonstrates Metacognitive Lock-in's effect on goal-related metacognition. Participants repeatedly chose one of three cell phone pricing plans and were rewarded for choosing the least expensive one. They made these choices in four different two-minute phases. In the first two phases, participants were randomly assigned to a Fast or a Slow condition. In the Fast condition participants were paid more for the sheer number of correct responses, while in the Slow condition they were paid more for accuracy. The use of reward-based constraints causes participants to interpret the constraints and set goals accordingly. Those in the Fast condition should set effort and accuracy goals to favor lower effort and lower accuracy.

One day later, participants were emailed a link to complete the last two phases of the study. In the last two phases, participants were rewarded equally. It was hoped that as a result of their lower effort and accuracy goals from the first two phases, Fast condition participants would make decisions more quickly in these two phases. Indeed, these results were attained. Slow condition participants made decisions more slowly (M = 6.52 s) than participants in the Fast condition (M = 5.81 s), t(39) = 2.63, p < .01. This difference continued in phase 4 (M = 6.14 s vs. M = 5.40 s), t(39) = 2.93, p < .01. Because Metacognitive Lock-in affects all domains of metacognition, the study was designed to ensure that the results were caused by Lock-in's effect on goal metacognition, not decision strategies or outcome evaluation. To control for outcome evaluation, the difficulty of the choices in the first two phases were manipulated to make sure that Fast condition participants made decisions at the same speed as Slow condition participants, despite their lower effort goals. Indeed, this occurred (t(39) = 1.04, p = .30). An examination of various decision strategies found no evidence of different decision strategies being used between the two conditions (all p's > .1).

Study 2 shows the effect of Metacognitive Lock-in on outcome evaluation. Participants made fifteen candy bar choices using the Mouselab procedure; two of their selections were randomly chosen and given to them. Participants practiced the Mouselab procedure by making five selections of the column of numbers with the largest sum. The numbers were laid out in the same orientation as the later candy bar choices were. In the High Effort condition, it was more difficult to assess which column had the higher sum. As a result, participants put more effort into these practice choices (p < .0001 for all three measures of effort, BoxTime, Acquisitions, and TimePerAcquisition). Because the High Effort participants established a higher baseline level of effort, their evaluation of what constituted a reasonable amount of effort was higher. As a result, they put more effort into the candy bar choices, F(2,279) = 3.7, p = .02 for MANOVA on the three effort variables. As in Study 1, we must ensure that these results were driven by Lock-in's effect on outcome evaluation and not on goals or decision strategies. Goals were no different between the two conditions, because no part of the manipulation affected goals. Decision strategies, however, might have differed as a result of the effort manipulation. However, examination of the decisions strategies, more precise in this study because of the Mouselab measures, revealed no differences in decision strategies (all p's > .1).

Study 3 shows that Metacognitive Lock-in is symmetrical—it inhibits decision makers from adjusting effort levels either up or down. Participants performed the same cell phone pricing task as in Study 1. Participants again made choices in four different two-minute phases. Half the participants

started in the Fast condition, half in the Slow condition. After the second phase, half of the participants in each condition switched into the other condition, yielding four total conditions, Fast-Fast, Fast-Slow, Slow-Slow, and Slow-Fast. As a result of Metacognitive Lock-in, Fast-Slow participants made choices more quickly than Slow-Slow participants ($p < .0001$), and Slow-Fast participants made choices more slowly than Fast-Fast participants ($p < .0001$). This led to a significant difference in earnings ($p = .06$ and $p = .03$, respectively). Metacognitive Lock-in caused those who changed conditions to earn less money than those who kept the same rewards.

Metacognitive Lock-in causes decision makers to continue to apply learned metacognition even when it becomes obsolete. This occurs even when decision makers fully realize that a change in the environment has necessitated new metacognition. Lock-in affects all domains of metacognition, namely goals setting, decision strategy selection, and outcome evaluation.

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The Mere Signature Effect: How Signing One's Name Affects Behavior

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Your signature – the distinctive way in which you write your name – plays a vital role in your life. By simply signing your name on a document, you can commit to marriage, years of mortgage payments, or military service. Despite the importance of signatures, however, the influence of signing one's name on subsequent behavior has not been examined to date.

People associate their signature with their identity. They craft a unique signature that they use to represent their identity in writing, such as when they sign a contract. Further, people verify their identity to others by replicating their signature, and pen their signature on items they use to identify themselves (e.g., passport, driver's license). We propose, therefore, that signing one's name acts as a general self-identity prime.

A person's *general self-identity* refers to the totality of self-schemas and self-identities that form that his/her sense of self (Markus, 1977). In situations where people are afforded the opportunity to express a particular self-identity (Gibson, 1977), priming that specific self-identity promotes behavior that is more consistent with the typical conduct associated with the primed identity (Forehand & Deshpande, 2001). For example, priming their gender identity induces women to report more negative attitudes towards math (Steele & Ambady, 2006) and perform worse at solving math problems (Shih et al., 1999). Our key proposition is that – in situations where a person is afforded the opportunity to express a particular self-identity – signing one's name promotes behavior that is more consistent with the afforded identity.

We tested this proposition in seven experiments. In each study, participants were randomly assigned to either sign or print their own name on a blank piece of paper (ostensibly for a separate study about hand-writing) before entering into the focal situation.

The first two studies examined a domain with divergent schemas for women and men – food. Compared to men, women are more prone to impulsive food consumption (Fredrickson et al., 1998). We hypothesized, therefore, that signing their name would induce women to consume food, but would have no such effect on men. In Study 1, participants were offered free snack foods (carrots and pretzels) during a brief waiting period. As predicted, females who had provided a signature were more likely to snack than those who had printed their name, but male participants' snacking was not affected by whether they had signed or printed their name. In Study 2, participants were given the opportunity to buy chocolates. Consistent with the results of Study 1, females who had signed their name were more likely to buy chocolate than those who had printed their name. By contrast, the amount of chocolate purchased by male participants was not affected by this manipulation.

In Study 3, we examined the effect of signing one's name in a context that is of greater importance to the male identity – whether a product is perceived as having feminine characteristics. Prior research suggests that men are highly motivated to avoid feminine products and activities, whereas women are much less influenced by a product's perceived masculinity or femininity (White & Dahl, 2006). Therefore, we hypothesized that signing their name would lead men to make less favorable evaluations of products perceived as feminine, but would have no effect on women's evaluations. Consistent with our hypothesis, male participants who signed their name rated products in feminine packaging less favorably, whereas female participants' responses were not affected by whether they had signed their name.

Studies 4 and 5 examined the relationship between consumers' expertise in a product domain and their level of engagement in a shopping task. Experts are engaged in their topic, and expertise is predominantly linked with greater effort and engagement (Ericsson et al., 1993). Therefore, we hypothesized that signing one's name would induce experts to be more engaged when shopping in their domain of expertise. In Study 4, participants used a web-based interface to search for product attribute information prior to choosing from a set of cameras or a set of dishwashers. As predicted, signing one's name led participants at higher levels of expertise to look at more product attributes, and to spend more time shopping. In Study 5, participants went to a retail store to choose a pair of running shoes. As hypothesized, signing their name led participants at higher levels of running expertise to spend more time in the retail store and to try on more pairs of shoes.

One's self-identity is defined, in large part, by one's (non-)membership in social groups. The final two studies tested our theoretical account by examining the effect of signing one's name on the degree to which one identifies with a social group. In Study 6, after signing or printing their own name, participants articulated a social group to which they belonged (in-group condition) or did not belong (out-group condition). We hypothesized that signing their name would induce people to identify more (less) closely with an in-(out-)group. Using an identity-signaling paradigm, (see Berger & Heath, 2007), participants signaled the extent to which they identified with the group by making 19 product choices. As predicted, signing their name caused people to converge with (diverge from) their in-(out-)group by choosing the alternative that was most (least) popular with the members of that group. In Study 7 – using the same manipulations as Study 6 – participants answered a series of questions about the social group they had selected. Participants who had signed their name identified more (less) closely with an in-(out-)group than those who had printed their name.

The present research is the first to show that merely signing one's name influences subsequent behavior. Across seven different consumption-related behaviors, and in the context of a variety of self-identities (gender, expertise, group membership), we demonstrate that signing one's name induces people to behave in a manner consistent with the afforded self-identity. Because consumers are often required to provide a signature in a retail setting (e.g., on a credit card receipt), our findings have important implications for both consumers and retailers.

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Rejectable Choice Sets: How Seemingly Irrelevant No-Choice Options Affect Consumer Decisions
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Existing literature on no-choice options has focused its attention on the segment of consumers which opt for the no-choice option. For example, a great deal of research examined the factors that lead consumers to defer their choice (e.g., Dhar 1997), which alternatives are more likely to lose choice shares to the no-choice option (Dhar and Simonson 2003), and how different response modes interact with the choice-set characteristics to influence choice deferral (Dhar and Nowlis 2004). In contrast, this paper focuses on the segment of consumers who do not opt for the no-choice option. Specifically, we investigate how the mere presence of a no-choice option in the set affects consumers' decisions. Could it be that the mere opportunity to reject all of the available alternatives changes consumers' decision processes and ultimate choice? If so why, and in what way?

Economic and rational choice theory would argue that adding a no-choice option to a choice-set should not affect the preference for one alternative over another. Specifically, the economic assumption of regularity states that the addition of a new alternative should not increase the probability of choosing another alternative from the original set. However, we show that adding a no-choice option to the set (hereafter, a rejectable choice-set) systematically changes consumer preferences and leads to violations of regularity. Specifically, we postulate that given a rejectable choice set, the consumer needs to not only determine which alternative is the winner, but also if any or all of the alternatives are worth choosing. Simply being the best does not guarantee that an alternative is good enough to be chosen. Nor does being good enough suggest that an alternative is the best choice. Accordingly, and building on previous literature on response modes, attribute-task compatibility, and diminishing sensitivity, we assert and demonstrate across four studies that adding a no-choice option to the set triggers a more evaluative (as opposed to comparative) type of judgment, which changes consumers' information-processing patterns, attribute weighting, and preference ordering.

In Study 1 we employ an information-processing tracing methodology to examine how the mere addition of a no-choice option to the set changes consumers' processing patterns. In this study we ask respondents to make a choice between two laptop computers and manipulate (between subjects) whether or not they have the option of choosing neither laptop, i.e., whether or not they are choosing from a rejectable choice set. The attribute information describing each alternative is hidden on the computer screen and the order by which respondents reveal the information is recorded and analyzed[2].

We hypothesize that adding a no-choice option to the set forces consumers to determine not only which alternative is best, but also which if any are acceptable. Thus, respondents who are given the no-choice option (rejectable choice-set condition) are expected to employ a more evaluative (as opposed to comparative) type of judgment compared to respondents who are forced to choose (forced choice-set condition). Further, since comparative judgments require direct comparisons between alternatives while evaluative judgments require determining the overall value of the alternative(s), we predict shifts in processing patterns. Specifically, we expect and find that respondents who are given the no-choice option (rejectable choice-set condition) exhibit a more alternative-based processing pattern (i.e., shift their attention from attribute to attribute within the same alternative). Conversely, respondents in the forced choice condition exhibit a more attribute-based processing pattern (i.e., shift their attention from an attribute in one alternative to an attribute in the other alternative).

In Study 2 we investigate how the addition of a no-choice option to the set changes consumers' preference structure. Specifically, previous literature has shown that consumers weight enriched (as opposed to comparable) attributes more heavily when a more evaluative (as opposed to comparative) judgments are being made. Accordingly, we demonstrate that respondents choosing from rejectable [forced] choice-sets increase the relative importance they attach to the enriched [comparable] attributes. Further, in both Studies 1 and 2, the choice shares of the alternative superior on the enriched [comparable] attribute significantly increase when the choice is made from a rejectable [forced] choice-set.

In Study 3 we test another manner by which the addition of a no-choice option to the set changes consumers' preference structure. Specifically, we postulate that rejectable choice-sets elicit a greater consideration of one's minimum needs. Since choosing from a rejectable choice-set requires the consumer to determine not only which alternative is best, but also whether or not the alternatives are acceptable, the consumer must consider his or her minimum needs. Such minimum needs may be thought of as attribute-specific thresholds, or reference points from which each alternative is evaluated. Because attribute-specific thresholds are used as a reference point when facing a rejectable choice-set, we predict that the closer the choice-set (i.e., the available alternatives) is to a certain attribute-specific threshold, the more important the attribute corresponding to that threshold will become. This prediction is consistent with the principle of diminishing sensitivity; i.e., the marginal values of both gains and losses decrease with their distance from the consumer's reference point. Accordingly, we demonstrate that the relative proximity of the participants' thresholds (experimentally manipulated) to the choice-set affects preferences for those choosing from rejectable, but not forced, choice-sets.

Finally, in Study 4 we employ a field study in cooperation with a food company that conducted a choice-based conjoint analysis for its products. In

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[2] The program used is similar in nature to *Mouselab* (Johnson, Payne, Schkade, and Bettman 1991)

this study, respondents (sampled from the company's target market) were asked to make multiple choices from products described on both enriched and comparable attributes. The choice-sets either included or did not include a no-choice option (forced and rejectable choice-set conditions respectively). Respondents were randomly assigned to one of the two conditions and the relative weights of the enriched and comparable attributes were implicitly inferred from their choices (using a standard Hierarchical Bayesian approach). As expected, consumers facing rejectable [forced] choice-sets increased the relative importance of the enriched [comparable] attributes. We discuss the theoretical and practical importance of our findings.

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"Locked in" Commitment and Effects on Consumers' Repurchase Decisions
Lan Xia, Bentley University*

Consumer loyalty is crucial to a company's healthy growth. Research has shown that commitment enhanced loyalty and is closely related to repurchase intentions (Fullerton 2003). Commitment is broadly defined as "an enduring desire to maintain a valued relationship" (Moorman, Zaltman, and Deshpandé 1992, p. 316). Meyer and Allen (1997) conceptualized three dimensions of commitment. Affect commitment is emotional attachment and identification with a company ("want"). Normative commitment is the degree to which a customer feels a moral obligation to maintain the relationship with the company ("should"). And continuance commitment refers to a cost-based attachment where consumers feel it is economically beneficial to stay with the company ("have to").

In this research, we propose a split of continuance commitment. Continuance commitment is constraint based. We distinguish two components of continuance commitment based on consumers' control and attribution of these constraints. First, constraints can be based on consumers' assessment of market situation and economic benefit and therefore lead to *voluntary* staying in the relationship. This is the positive aspect of continuance commitment and we term this aspect "calculative commitment". On the other hand, constraints can be induced by marketers' marketing tactics or sales policies such as a service contract. Consumers *involuntarily* stay in the relationship because they don't have the freedom to leave and thus are locked in the relationship. This is the negative aspect of continuance commitment and we term this aspect "locked-in" commitment. Locked-in commitment is not merely cognition of benefit lost if the relationship were to end. Rather, it is the sense of being locked and having no control. For example, consumers may be locked into a service contract (e.g., cell phone or cable service) and not able to switch until the current contract expire even when there are attractive alternatives available. Such constraints are imposed by the company and many times are out of the control of the consumers once they get into.

We propose that consumer characteristics, industry characteristics, and perceived service quality are important factors influencing locked-in commitment. First, research has documented the impact of service quality on behavior consequences (Zeithaml, Berry, and Parasuraman 1996). Perceived service quality is consumers' experiences with the service provider in the past while commitment is consumers' intentions while looking into the future. Future intentions are based on past experiences. Hence, a good experience based on higher perceived quality will make consumers "want" to stay in the relationship, enhancing affect commitment but reducing locked-in commitment. Second, consumers vary by their degree of psychological reactance. Psychological reactance refers to a motivational state where people feel a threat of elimination of a behavioral freedom such as the freedom of choosing what one can eat or possession of a choice alterative (Brehm 1989). Locked-in commitment is based on involuntary constraints due to marketers' tactics and policies. These tactics and policies take or threaten to take some of consumers' freedom away hence we hypothesize that people high on psychological reactance will react more strongly and have higher locked-in commitment. Third, locked-in commitment is induced by marketers' tactics and policies such as service contract so these tactics and policies are natural antecedences of locked-in commitment.

A substantial body of research has demonstrated that commitment of an affective nature is positively related to customer retention (Bendapudi and Berry 1997; Garbarino and Johnson 1999; Morgan and Hunt 1994) and helps to reduce the perceived attractiveness of other offers. Calculative commitment also has a consistent negative effect on churn (Gustafsson, Johnson, and Roos 2005). We expect to replicate these effects. In addition, we hypothesize that locked-in commitment influences behavioral intentions both directly and indirectly in two different directions. First, as we conceptualized, locked-in commitment is based on the feeling of losing the freedom to switch due to marketers' marketing tactics. It does not necessarily mean consumers perceive lower value of the offer and intend to switch. Hence, consumers would focus more on getting out of the lock rather than switching to a new service provider. If the current provider offers an option without the constraint, consumers are likely to accept that. Hence, locked-in commitment can also potentially promote retention. Second, locked-in commitment may indirectly enhance switching through higher perceived attractiveness of alternatives. For consumers with high locked-in commitment, being unable to choose the alternatives will further enhance the attractiveness of the alternatives available on the market, which will negatively impact retention. The overall proposed model is presented in Figure 1.

The model was tested using a survey of mobile phone users. Data collection was through an online survey supported by Perseus software. Participants were students, parents, and staff of a college in the northeastern U.S. In the survey, participants were asked general questions regarding their mobile phone usage. We then measured the key constructs in the model. All measures and scale reliability were presented in Table 1.

In total, 109 people participated in the survey with 33% male and average age of 33. We first examined the dimensions of commitment. Confirmatory factor analysis with the 13 items showed a good fit (χ^2 (59) = 116.5, p < .01; TLI = .93, CFI = .93, and RMSEA = .095). We compared it with the 1-factor, 2-factor, and 3-factor models. All χ^2 differences were significant and the 4-factor model fitted the best.

Next, we tested the proposed model. The overall fit of the model was significant (χ^2 (171) = 204.1, $p < .01$). However, additional goodness-of-fit indices (TLI = .96, CFI = .97, IFI = .98 and RMSEA = .04) all were at acceptable levels indicating that the model fits the data well (see Table 2). As expected, perceived service quality enhanced affect commitment (β = .72, t = 7.72, $p < .01$), calculative commitment (β = .35, t = 3.30, $p < .01$), and reduced locked-in commitment (β = -.34, t = -3.26, $p < .01$). Psychological reactance (β = .18, t = 1.89, $p = .058$) and months left on the current contract (β = .27, t = 2.50, $p < .05$) both had a positive effect on locked-in commitment.

Examining the consequences, locked-in commitment had a slight negative effect on signing a new contract (β = -.14, t = -1.08, $p = .28$), but had a positive effect on staying on a pay-as-you-go basis (β = .27, t = 1.88, $p = .06$) with the current provider. In addition, locked-in commitment had a positive effect on perceived attractiveness of alternatives (β =.50, t = 4.65, $p < .01$). Finally, perceived attractiveness of alternatives had a negative effect on staying pay-as-you-go (β = -.26, t = -2.23, $p < .05$) with the current service provider, but had a slightly positive effect on signing a new contract (β = .14, t = 1.18, $p = .24$). Additional results were presented in Table 2.

In this research, we offered a new conceptualization of continuance commitment by distinguishing voluntarily "have to" stay with the service provider which is based on consumers' assessment of economic benefits and involuntarily "have to" stay which is based on consumers' feeling of being locked in. Although both aspects of commitments are constraint based, calculative commitment is positive and locked in commitment is negative. Moreover, they are associated with different behavioral consequences. Given the potential negative impact of locked-in commitment, marketers should examine their marketing tactics and try not to constraint consumers involuntarily. In addition, since locked in commitment is based on the feeling of involuntarily constrained and loosing freedom of choice, marketers may consider offer different options to accommodate people who have strong reactions to constraint features of the service offer. Finally, service providers should also focus on improving service quality. A superior service quality gives consumers a good reason to voluntarily enter the constraints. Finally, the effect of locked-in commitment may depend on market features and competition. When consumers perceive the market offers as largely similar and there are no attractive alternatives available, they may be more acceptable to non-locked options offered by the same service provider than switching to a different provider. When there are clear attractive alternatives available, consumers may opt to switch. Our research was conducted in the context of mobile services so not all results are generalizable to other industries. Additional future research is desirable.

Figure 1. Antecedences and Consequences of Locked-in Commitment
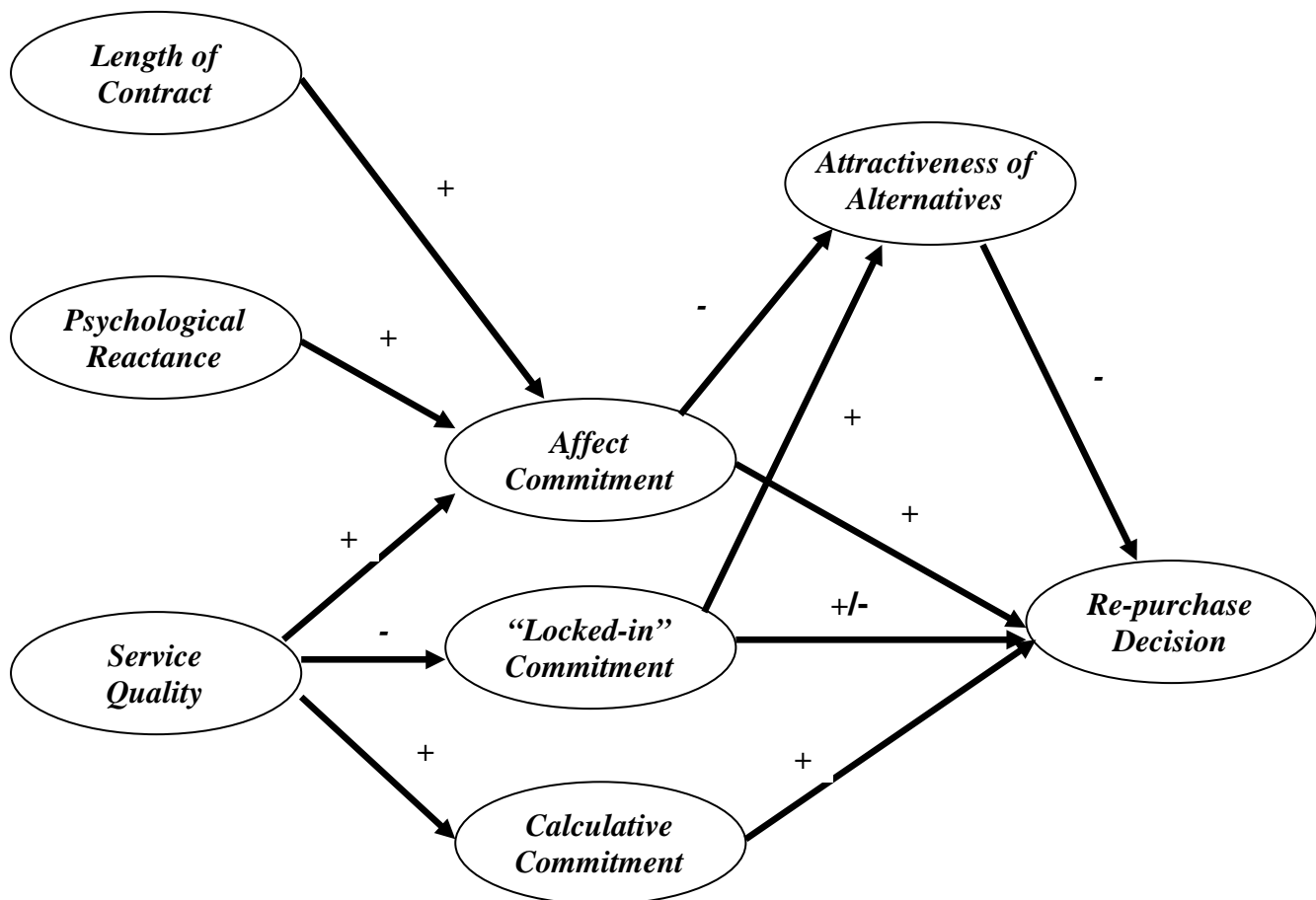
Table 1   Measures and Reliability

Measures	Factor Loadings	Scale Reliability
Service Quality		
The wireless provider always tries to meet my needs.	.89	α = .90
The wireless provider is responsive to my questions and requests.	.92	
The wireless provider provides reliable service.	.71	
The wireless provider is consistently courteous with me.	.80	
Affect Commitment		
I like this company.	.86	α = .90
I use this company because I really like it.	.93	
I am a customer of this company because I feel a strong sense of attachment to it.	.76	
I do business with this company because I like it.	.80	
Calculative Commitment		
It pays off economically to use this wireless provider	.90	α = .88
It makes economic sense for me to use this wireless provider	.81	
To me, the provider has economic advantages versus other providers	.76	
Locked-in Commitment		
I feel sort of stuck with this company.	.80	α = .87
I feel that I am constrained by the service contract	.88	
The service provider takes away my freedom to switch	.81	
Attractiveness of Alternatives		
I think I would be much more satisfied with the competitors than my current wireless provider	.91	α = .94
I think competitors' plans would benefit me much more than my current wireless provider	.96	
I think competitors offer more attractive plans than the one I currently have with my wireless provide	.88	
Repurchase Decisions		
Enter another contract with the current provider		
Remain with the current provider on a month-by-month or pay-as-you-go plan		

Table 2. Testing the Conceptual Model

Hypothesis	Path from → to	N = 109	
		Standardized estimate	t-values
H_{1a}	Service quality → affect commitment	.72 [a]	7.66 [a]
H_{1b}	Service quality → calculative commitment	.35 [a]	3.30 [a]
H_{1c}	Service quality → locked-in commitment	-.34 [a]	-3.01 [a]
H_2	Psychological reactance → locked-in commitment	.18 [c]	1.89 [c]
H_3	Length of contract left → locked-in commitment	.27 [b]	2.50 [b]
H_{4a}	Affect commitment → attractiveness of alternatives	-.17 [b]	-1.71 [b]
H_{4b}	Affect commitment → repurchase intention	.23 [b]	1.96 [b]
		.30 [a]	2.63 [a]
H_5	Calculative commitment → repurchase intention	.07	.63
		.09	.84
H_{6a}	Locked-in commitment → attractiveness of alternatives	.50 [a]	4.65 [a]
H_{6b}	Locked-in commitment → repurchase of less constraint service	-.14	-1.09
		.24 [b]	1.88 [b]
H_7	Attractiveness of alternatives → repurchase intention	.14	1.18
		-.26 [b]	-2.23 [b]

Note: [a] $p < .01$; [b] $p < .05$; [b] $p < .10$.

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Session 3.5

Do Negative Consumption Experiences Hurt Manufacturers or Retailers?
The Influence of Reasoning Style on Consumer Blame Attributions and Purchase Intention
Sukki Yoon, Bryant University*

Suppose that you buy a digital camera at a major electronics store and experience a series of unfortunate incidents. After consulting with your friends and sales representatives at the store, you select and purchase a model, only to have the product break down after a short period. The malfunction prevents you from taking any pictures at all and, even worse, you cannot return the product to the store, as its warranty has already expired. Moreover, you learn that the cost of repair is unreasonably high. Which party in the supply chain — the manufacturer or the retailer — is more responsible, and thus to blame, for this frustrating situation? Did it happen because the manufacturer *made* the bad product, or because the retailer *sold* you the bad product? To avoid a similar mishap in the future, should you avoid a product of the same brand or should you avoid a store of the same brand? The responses to these questions may vary, we argue, depending on the reasoning style you employ: analytical versus holistic reasoning (e.g., Nisbett et al. 2001).

Unfortunately, the above scenario is not unfamiliar to many consumers — products and services often do not live up to their expectations, and the consequences can be quite costly, causing irreparable damage to the various parties in the marketing supply chain. As research has revealed, negative consumption experiences can lead to complaining behaviors, customer loss, and bad word of mouth. Accordingly, it is of practical value to managers in a position to address the issue effectively to know conditions under which consumers blame the *maker* or *seller* of the product — the central theme of this paper.

It should come as no surprise that understanding when and toward whom consumers express their frustration and anger has been a topic of interest in the marketing literature (e.g., Folkes 1984). Few, however, have explored what determines the who-is-to-blame question, with most studies focusing on whether the blame is attributed to the self or others (i.e., internal vs. external attribution). Of relevance to our inquiry, Laufer and Gillespie (2004) investigated blame attribution toward the manufacturer and found that women tend to blame the company (e.g., orange juice manufacturer) more than men. However, no prior study, to our knowledge, has directly compared blame attributions toward arguably the two most salient parties in the marketing supply chain: the manufacturer and the retailer. This research aims to fill this gap.

Study 1 showed that analytic thinkers (i.e., individualistic participants with a low level of concern for in-group harmony) were more likely than holistic thinkers (i.e., collectivist participants with a high level of concern for in-group harmony) to believe that the manufacturer caused the undesirable event. Conversely, holistic thinkers were more likely than analytic thinkers to believe that the retailer caused the event.

Study 2 conceptually replicated the findings from Study 1 in a substantially different setting. Specifically, contextually activated self-construal influenced repurchase intention of the manufacturer brand and repurchase intention at the retailer. Although marginally significant, participants primed with an independent self-view were less likely than participants primed with an interdependent self-view to buy the same manufacturer brand in the future. In contrast, participants primed with an interdependent self-view were less likely than participants primed with an independent self-view to shop at the same retailer.

Study 3 expanded on the findings from Studies 1 and 2 in two important ways. First, we tested our conceptualization using data collected from two populations: the United States and Korea. Second, we extended the applicability of our framework to include other key variables: blame assignments to, and attitude toward, the manufacturer versus retailer brands. The results supported the effects on causal attribution and blame assignment. American participants were more likely than Korean participants to ascribe the negative event to, and assign more blame to, the manufacturer, whereas Korean participants were more likely than American participants to ascribe the event to, and assign more blame to, the retailer. On the other hand, the results partially supported the effects on attitude and purchase intention. As predicted, Korean (vs. American) participants exhibited more negative attitude toward, and were less likely to revisit, the same retailer, but such cross-cultural difference did not emerge on the attitude toward and purchase intention for the manufacturer: Participants from both nations showed equally negative attitude toward, and were equally likely to avoid, the manufacturer brand.

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Not all Individualists are Alike! Horizontal & Vertical Individualism - Implications for Consumer Orientation and Advertising Response

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Consumers' cultural orientations have shown to influence their consumption and advertising response. Whereas past research has focused on Individualism and Collectivism (I/C), scholars recently suggest that differentiating the vertical from horizontal aspects of I/C offers promise for understanding consumer behavior (e.g., Shavitt et al. 2006). Horizontal Individualism (HI) presents the following motives: being distinct, unique and separate from others (but not in status) and expressing modesty; Vertical Individualism (VI) is characterized by improving individual status via competition, seeking achievement, power, prestige; and standing out – typically through display of success and status. Through two large-scale surveys, we show distinct effects of VI on consumer orientation, such as brand consciousness and status consumption and advertising response. In Study 2, we also explore the possibility that VI may be related to need for cognitive closure (NCC), a processing style characterized by a desire for a definite answer on some topic or issue.

First, those who value hierarchy and status and desire to show off (VI) are expected to show a greater consumer orientation in general than HI's, who value modesty. Further, brands are a special form of communication that act as heuristics for knowing where goods (and their owners) lie on a societal hierarchy. Dutta-Bergman and Wells (2002) found that individualists were more likely than collectivists to be brand-conscious (stick to well-known brands). However, as suggested by Shavitt et al. (2006, p. 333), "cultural differences in the tendency to view products in hierarchical terms…may be driven by vertical and not by horizontal cultural orientations," and VI consumers are "…more likely to value symbols designed to convey status" (p.338). Thus, we expect VI to be related to brand consciousness and purchases of status brands. Finally, those who are interested in (conspicuous) consumption and status brands may rely on advertising as a way to learn about consumption. Aaker (2006) states, "…whereas mass advertising may be an accepted and effective way of marketing in vertical cultures, it may be ineffective and negatively construed in horizontal cultures" (p. 345). Some evidence supports this view at the individual level. Lee and Choi (2005) found that HI's were significantly more negative in their attitudes toward web advertising than VI's– indicating that it was more irritating and less entertaining. In a national panel study of U.S. consumers, we show that VI and HI reveal distinct consumer orientations and response to advertising. In line with theoretical expectations, VI's are, perhaps, the consummate consumers: they have no intent to limit consumption habits, readily admit to relying on and purchasing well-known and upscale brands, and actively look to advertising as information for purchasing decisions. Conversely, HI responses display negative attitudes to consumption, brands, and advertising.

In a second large-scale survey of consumers, Study 2 examined the relationship between VI and attitudes toward a status-oriented advertising appeal for a fictitious furniture brand. In line with Study 1 and theoretical expectations, VI significantly predicted ad response. In addition, this study explored whether a certain processing style may relate to VI and the effects on ad response. In previous work, we showed that VI (but not HI) values were predictive of right-wing ideology and attitudes toward political figures (Zhang et al.,2009). Further, we suggested that complex thinking may be more representative of the left and those holding HI values. This may explain why their values did not directly relate to attitudes toward political figures as compared with those with more monistic ideology (and VI values). The emphasis on hierarchy and conformity (Triandis 1995) of VI's may in fact make them hold a low tolerance for others' opinions (Shavitt et al. 2006) or for considering multiple factors in decision making. In fact, research has shown that those who hold hierarchical or authoritarian values (and right-wing political ideology) also demonstrate a need for closure (Chirumbolo 2002). We expect that need for cognitive closure (NCC), "the desire for a definite answer on some topic, any answer as opposed to confusion and ambiguity" (Kruglanski 1989, p.14), may positively relate to VI values. Also, given that high NCC will cause consumers to focus selectively on belief-consistent information (Kruglanski and Webster 1996), we expect that NCC will predict advertising response to a status appeal for VI's who hold status/brand beliefs dear. Results of our initial regressions analyses suggest that VI relates positively to NCC and that NCC mediates the effects of VI on attitude toward a status-oriented ad.

These studies provide an enhanced understanding of the relationships between cultural values, consumption orientation, and advertising response and underscore the importance of the HI/VI distinction within I/C. The research also explores the possibility that such cultural values may reflect distinct processing goals and motivations. Future experimental research will investigate the links between need for cognitive closure, brands as heuristics, and advertising response among VI and HI consumers.

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Be Rude to Me and I will Buy a Rolex: Effects of Culture Orientation on Responses to Power Threat in a Service Setting

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In most societies, members gain power because they possess the capacity to control vital resources (French & Raven, 1959). Because such capacity differs among individuals, consumer behavior may be affected by power differences. Hence, consumers may feel more powerful than a receptionist and expect a certain amount of respect. Thus, when a receptionist is rude, a consumer may feel more threatened than when a hotel vice president is rude. This research studies how a server's rank affects consumers' service experience and their motivation to restore power.

Individuals differ in their emphasis on power and this may moderate the effects of server rank described. For example, recent work on cross-cultural research pointed to the distinction between vertical (emphasizing hierarchy) and horizontal (emphasizing equality) values nested within the Individualism–Collectivism (INDCOL) framework (Shavitt et al., 2006;Triandis & Gelfand, 1998). This research suggests that people in vertical, individualistic societies (VIs) such as the U.S. focus more on hierarchy and are motivated to enhance their status through competition and achievement[3]. Research has also established individual differences in such cultural orientations (Triandis & Gelfand, 1998). Our studies examine the role of cultural orientation in moderating whether rude service is experienced as a power threat.

We anticipated individuals high (vs. low) in VI to be more sensitive to power, and hence experience greater threat and power loss when engaging a rude, low rank server – a receptionist. Consequently, people high (vs. low) in VI should feel more negative with a rude receptionist than a rude, high rank server such as a hotel vice president. In the latter case, because the sense of power loss may not be as acute, high VI people may not feel as motivated to regain power. Hence, we predict that the motivation to regain power should be salient only when high VI individuals encounter a rude, low rank server.

Because powerlessness is an aversive state, individuals in a low power state exhibit compensatory reactions by showing an increased desire to acquire status products (Rucker & Galinsky, 2008). Hence, we predict that high VI individuals will show similar compensatory reactions for power loss after engaging a rude, low rank server. To further support this compensatory hypothesis, we also predict that when given a chance to self-affirm, the sense of power loss will be reduced among those high in VI and the described effects of engaging a rude, low rank server will be erased.

In previous studies, we showed that high (vs. low) VI individuals are more dissatisfied and experienced higher negativity when they engage a rude, low rank server than a high one (Wong & Shavitt, 2009). In this project, we extend the analysis to establish the role of compensatory power motives. In three studies, participants' cultural orientation was measured by a 16-item scale (Triandis & Gelfand, 1998). In study 1, we show how power threat is buffered by self-affirmation. Participants randomly assigned to the self-affirmation condition listed four ways which they had exceeded other's expectations (Johnson & Stapel, 2007); those in the control condition described four features of a tree. Next, they read about a rude hotel encounter with either a receptionist or vice president. As predicted, in the control condition, people high in VI reported higher dissatisfaction and negativity with the receptionist than the vice president, replicating our previous results. In the self-affirmation condition, this effect disappeared.

In study 2, we tested the compensatory hypothesis that high (vs. low) VI individuals exhibit increased motivation to restore power when they faced a low rank, rude server. Participants first read the hotel scenario with service ranks manipulated. Next they responded to the Multi-Motive Grid (MMG) (Sokolowski, Schmalt, Langens, & Puca, 2000) which combines the features of the projective Thematic Apperception Test (TAT) with features of self-report questionnaires. The MMG consists of a set of ambiguous pictures depicting situations that can arouse power-related thoughts and fears, and respondents indicate what themes they see in the pictures. Participants motivated by power concerns should see more power-related themes. Indeed, our findings showed that people high (vs. low) in VI who read the rude receptionist scenario reported more power-related themes, indicating stronger power concerns.

Next, we extend the above logic by showing that power concerns should translate into the desire to acquire status products (e.g., fur-coat). In study 3, participants indicated their willingness to pay for status vs. neutral products after reading the service scenario (Rucker & Galinsky, 2008). Consistently, high (vs. low) VI individuals who read the rude receptionist scenario reported higher willingness to pay for status products, but not for neutral products (e.g., minivan).

This research provides an enhanced understanding of the link between cultural values and power motivations. It also reinforces the value of studying the distinction between vertical and horizontal cultural orientations. In our studies, only the VI orientation consistently moderated the effects of service rank.

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[3] Nesting the Horizontal-Vertical distinction over INDCOL creates a four category typology. The other three typologies are: (1) People from horizontal, individualistic societies (HIs; e.g., Danes) tend to view themselves as having equal status with others; they do not compete for power or achievement but focus on being self-reliant. (2) People from vertical, collectivistic societies (VCs; e.g., Koreans) tend to focus on enhancing in-group status instead of personal status through sacrificing personal goals. (3) Lastly, people from horizontal, collectivistic societies (HCs; e.g., Israeli kibbutz) do not focus on status but on sociability, benevolence and interdependence with others.

Session 3.6

The Beauty Penalty: Too Sexy for the Job?
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Attractive people are perceived as more sociable, dominant, sexually warm, mentally healthy, intelligent, and occupationally and interpersonally competent than unattractive people (see e.g. Dion, Berscheid and Walster, 1972; Feingold 1992; Langlois et al. 2002). In Economics, this advantage has been shown to translate into higher salaries (Hamermesh & Biddle, 1994), which is often referred to as the "beauty premium".

We conjecture that a "beauty penalty" may occur for activities and professions that require little social but extensive analytical skills or training. This may be the case because people believe that attractive individuals perform better in professions that require social skills as their beauty pays off in social interactions. In contrast, less attractive individuals incur higher cost in social interactions than attractive individuals, and are therefore more likely to engage in analytical activities and extensive training that do not require or even inhibit social interactions.

For Study 1 we selected 12 photos (3 of attractive and 3 of unattractive individuals of each gender) from a large set of working professionals. 305 respondents rated each photo along a single dimension from the following set: attractiveness, intelligence, responsibility, trustworthiness, social skills, analytical skills, and estimated age. With photos as unit of analysis, we regressed averaged ratings of analytical skills and averaged ratings of social skills on each of the other ratings. Consistent with our prediction, people (photos) perceived as more attractive were perceived to have better social skills (standardized $b = 0.88$, $t(11) = 3.55$, $p = .012$) but to have worse analytical skills (standardized $b = -0.56$, $t(11) = 3.25$, $p = .018$).

In Study 2 we examined whether this beauty penalty would influence people's preference for professionals. In a pretest, we found that for lawyers, people judge social skills to be relatively more important than analytical skills, but for doctors they judge analytical skills to be more important than social skills. Thus, we expected participants to prefer attractive lawyers to less attractive lawyers, but to prefer less attractive doctors to attractive doctors. The study deployed a 2 (lawyer vs. doctor; between-sbj.) x 2 (attractive vs. less attractive; within-sbj.) x 2 (high stake vs. low stake; between-sbj.) design. 105 participants were asked to imagine that they either had a medical condition or had to go to court to appeal a property tax estimate and were provided with the CVs of two equally qualified doctors/lawyers with a photo (CVs, gender, and presentation order were counterbalanced). Participants were asked which of the two professionals they would choose (1 = prefer less attractive expert, 9 = prefer attractive expert). Additionally, we manipulated the stake in the decision as either high (kidney surgery or an $8,000 tax appeal) or low (getting a drug prescription or a $500 tax appeal). The low-stakes condition seeks to rule out the possibility that preferences for attractive lawyers and unattractive doctors may be driven by people's general expectations of such professionals, rather than by their expected performance. We expect the interaction between attractiveness and task to disappear when the stakes are low.

Supporting our hypothesis, participants preferred attractive lawyers to less attractive ones ($M = 5.66$, $SD = 2.50$) but preferred less attractive doctors to attractive ones ($M = 4.20$, $SD = 2.91$; $F(1,101) = 7.99$, $p = .006$). Furthermore, the interaction of profession and stake was marginally significant ($F(1,101) = 3.46$, $p = .066$). In the low stake condition participants were indifferent between the two lawyers ($M = 5.29$, $SD = 2.48$; t-test against scale midpoint 5 of indifference $t(30) = 0.65$, $p = .52$) and the two doctors ($M = 4.78$, $SD = 2.80$; t-test against indifference $t(22) = 0.37$, $p = .71$). In the high stake condition, participants preferred the attractive lawyer to the less attractive lawyer ($M = 6.07$, $SD = 2.51$; t-test against indifference $t(27) = 2.26$, $p = .032$), but preferred the less attractive doctor over the attractive doctor ($M = 3.61$, $SD = 2.97$; t-test against indifference $t(22) = 2.25$, $p = .035$). These results demonstrate that the more important are analytical/social skills of the expert to solve the problem at hand, the stronger is the beauty penalty/premium.

In Study 3, we manipulated the relative importance of social skills to analytical skills within the lawyer profession. Participants were told that they needed to hire a lawyer for a property tax reduction appeal. Half of the participants were told that the lawyer needed to file a written appeal with the Board of Review (analytical skills condition), the other half was told that the lawyer needed to present their case in front of a jury (social skill condition). The study deployed a 2 (attractive vs. less attractive; within-subjects) x 2 (written appeal (analytical skill) vs. jury (social skill); between-subjects) design. In an online survey, 396 participants were provided with the CVs of two equally qualified lawyers with a photo (CVs, gender, and presentation order were counterbalanced), and asked which one they would choose. Consistent with a 'beauty-premium' for social skills, a majority of subjects in the jury-trial condition selected the more attractive lawyer (58%). In contrast, consistent with our hypothesized 'beauty-penalty' for analytical skills a minority selected the more attractive lawyer for the written appeal petition (43%; test for difference: $z = 2.22$, $p = .013$).

In conclusion, a beauty penalty might be as common as a beauty premium depending on what skills are deemed to be more important, social or analytical skills.

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The Intelligence of Judging Products Based on Looks

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There is a common belief that making decisions based on the way something looks is not an intelligent way to think. There is the familiar adage that one ought not to "judge a book by its cover" and this bias against evaluation based on appearance is likely considered, either consciously or unconsciously, by people in a variety of situations – from meeting new people to selecting a new household appliance. Moreover, recent work indicates that respondents consistently under-value the importance of product aesthetics in choice and also look to other, more functional, attributes to justify the choice of more attractive products (Townsend Sood working paper A). Indeed, there seems to be some common understanding that performance and functionality ought to play a greater role in evaluation than looks. And yet, in a series of studies we find that more intelligent individuals are more likely to choose better looking options – even when selecting good looks means selecting poorer functionality or a worse brand. Along with functionality, we examine the trade-off made with brand as this is another attribute that, even more so than design, may be considered an indicator of overall quality. Moreover, in the realm of fashion-related products it functions similarly to design as a source of value and as a signal to others. And yet, the preference for good design over a well-known brand persists, despite intelligent individuals having greater overall brand knowledge. That intelligent people are more likely to allow design to drive their choices, suggests there is some value in good design that ought to be further recognized.

The Cognitive Reflect Task (CRT) was introduced to measure one specific type of cognitive ability – the propensity to question one's initial response and correct it if there is a better one (Frederick 2005). Yet, it is positively correlated (with medium correlation) with self-reports on various intelligence and performance measures including the Scholastic Aptitude Test (SAT, .44) and the Wonderlic Personnel Test (WPT, .43). Thus, we used the three question CRT, as well as ten questions from the Mill Hill vocabulary test, as an indicator of overall intelligence. Using the CRT as part of our intelligence test, in fact, worked against our hypothesis that more intelligent people would choose based on design. Previous research (Townsend Sood working paper B) provides evidence for a more system 1-based processing of design relative to the more system 2-like processing of functional attributes, finding that cognitive load increases the choice share of the more aesthetic option. Based on this finding, one would expect those who are more prone to cognitive reflection and who are less likely to give the initial or more system 1-based response are also less likely to base a decision on design and more likely to take into account the functional attributes which are, presumably, processed with more reflective system 2 thinking. Therefore, our findings that intelligence, as partially measured by CRT, and preference for good design are correlated is particularly intriguing.

In Study 1 we found that when faced with a hypothetical choice between two options where one performs better on a functional attribute and the other is better looking, those who score better on the CRT as well as our overall intelligence indicator (combination of CRT and Mill Hill vocabulary score) were more likely to select the better looking, though functionally inferior option, than less intelligent respondents. One possible explanation for these results is that, despite asking respondents to assume the products were the same on all other attributes, because we provided information on only one functional feature along with design, perhaps the selection of good looks was driven by a notion that good looks implies better performance in other domains.

In Study 2 we examined design versus brand. Moreover, we examined fashion-related goods (e.g. clothing, accessories) where functionalities are less relevant. Thus in Study 2 respondents chose between two options where one was good looking and from an unknown brand while the other was less good looking and from a well-known brand – e.g. attractive Sun Song-branded dress versus unattractive Donna Karan-branded dress. Again, we found that more intelligent respondents were more likely to select the better designed options, despite the unknown brand name.

In our third study we examined this same issue using a different probing mechanism and asked respondents to give a price at which they would be equally likely to purchase two options. Respondents were shown a branded fashion item with a price and asked at what price they would be as likely to purchase a counterfeit version. Thus, in this study we were examining more specifically the value of an authentic brand-name to consumers. Consistent with our previous results, intelligent respondents valued the authentic brand-name less, pricing the counterfeit version higher, on average, than less intelligent respondents and, again, indicating that the overall look of the product is more important to highly intelligent individuals than those less intelligent..

The research presented here reveals that, at least in consumer products, valuing looks is associated with higher intelligence. These results are counterintuitive with respect to both our lay-theories about not "judging a book by its cover" as well as research on CRT, system 1 versus System 2 processing, and design. But also, these findings build on other work on both CRT and intelligence – some of which is also presented in this session.

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Positive Effects of Negative Publicity: Can Negative Reviews Increase Sales?

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Negative publicity often hurts. Negative rumors (e.g., a company uses worm meat in their hamburgers) decrease brand evaluations (Tybout, Calder, and Sternthal 1981) and negative reviews hurt purchase likelihood and sales (Basuroy, Chatterjee, and Ravid 2003; Huang and Chen 2006). At the same time, however, a number of intriguing examples seem to contradict these findings. A wine reviewed as being "redolent of stinky socks," for example, saw its sales increase by 5% and while the movie Borat made relentless fun of Kazakhstan, Hotels.com reported a 300 percent increase in requests for information about the country after the film was released. Can negative publicity actually have a positive effect? And if so, when?

We argue that negative publicity can positively affect consumer choice by cueing, or priming people to think of the product. Just as environmental cues, such as advertising, can make people more aware of a product, even negative cues can be useful by making products more top of mind. Accordingly, we suggest that whether negative publicity has positive or negative effects will depend on existing product awareness. When product awareness is already high, negative publicity should have little ability to boost awareness (see Nedungadi 1990), but should lower product evaluation, and consequently, decrease consumer choice. When product awareness is low, however, negative publicity should increase awareness and may boost choice if awareness and publicity valence become dissociated in memory. Similar to the sleeper effect (Hannah and Sternthal 1984), people may have a feeling of awareness, or remember they heard something about the product, but the valence may be forgotten. Due to decreased processing and encoding in memory of unknown product information, this dissociation should be particularly likely when product awareness is low. Three studies test these hypotheses using a combination of experimental methods and econometric analysis.

Study 1 investigates the effect of publicity valence and product awareness on *actual* book sales. We use weekly sales data to estimate the impact of *New York Times* book reviews on the sales of over 200 hardcover fiction titles. To avoid potential endogeneity bias, our analysis focuses solely on reviewed books, and we examine whether positive and negative reviews have different effects on post-review sales patterns. First, we systematically classified reviews as positive or negative using a textual search algorithm. We then estimate the impact of each type of review among new and well established authors (i.e., those that have published more than 10 books).

As predicted, analyses revealed a review valence by product awareness interaction. While a positive review increased sales of both new and established authors (between 32% and 52%), the effect of negative publicity depended on whether the author was well known. Negative publicity decreased (-15%) sales of established authors, but it had the opposite effect on relatively unknown (new) authors, *increasing* sales by 45%.

Study 2 investigates these effects in a more controlled laboratory setting while also examining the role that the dissociation of valence in memory plays in these effects. We suggested that valence might be dissociated over time, so to test this possibility, we manipulated whether people reported purchase likelihood either right after reading a product review, or after a delay. We also manipulated review valence and product awareness (i.e., whether an unknown or well-known product was reviewed).

As expected, analyses revealed a 3-way interaction. For well known products, there was only a main effect of review valence: Participants reported they would be more likely to purchase well known products that were positively (rather than negatively) reviewed, regardless of whether they reported purchase likelihood right away, or after a delay. In contrast, for unknown products, delay moderated the effect of review valence on purchase likelihood: Review valence had an effect when participants reported purchase likelihood right away, but this dissipated such that after delay, purchase likelihood was similar after a positive or negative review.

Study 3 directly examined the mediating role of increased awareness. First, participants reported their awareness of a number of books. They were then exposed to either a positive or negative review about either a well known or unknown book from the set. Finally, after a long delay, participants again reported product awareness (which allowed us to calculate whether publicity affected awareness) as well as product evaluation and purchase likelihood.

Results support the expected pattern of results. For well-known products, being reviewed did not affect product awareness. But while positive reviews increased purchase likelihood, negative reviews decreased it, and these outcomes were mediated by the affect of review valence on product evaluation. For relatively unknown products, in contrast, review valence had little effect on product evaluations. Both positive and negative reviews boosted purchase likelihood, however, and this was mediated by the affect of reviews in increasing product awareness.

Overall this investigation shows that even negative cues can sometimes have positive effects. Our findings delineate conditions under which negative publicity will have positive versus negative effects on purchase likelihood and actual sales, while also shedding light on the mechanism behind these effects.

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Session 3.7

The Sensation of Luxury: Reward-Related Brain Response to Luxury Brands Depends on Goal-Congruent Cues.

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The acquisition of beautiful, costly, or prestigious goods is an age-old human consumption behavior that finds its modern expression in luxury brands. Given the strong appeal of luxury brands even in inauspicious personal or societal economic environments, two questions emerge: (a) is there a neurophysiological component to luxury brand appeal and, (b) if so, what can mitigate this neurophysiological response? We hypothesize that there is a neurophysiological response to luxury that is congruent with desire or wanting, but that this response depends on the presence of goal-related cues. For consumers who wish to reduce their consumption of expensive luxuries, such results would provide good news. Though luxury brands feel good, exposure to messages of frugality reduces this value and, thus perhaps the temptation. While indulgence goals may seem more prevalent in the marketplace, current consumption contexts also promote well-established goals to save. To examine individuals' neural responses to luxury brands, we compare luxury brands to other well-regarded and familiar brands that are positioned in terms of practicality.

Research on consumer attitudes toward luxury is often limited by methods prone to socially desirable responding, self-generated validity, or the inability to articulate complex cognitive/emotional responses operating automatically. The use of fMRI methodology allows us to circumvent these issues and more directly assess neural processes underlying response to brands across conditions. Based on two recent fMRI studies that offer important insight into a neuroeconomic perspective of luxury valuation, we designed an fMRI protocol to examine activation in areas of the brain known to play a role in valuation and reward (Hare et al. 2008, Plassmann et al. 2008). Research finds that medial orbitofrontal cortex (mOFC) and anterior cingulate cortex (ACC) activation is correlated with computations of amount of reward associated with an option under consideration (i.e. goal value). The OFC is one of the most enigmatic regions of the brain, but is believed to be involved in the regulation of planning behavior with sensitivity to reward calculations and, as such, responsible for connections between reward and hedonic experience. As a basis for our research, these findings suggest a) the probable existence of a neurophysiological component to the appeal of luxury brands, b) that this valuation is likely to be goal-oriented, and c) that the mOFC and ACC encode context dependent goal valuation activation.

We expect to observe increased activation in the mOFC and ACC for luxury brands relative to practical brands when the cue is consistent. We propose that goal valuation effects depend on congruency between the cued goal (indulgence vs. frugality) and the brand. Secondly, we do not expect increased goal-activation for practical brand images when they are preceded by cues related to practicality, as utilitarian goals do not invoke the same degree of associated reward value. For automaticity researchers, it will be interesting to see that this pattern of results is consistent with goal-means valuation rather than mere schema activation, as this distinction represents an important debate in current priming research.

To test these hypotheses, we scanned 24 participants while they viewed four cue-brand conditions in a 2 x 2 within- subjects design that crossed the consumption goal cued (indulgence or frugality) and the brand logos presented (luxury or practicality). Thus, in condition 1, three indulgence-oriented words preceded three luxury brand logos (IL); in condition 2, three frugality-oriented words preceded three practical brand logos (FP); in condition 3, three indulgence-oriented words preceded three practical brand logos (IP); and, in condition 4, three frugality-oriented words preceded three luxury brand logos (FL). Cue words were carefully chosen to avoid pejoratively nuanced consumption goals (e.g., spoiled, cheap). Brand logos were pretested to ensure familiarity and that both luxury and practical brands were equally well-regarded.

Imaging analyses indicated that, as predicted, congruency between an indulgence cue and luxury brand (contrast of IL > FL) resulted in increased ACC and mOFC activity. We observe that luxury brands paired with an indulgent goal cue evoke an affective response compared to a similarly consistent frugal goal cue and practical brand pairing. Compared to other well-liked but more attainable brands, luxuries represent a special case in the marketplace in that they are largely aspirational, often reflecting a higher-status future self. Thus, luxury brands may evoke a negative affective response as a "pain of wanting." Here, similar to research that demonstrates craving responses to drug and sexual or food cues, we find that luxury brands generate increased activity in the insula (IL > FP). What happens to brain response for practical brands when they are preceded by indulgence cues? We observed a post-hoc increase in bilateral insula activity when we contrast Condition 3 versus Condition 2 (IP > FP); although this activation must be interpreted with caution, its presence may reflect a "pain of disappointment," consistent with recent research positing disappointment is encoded in the insula.

The contributions of this research are two-fold. First, building on recent research on relative goal value, our study shows that the appeal of luxury brands is associated with neurological responses contingent on the presence of consumption related cues—the mere presence of a luxury cue affects the valuation of luxury brand representations. This study is the first to demonstrate that goal valuation occurs automatically within a passive viewing context. Automatic valuation would be a necessary precursor to the selection of luxury goods when an indulgence goal has been activated. Given this automatic valuation and subsequent nonconscious motivation, perhaps it is not surprising that luxury appeals have increasingly become the target of mass marketing efforts in the early 21st century. Second, as consumers strive to balance their immediate desires and long-term goals, they often switch between indulgence and frugality goals or shield their salient goal from temptation. However, the data here suggest that the presence of a conflicting goal may serve to diminish the neurological appeal of the luxury image by reducing the goal-related valuation activation triggered by it. By showing that context and congruence affects the encoding of goal value in consumer settings, our findings complement recent work on context/emotion influences on choice.

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I Can Almost Taste It Now : How Anticipatory Delays Influence Neural Activity During Consumption

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In many situations consumers experience a delay between choice and consuming or experiencing a product. The overall question that we address in this research is, how does the anticipation of receiving a product shape the neural coding of the consumption experience? Behavioral studies have suggested that in many cases the anticipation of a positive or negative outcome can change the value that is experienced at consumption (e.g. Loewenstein, 1987; Nowlis et al. 2004). For example, Nowlis et al. (2004) show that uncertain anticipatory periods act to intensify both appetitive and aversive taste experiences.

Data from neuroscientific research presents a more complicated picture. For example, in the realm of taste, mere anticipation evokes its own signature pattern of neural activity but can engage some of the same neural circuitry involved in processing rewarding experiences (O'Doherty et al 2002). In addition, a period of negative anticipation or "dread" before an experience such as an electrical shock activates many of the same brain areas that are involved in processing physical pain (Berns et al. 2006). However, Berns et al. (2006) also found that delays before receiving a shock did not alter the eventual experience of pain itself as reported by both neural and behavioral measures. Thus, it remains unclear how and when anticipation actively changes experience.

A related and unexplored issue is whether the effects of a delay are determined by its duration.   Specifically it is not clear whether more time should enhance or attenuate the influence of anticipation. To address these unresolved questions, we examined the effects of a short or long anticipation time on a pleasant or unpleasant consumption experience at the neural level using functional magnetic resonance imaging (fMRI). On any particular trial, participants received a brief cue that indicated the valence of a liquid they would receive (unpleasant salty tea or pleasant sweet juice), as well as the number of seconds they would have to wait from the onset of the cue for the liquid to arrive. This anticipatory period lasted either 2 (short) or 6 (long) seconds. Once the liquid was delivered, participants were instructed to hold it in their mouths, tasting it until directed to swallow. They finally received a neutral rinse solution at the end of every trial. Data was collected from 17 participants who received four trial types, comprising a 2 (negative vs. positive) by 2 (2s vs. 6s) within-subject design.

Our focal analysis concerned the first four seconds during which participants were actually tasting the sample liquid. We contrasted neural activity during this taste experience when it had been preceded by short compared to long anticipatory delays. Activity in affective and valuation related brain areas was stronger when the participants had only had a short time to expect the onset of the taste. In detail, the bilateral insula, caudate nucleus, anterior cingulate cortex and medial prefrontal cortex were all more active when taste was preceded by a short rather than a long cue. The overall pattern found was similar for both pleasant and unpleasant liquids – the only difference due to valence appeared to be a higher valuation of the pleasant liquid as signaled by marginally increased activity in the medial orbitofrontal cortex.

These results suggest that the value processing of taste attenuates as the duration of anticipation gets longer. Further careful analysis is required to draw process-related conclusions from these initial results. However, one tantalizing possibility may be that since there is some overlap between neural areas involved in the anticipation and experience of taste, a long anticipatory delay allows sufficient time for the brain to react emotionally to the expected pleasant or unpleasantness of the upcoming experience. Thus by the time the stimulus itself arrives, the evaluatory neural response has already occurred or habituated.

On the surface, this appears to disagree with behavioral work such as that done by Nowlis et al. (2004.) However, it should be noted that in those experiments, participants were unaware of when they would be receiving their outcome. In addition, the anticipatory period was much longer. In our experiment, the durations were defined and were within a timescale that could easily be estimated by the participant. However, given this conflict, future studies need to explore whether the impact of a post-choice delay in the consumption experience is affected by uncertainty about the duration of the anticipatory period.

A main contribution of this study lies in suggesting that the length of an anticipatory delay may decrease the emotional impact of the experience itself. This could be analogous to "spoiling the surprise" for positive outcomes, suggesting that it is better not to provide consumers information about a pleasant experience too far in advance. However, for aversive experiences it may have a silver lining, allowing people to prepare for negative events. Overall our results have useful implications for marketers in choosing how and when to give consumers information when the impact of consumption is important, but its occurrence is delayed.

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Neural Evidence Against the Pain of Paying Theory of Cost Processing

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A seminal account proposed for the hedonics underlying consumption decisions distinguishes between two opposing hedonic factors: rewarding factors like the pleasure derived from consumption and aversive factors like the costs of the consumption often referred to as "pain of paying" (Prelec & Loewenstein 1998). Previous research in neuroeconomics has investigated how decision utility computations are represented in the brain (Plassmann et al. 2007) and whether these representations differ for different modalities such as primary or secondary rewards (Chib et al. in press). However, despite its importance for consumer decision-making, little is known about how the human brain computes costs during decision-making. In particular, it is unknown if different types of costs (e.g., monetary costs vs. physical pain) are processed by the same brain networks. This is the central question of this paper. In particular, we investigated whether that representation differs between abstract costs (e.g. paying money) or somatosensory costs (e.g. tolerating electric shocks) that are matched in economic value.

In consumer behavior theories it has been suggested that consumers consider abstract monetary prices as a potential loss that triggers a negative affective response that resembles the feeling of physical pain (so-called "pain of paying", see Prelec & Loewenstein 1998, Rick et al. 2008). A recent neuroimaging study that investigated the neural correlates of different phases in the purchasing process supports this view (Knuston et al. 2008). The authors found that in a brain area that is part of the human pain matrix, the insula, brain activation was negatively correlated with purchasing during the choice period (i.e., when subjects chose to purchase or not). However, these results were based on inverse inferences about the insula as their study did not allow comparing the act of paying with the experience of physical pain. Given that the insula is a highly interconnected brain area that has also been found to be involved in various other mental processes important for consumer decision-making, the current findings are inconclusive.

In this paper we investigated the neural basis of cost computations by scanning hungry subjects' brains (N=21, aged 18-35, mean 23.65 years) while making 280 purchasing decisions. Subjects could either pay in monetary units ($0-$1.50) and or in subjective equivalent physical pain units. Several days before the fMRI experiment, we performed a calibration of their subjective pain tolerance levels in which we matched their pain tolerance to monetary values using a BDM auction mechanism (Becker, DeGroot, and Marschak, 1964). Because of the characteristics of this auction, individuals always bid their 'true' utility for the object, in our case the right to avoid receiving an electric shock of different intensities (Wertenbroch and Skierra, 2002). During a second pre-scanning task, subjects underwent another BDM task, this time to sample subjects' willingness-to-pay (WTP) for the 40 different liked food items. The fMRI task consisted of two different trial types: Trials in which subjects could decide to buy 40 food items at four different monetary prices ($0, $0.50, $1.00, $1.50) (= 160 '$ trials') and trials in which they could decide to buy the same 40 food items for tolerating pain (electric shock) at three different pain intensities (=120 'V trials') that were matched with the three different non-zero monetary prices.

For the behavioral data analysis, we created dummy variables for WTP and purchasing prices in money and physical pain trials and entered them into a mixed effects logistic regression analysis. The model shows a good overall fit (Likelihood Ratio test: χ^2=3174.6, DF=22, p<.001) and each individual predictor had a significant regression coefficient ($\beta_{wtp\_\$}$ = 3.35, p<.001; β_{wtp_v} = 3.01, p<.001; $\beta_{price\_\$}$ = -2.41, p<.001; β_{price_v} =-2.25, p<.001). We tested differences in the regression coefficients between money and physical trials for WTP and price predictors and found significant differences (both p<.001). For the fMRI data analysis we estimated a hierarchical mixed effect GLM to investigate differences and overlaps for brain areas that correlated with the size of monetary and physical pain costs. We found that the insula, a region involved in pain processing, correlated positively with the size of physical pain prices, but not with the size of monetary prices (p<.001, uncorr.). A conjunction analysis revealed that no overlapping areas can be found (p<.001, uncorr.).

Taken together, these results show that people react differently to "monetary" and "pain costs" on a behavioral and on a brain level. Our fMRI results suggest that paying with money might trigger very different emotional processes than those involved with more "physical" forms of costs. These results call into question "pain of paying" theories at least for everyday consumption decisions. Our results have important implications for disadvantageous decision-making such as overspending and transformative consumer research.

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Session 4.1

Corporate Hypocrisy: Overcoming the Threat of Inconsistent Corporate Social Responsibility Perceptions

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In response to increased levels of sensitivity of customers, employees, and other stakeholders to social and environmental issues, companies continue to develop and communicate more socially responsible policies and procedures. Yet, as businesses globalize, reported incidents of socially irresponsible firm behaviors are bound to increase due to rising complexity. For instance, the coffee-house chain Starbucks has long distinctively presented itself as an avid adopter of fair trading practices (Starbucks 2005). However, the company recently has been criticized for trying to inhibit Ethiopian farmers from securing trademark protection for their coffee and being able to obtain a better price for themselves (Adamy and Thurow 2007). Likewise, McDonalds has made a commitment to reduce unhealthy artificial trans fats but the extent of such fats in their products varies greatly across different countries (Stender et al. 2006). Consequently, consumers are likely to be exposed to inconsistent information about firms' stated CSR policies on the one hand and their actual practices on the other hand. The deviations between public CSR statements and business practices disclosed by other sources can have dramatic effects on the firm's image and sales. Thus, research is needed to understand the impact of these inconsistencies on consumers as well as the actions firms can take to mitigate negative perceptions.

Past research has examined the impact of both positively and negatively valenced CSR information and found that negative CSR information has a stronger effect than positive information (e.g., Sen and Bhattacharya 2001). While this line of work has investigated the impact of information that is either positive or negative, no research seems to exist that investigates how consumers react to directly inconsistent CSR information. The present research examines the effects of varying configurations of inconsistent CSR information on consumers and thereby the effectiveness of three communication approaches that firms may deploy. To examine these issues, we introduce the concept of perceived corporate hypocrisy and investigate its dynamics as a key psychological mechanism through which inconsistent CSR information impacts consumers. Three behavioral experiments are used to address these issues.

Transferring social psychological research by Barden, Rucker, and Petty (2005) to the context of our research, we introduce the concept of perceived corporate hypocrisy as a consequence of inconsistent CSR information and suggest the existence of an order effect whereby hypocrisy perceptions are higher when the firm's statements are presented first, followed by reported corporate actions (i.e., a proactive CSR strategy gone wrong) than in the case of behaviors succeeded by statements (i.e., a reactive CSR strategy). This order effect is due to attributions of a dispositional change when statements are made after initially observed behaviors. That is to say, people are inclined to believe that the inconsistent entity changed its position from the position suggested by its earlier behaviors (Barden et al. 2005). Based on extant CSR related research, we also theorize that corporate hypocrisy has a negative impact on consumers' attitudes toward firms both directly as well as indirectly through negatively affected CSR beliefs. Moreover, we suggest that hypocrisy functions as a key psychological mechanism in consumers' processing of inconsistent CSR information, exerting a mediating role in the impact of such information on the dependent variables of CSR beliefs and attitude toward the firm. Our first experiment provides supportive findings.

Next, we introduce additional measures that companies may deploy to influence the processing of inconsistent CSR information, thereby avoiding perceptions of corporate hypocrisy and its negative consequences. Specifically, we hypothesize an interaction effect involving the abstractness of firm statements and the impact of information presentation order on hypocrisy. The results of our second study suggests that statement abstractness indeed tends to decrease perceptions of corporate hypocrisy in cases of statements followed by contrary behaviors and to actually increase hypocrisy when behaviors precede firm statements. This effect occurs because when both elements of information exhibit a similar degree of abstraction the information presented initially become more mentally accessible, thereby creating the realization that the same validation criterion applies (Ziamou and Ratneshwar 2003). This perceived compatibility then increases the likelihood of attitude change, that is, the contrary information presented last being more influential (Johar et al. 2005). The second experiment further replicated the key findings of the first study.

Adopting an inoculation theoretical perspective, our final study tests the impact of inoculation treatments as an additional counter measure that companies may deploy when reports of negative corporate actions have already occurred or can be anticipated. Inoculation treatments, consisting of both a moderate degree of negative information and a corresponding refutational defense or justification (Compton and Pfau 2005), can reduce the perceived inconsistency in information about an object and thereby reduce negative attitude changes toward it (Tannenbaum et al. 1966). The findings of our third experiment suggest that the insertion of an inoculation message between the inconsistent CSR statement and reported behavior will reduce hypocrisy perceptions for both proactive and reactive communication scenarios.

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Does It Hurt to Communicate the Good Deeds of a Luxury Brand?
Power Concerns and Attitudes toward Luxury Brands Positioned on Social Responsibility

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Luxury brands have been quite varied in their support of CSR initiatives. A recent report by the WWF suggests that luxury conglomerates do not perform well on CSR (Bendell & Kleanthous, 2007). However, some luxury brands including Bulgari, MontBlanc, and Swarovski seem to be interested in changing this view by embracing a CSR agenda (Makeluxurycount, 2009). Although some luxury brand managers are engaging in CSR initiatives, we know little about consumer responses to their CSR actions since most studies appear to have focused mainly on non-luxury brands. Yet, we know from prior research that luxury brands possess certain unique characteristics that elicit different consumer responses compared to non-luxury brands (e.g., Park, Milberg, & Lawson, 1991). Furthermore, luxury products and brands are often purchased because of their status affordances (Veblen 1899/1994), particularly by consumers who are motivated to acquire status as a form of power (Rucker and Galinsky 2008; Winter 1978). Thus, luxury brand's distinctive role in satisfying status goals offers a unique opportunity for examining how enduring consumer goals affect CSR outcomes.

The impact of enduring status goals on the evaluation of luxury brands' CSR endeavors seems particularly important given the potential incompatibility of status and social responsibility concerns. A significant body of prior research suggests that the pursuit of values associated with status/success (power/achievement values) and social responsibility/equality (universalism/benevolence values) are psychologically incompatible with one another (Schwartz, 1992). Recent research further indicates that consumers in a variety of countries rate luxury brands very high in terms of status associations and very low in terms of a socially responsible image (Torelli et al., 2009). Evidence pointing to an incongruity between status and CSR images suggests that engaging in CSR actions could potentially dilute the status perceptions of luxury brands.

We propose that enduring status goals associated with power would facilitate consumers' interpretation of CSR information in terms of its status affordances. Prior research in psychology suggests that the extent to which people have these enduring power concerns depends on their value orientation. More specifically, individuals who are high in vertical individualism (VI) exhibit chronic concerns with acquiring status as a form of power, whereas those who are low in VI do not exhibit such concerns (Torelli & Shavitt, 2009). Encountering information about a luxury brand would provide high-VI individuals with the cues that trigger status-seeking goals, which would in turn facilitate interpreting incoming CSR information about luxury brands in terms of their status affordances (see Verplanken & Holland, 2002). As a result, their status perceptions of a luxury brand would be lower when it is positioned on CSR than when it is not. We expect that brand evaluations will exhibit similar effects, since status perceptions are an important source of brand equity for luxury brands (Keller, 2007). These effects are not likely to emerge among low VI individuals, who do not share the same status concerns and who are less likely to interpret the CSR actions of a luxury brand in terms of status.

We test these predictions in four experiments using real and hypothetical brands. In experiment 1, participants saw an ad positioning Rolex on either CSR or status, and subsequently indicated their brand evaluations and their status perceptions. Participants also completed the Triandis and Gelfand (1998) scale for VI orientation. When exposed to CSR information about a luxury brand, high-VI individuals' status perceptions and evaluations of the brand were less favorable than in the baseline condition containing only status information. These effects were absent among low-VI individuals.

Experiment 2 demonstrates that the effects are driven by status concerns linked to power, and not to other extraneous factors associated with a luxury brand (e.g., high quality). We either primed power or not before presenting participants with a fictitious brand described (or not) in terms of CSR features. Priming status among high-VI individuals led to a decline in status perceptions (and brand evaluations) when CSR information was present, in comparison to a baseline condition where the CSR information was absent. In contrast, these effects did not emerge for high-VI individuals in the control condition or among those low in VI.

The last two studies demonstrate the process, such that these negative effects of CSR for luxury brands can be offset by encouraging elaboration about the congruity between status and CSR (experiment 3) and also by designing CSR actions that reflect the brand's luxury status (experiment 4). In experiment 3, we either encouraged participants to elaborate upon the congruity between CSR information and status or not (control), and asked them to evaluate a brand positioned or not on CSR. After seeing a luxury brand positioned on CSR, high-VI participants rated the brand and its status perceptions less favorably than when the brand was not positioned on CSR. However, this occurred only in the control condition, where participants were guided by the CSR-status incongruity. When participants were asked to elaborate on the congruity between status and CSR, the effects observed for high-VI individuals dissipated.

In experiment 4, participants were exposed to a CSR activity that is consistent [inconsistent] with status (e.g., reconstruction of a luxury [affordable] hotel in New Orleans). For high-VI individuals, a CSR action that reflects status enhanced brand evaluations, status perceptions, brand image clarity, and self-brand congruity in comparison to an action that does not reflect status. These effects were different among low-VI individuals, who evaluated the brand similarly in the consistent and inconsistent conditions. Results of mediation analyses conducted in the four experiments confirmed that status perceptions mediated the interactive effects of consistency or brand positioning on brand evaluations.

We make several important contributions in this research. First, we are the first to show that enduring goals of consumers (specifically, status concerns associated with power) can have a pervasive effect on their responses to CSR activities of brands. Second, our research focuses on luxury brands, which have unique implications for the study of CSR due to the incongruity between status and CSR images. Thus, we suggest that

engaging in CSR can dilute the favorable impression associated with a luxury brand particularly among its core customers— high-VI individuals with chronic status concerns. Third, we provide evidence for the underlying process and provide luxury brand managers with actionable guidelines for avoiding the pitfalls and reaping potential rewards associated with positioning a luxury brand on CSR.

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Consumer Reactions to CSR Accompanied by A Price Increase:
The Role of Perceptions of Price Fairness, Feelings of Personal Satisfaction and Purchasing Power

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CSR today is a global phenomenon. Yet, in the words of Idowu and Filho (2009), "a gap exists in our [understanding] of how corporate entities in different political settings, economic contexts and cultural circumstances around the world understand, perceive and are indeed practicing…social responsibility." Key to this understanding are insights into the reactions of consumers to corporate action in the CSR domain. Yet we know little about how consumers outside North America and Europe think about and respond to CSR. This research attempts to respond to this urgent need by focusing on the reactions of Brazilian consumers to CSR strategies accompanied by a price increase.

In a field study conducted among 400 Brazilian consumers, we found that, at a basic level, Brazilian consumers respond to higher prices stemming from a company's CSR actions much in the same manner as consumers in previously examined cultures (e.g., Trudel and Cotte, 2009), by being not only willing to pay a price premium but also being willing to curb their impulses to switch to a competitor or complain to the company. Importantly, however, our findings shed new light on the processes through which these outcomes might occur in a developing nation such as Brazil. First, the positive reactions of Brazilian consumers to a company's CSR actions seem to be based, at least in part, on their perceptions that the CSR-based price increase is fair. More interesting, given the great disparity in purchasing power among Brazilian consumers, is our finding that the effect of perception of price fairness is much more pronounced among lower income than higher income Brazilian consumers. Second, our findings suggest that the reactions of Brazilian consumers to a company's CSR actions are also driven by their feelings of personal satisfaction from supporting a socially responsible company and the role of these feelings is much stronger for higher income consumers. This is both noteworthy and sensible given that Brazilians are known for being both benevolent (Tamayo, 2007; Tamayo and Schwartz, 1993) and more emotionally driven than, for instance, Europeans and North Americans (Rezende, 2008).

In providing the above insights about the reactions of Brazilian consumers to CSR, our research makes three basic contributions. First, it generalizes our conceptual understanding of how consumers react to CSR by documenting the basic pro-company outcomes (i.e., consumer behaviors that benefits the company, such as positive word of mouth, Bhattacharya and Sen, 2003; 2004; Sen and Bhattacharya, 2001), stemming from CSR within this new, important consumer population. Second, and more importantly, it advances our theoretical understanding of the dynamics underlying consumer reactions to CSR by examining, for the first time to the best of our knowledge, the mediating roles of both price fairness perceptions and feelings of personal satisfaction in the CSR perception – pro-company behaviors relationships. By doing so, our findings also contribute to the considerable literature on price fairness by both implicating it as a key determinant of consumer reactions to CSR and extending its influence to consumer reactions beyond purchase intentions. Third, our research underscores the relevance of consumers' means rather than merely their thoughts and feelings about CSR as a key determinant of their reactions to a CSR-based price increase. For instance, Trudel and Cotte (2009) found that consumers vary in their willingness to pay for an ethical product from a company based on their expectations regarding the ethical behavior of that company. Implicit to such a perspective, taken by most research on consumers' willingness to pay more for ethical products (see also Auger and Devinney, 2003; Creyer and Ross, 1997), is the assumption that consumers, particularly in the cultures examined (e.g., North America, Hong Kong; Australia) and among the types of products in question, are not constrained by their purchasing power. However, not only does purchasing power vary quite drastically from country to country, but also within countries. Moreover, in cultures with wider variations in purchasing power, such as Brazil, it may, as we find in our research, significantly constrain consumers' willingness to pay for CSR. This finding also points, more generally, to the potential role of demographic factors in driving consumer reactions to CSR. Given the practical importance of these factors for marketers, further research linking these factors meaningfully to the cognitive, affective and behavioral constructs typically examined by academics would be of much practical value.

What implications do our findings have for the global management of CSR? At the most basic level, our results are heartening to marketers either engaged in or thinking of engaging in CSR in that they suggest that Brazilian consumers are similar to their North American and European counterparts in their pro-company reactions to CSR. At least within limits (i.e., the 10% price increase in our research), Brazilian consumers seem to be willing to reward good citizenship even if it comes at a cost, by both buying the product and through longer-term relational activities such as sticking with the brand and not actively complaining about it. At the same time, however, our findings suggest that marketers need to segment consumers not just on ethics, values or other CSR-related dimensions that are typically top of mind (e.g., the LOHAS segment in North America) but also on demographic dimensions such as purchasing power (or income), particularly when dealing with consumers from the developing world. In fact, more research is urgently needed to understand whether the types of consumer-based value unearthed by this and related research are only a byproduct of affluence, or do these, in fact, generalize to larger, more economically diverse swaths of the world's population.

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Session 4.2

The Effects of Consumer Implicit Theories and Need for Cognitive Closure on Attitude Polarization

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Substantial research has demonstrated that simply thinking about an attitude object can result in more extreme attitudes toward the object (e.g., Tesser, 1978; Tesser, Martin, & Mendolia, 1995). Although research in this area has investigated several moderating factors such as schema complexity (Tesser & Leone, 1977; Linville, 1982) and inter-attribute correlations (Judd & Lusk, 1984; Millar & Tesser, 1986), the vast majority of research only investigates positive polarization. Less is known about movements toward the negative extreme.

Since the effects of advertising have been shown to be either positive or negative depending on varying implicit theories that are activated by consumers (Hung & Wyer, 2008), a better understanding of negative evaluative polarization is extremely important to marketers. When people are motivated to consider an advertisement, they are likely to consider that the advertiser's claims are generally exaggerated and designed to persuade (Persuasion Knowledge Model; Friestad & Wright, 1994). Actively thinking about product information communicated by an advertisement should trigger this implicit theory resulting in a negative polarizing effect. In contrast, if the communication comes from a more objective source (e.g., Consumer Reports), the standard positive polarizing effect should be found. Experiment 1 examines these predictions.

Participants were asked to imagine that they were shopping for a new cell phone plan and were provided with a brief description of a plan. Participants were informed that the information was either taken from an advertisement (low credibility) or from an article in Consumer Reports Magazine (high credibility).   Participants then rated their attitudes toward the plan on three 7-point scales (overall evaluation, overall impression, and overall assessment). Next, participants were asked to either think about the plan (thought task) or to work on a crossword puzzle (distraction task) for 90 seconds. Lastly, they rated their attitude toward the plan a second time using the same three items.

The attitude measures at time 1 and time 2 showed high internal consistency and were combined into attitude scores. The attitude score at time 1 showed no significant difference across conditions, and message source had no effect at time 1. A polarization score was computed using the difference between the attitude score at time 1 and time 2. As expected, participants in the distraction condition did not revise their evaluation between time 1 and time 2. The polarization scores were not different from zero. Participants in the thinking condition did adjust their attitude from time 1 to time 2. When the source was credible (Consumer Reports Magazine), attitudes polarized in the positive direction. When the source was less credible (an advertisement), attitudes polarized in the negative direction.

In addition to investigating source effects and negative polarization, this research also seeks to identify an additional moderator important to attitude polarization. Need for cognitive closure (NFCC) (Kruglanski and Webster, 1996) refers to a desire to form a definite opinion ("seize") and to maintain the opinion once it is formed ("freeze"). Since people high in NFCC are more likely to "seize" and "freeze" on an evaluation, they should be less likely to adjust an evaluation once it is formed. Low NFCC consumers should be more likely to draw inferences about missing information and this should contribute to attitude polarization. As a result, it was predicted that people low in NFCC would polarize but people high in NFCC would not. Experiment 2 investigates this prediction.

The cover story and stimuli were the same as experiment 1, except that only the low credibility source (an advertisement) was used. Again, attitudes were measured using the same three items both before and after the thought or distraction tasks. The same thought or distraction tasks were used as in experiment 1. Lastly, participants completed the 42-item Need for Cognitive Closure (NFCC) scale (Webster & Kruglanski, 1994).

The attitude measures at time 1 and time 2 showed high internal consistency and were combined into attitude scores. A polarization score was computed as in experiment 1. A regression analysis using the thought vs. distraction manipulation and NFCC score revealed a significant two-way interaction. As expected, participants in the distraction condition did not revise their evaluation between time 1 and time 2. Participants in the thinking condition did adjust their attitude from time 1 to time 2, but this was only the case for those low in NFCC. Their attitudes polarized in the negative direction. No adjustment was found for those high in NFCC.

This research provides important new insight into the effects of thought induced attitude polarization. Experiment 1 demonstrates that different levels of perceived source credibility can lead to either positive or negative polarization. Experiment 2 identifies an import moderator to the polarization effect, demonstrating that low NFCC consumers are more likely to draw inferences about missing information leading to attitude polarization, whereas high NFCC consumers are more likely to demonstrate attitude persistence.

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Exploring the Interplay of Associative and Deliberative Attitude Processes

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In recent years, the logic of dual-process theories has been applied to a wave of new dual-systems models of human thought and behavior. This trend is particularly evident in models of evaluation, and recent research on the topic has sparked debate regarding the formation and expression of attitudes.

One issue that has been raised concerns whether or not different measures of attitudes (i.e., implicit or automatic vs. explicit or deliberative) are uniquely sensitive to different means of forming or changing attitudes (i.e., associative vs. deliberative). Much prior research in which either associative or deliberative processes served as the sole foundation of attitudes revealed that either process could affect both implicit and explicit measures. However, several recent tests of the dual-systems perspective in which both kinds of processes operated simultaneously (Rydell & McConnell, 2006; Rydell, McConnell, Mackie, & Strain, 2006; Smith & DeCoster, 2000) suggest that different attitude measures might reflect independent modes of evaluation (i.e., implicit measures are solely impacted by simple association-based processes and explicit measures are only affected by deliberative processes).

In the current research, we sought to provide a theoretical account for why explicit attitude reports are only sometimes affected by associative processing. Specifically, we hypothesized that social judgeability concerns (Yzerbyt, Schadron, Leyens, & Rocher, 1994) might prevent participants from incorporating their reactions to associative information into their self-reported evaluations when deliberative information relevant to the target is also available. Freed from these concerns, however, we expect that explicit attitude measures would reflect the influence of both kinds of information. To test this idea, we conducted an experiment in which participants were simultaneously presented with associative and deliberative information about a target person. In addition, their sensitivity to social judgeability concerns was manipulated by instructing participants to rely on their gut reactions (or not) to the associative information when forming their opinions of the target. Previous research has shown that instructing participants to go with their gut and trust their intuition increases the correspondence between their implicit and explicit evaluations (e.g., Jordan, Whitfield, & Ziegler-Hill, 2007; Ranganath, Smith, & Nosek, 2008), and thus we predicted that this type of manipulation would be effective in influencing participants' social judgeability concerns in our study.

Critically, understanding when and why people's explicit attitude reports reflect the influence of deliberative and associative processing is of great importance within the domain of consumer research. For example, consumers who are trying to evaluate a new product are likely to have access to both associative and deliberative information from multiple sources (e.g., advertising, prior experience with similar products, feedback from others who have bought the product, etc.) that could be used to inform their attitudes. Our perspective suggests that individuals who express their attitudes under circumstances in which they must rationalize the product evaluation may only show an influence of information sources that are easy to consciously discuss with others (e.g., a friend). This attitude report would, however, hide the influence of more associative information that is only incorporated into explicit evaluations when individuals are freed from social judgeability concerns. Presumably, attitudes reported under these two evaluative contexts will also differentially predict actual purchasing behavior. Thus, if one must rationalize and explain the purchase to others, associative processes might be less likely to influence product selection than if one is allowed to buy whatever "feels good" without concern for what others think.

A sample of 39 undergraduates at Ohio State University completed the experiment in partial fulfillment of a course requirement. Upon entering the lab, participants were informed that they would read about a target individual named Paul and later report their impressions of him. Following these instructions, participants read a short paragraph describing neutral behaviors performed by Paul (deliberative information) while simultaneously being exposed to either positive or negative subliminal images (associative information), which were followed by a colored pattern mask. Half the participants were told of the existence of the images and informed that they may elicit "gut feelings" about Paul that would be appropriate to use when forming their impressions of him. The remaining participants were told that they would see flashes of color (i.e., from the pattern mask), but were not made aware of the subliminal images. After learning about the target, all participants provided their explicit evaluations of Paul on two unipolar scales assessing the independent contributions of positive and negative feelings towards Paul. Responses on these items were averaged into a single bivariate attitude index.

Participants' explicit attitudes were submitted to a 2(instructions: go with gut vs. control) X 2(associative information: positive vs. negative) ANOVA. A significant main effect of the associative information emerged, $F(1, 35) = 7.40$, $p = .01$, which was qualified by the predicted interaction, $F(1, 35) = 4.10$, $p = .05$. Decomposing the interaction revealed that the impact of the associative information on self-reported attitudes was only significant for participants who had been told to rely on their gut reactions, $F(1, 18) = 14.61$, $p = .001$, whereas those who had been subliminally presented with negative images reported less favorable attitudes toward Paul ($M = .50$) than those exposed to positive images ($M = 3.0$).

These findings suggest that in some instances, explicit attitude measures may not reflect associative processing because individuals are hesitant to report consciously inexplicable "gut feelings" towards certain attitude objects. When social judgeability concerns are reduced, however, the impact of associative and deliberative processes of attitude formation can be captured by explicit measures. By gaining a clearer understanding of the interplay of different modes of processing, researchers should be able to better predict the attitudes (and subsequent behavior) of consumers, who often have access to both associative and deliberative information when making their buying decisions.

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A Guide to Subliminal Persuasion: The Role of Needs and Conditioning in Motivating Behavior

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Subliminal persuasion attracted a lot of attention after James Vicary claimed that Coke and popcorn sales increased after subliminally priming the words "drink Coke" and "eat popcorn" on a cinema screen. The idea that presenting information outside conscious awareness was able to get consumers running off to buy Coke and popcorn seemed stranger than fiction and may explain the popularity of the topic. Vicary's findings turned out to be actual fiction however; the original study was exposed as a publicity hoax (see e.g., Karremans, Stroebe, & Claus 2006).

Research from the last decade *does* suggest that subliminal persuasion works, by showing that subliminally priming behavior representations instigates motivation for that behavior outside conscious awareness (see Dijksterhuis, Chartrand, & Aarts 2007). For example, subliminally priming a cooperation goal subsequently makes people more motivated to act cooperatively in a commons resource dilemma (Bargh, Gollwitzer, Lee-Chai, Barndollar, & Trötschel 2001). Priming a behavior representation is not always sufficient to result in motivation for that behavior, however. For example, priming the concept of making money motivated people, but only those that needed money (Aarts, Gollwitzer, & Hassin 2004).

The question, then, is not *whether* subliminal persuasion can motivate consumers to change their behavior or obtain products, but rather *when* subliminal persuasion is effective. In the literature, two answers to this question can be distinguished. First, studies directly addressing the question whether subliminal persuasion works suggest that subliminal priming only motivates behavior if the prime matches a current need-state (e.g., fluid; Strahan, Spencer, & Zanna 2002). For example, subliminally priming participants with a brand of dextrose pills increases dextrose pill intake, but only for people who were tired and hence needed an energy boost (Bermeitinger et al. 2009). Alternatively, research on classical and evaluative conditioning suggests that creating positive associations with behavior representations can also motivate people for that behavior (Aarts, Custers, & Marien 2008; Olson & Fazio 2001). For example, subliminally linking behaviors such as 'achieving' or 'writing' to positive information (e.g., words as "friend" or "summer"), results in actual motivation to perform those behaviors (Aarts et al. 2008; Custers & Aarts 2005). The conditioning literature leads to different predictions as to when subliminal persuasion will be effective, because motivation is not thought to be dependent on deprivation states for conditioned behaviors.

Importantly, research on conditioning and on the role of deprivation in priming led relatively separate lives. Hence, it is unknown how these factors work together, thus leaving several questions unanswered. For example, if consumers are fluid-deprived and motivated to drink soda after subliminal priming, will positive conditioning of this specific behavior further increase the motivation to buy soda or would it not add anything to the motivational equation anymore? To answer such questions, we report two studies aiming to examine the combined effects of deprivation and conditioning for the behavior of drinking water. Drinking water was selected as it is an effective way to reduce fluid deprivation but can, in principle, also be motivated because it is positive in itself.

Study 1 tested whether the motivation to drink water could be increased outside of participants' awareness, in a 2 (conditioning: neutral vs. positive) x 2 (deprivation: low vs. high) between participants design. Specifically, using an adaptation of the evaluative conditioning paradigm, all participants were subliminally primed with the concept of drinking water, but for half of the participants the primes were directly followed by positive words (see Aarts et al. 2008), thus conditioning "drinking" to positive affect. Deprivation was manipulated by asking all participants to eat crackers (thus exacerbating participants' need for fluid, Strahan et al. 2002) and allowing half of the participants to drink water (low deprivation condition). Changes in motivation were measured unobtrusively by letting participants consume water as part of a product comparison task. In line with earlier work (e.g., Strahan et al. 2002; Veltkamp, Aarts, & Custers 2008) results showed that water intake increased with fluid deprivation upon priming. Importantly however, pairing "drinking" with positive affect resulted in high water intake when deprivation was low, but did not further increase motivation when deprivation already motivated behavior.

Study 2 replicated and extended Study 1, by examining whether the motivation to drink ceases after fluid deprivation becomes replenished. Deprivation-motivated behaviors are thought to be rewarding depending on deprivation states. Hence, motivation should stay until deprivation is reduced. When a behavior is conditioned to positive affect, however, reducing deprivation may not matter as the behavior is desirable in itself. To test this idea, fluid-deprived participants were subliminally primed with drinking. Again, "drinking" was linked to positive affect for half of the participants. Then, half of the participants ate cucumber (containing 96% of water), thus reducing fluid deprivation without making reference to the focal behavior of drinking. The other participants had a short brake, thus not reducing fluid deprivation. Finally, participants were allowed to drink water. As expected, it was found that eating cucumber attenuated the motivation to drink after priming `drinking`. However, when drinking was linked to positive affect, participants remained motivated to drink irrespective of eating cucumber. Thus, after positive conditioning, the motivation for a behavior is not susceptible to variations in deprivation anymore.

By assessing the effects of deprivation and positive affect in subliminal persuasion, these findings together are the first to show how these two factors interact in motivating consumer behavior, thus providing a valuable contribution to the literature. Specifically, our findings suggest that prior research showing that the effectiveness of subliminal priming depends on deprivation is only true in the absence of conditioning, and that conditioning may thus be a powerful persuasive tool. Furthermore, whereas in research on conditioning, deprivation states are usually not taken into account, our findings suggest that conditioning is only effective under low levels of deprivation. Importantly, this suggests that null effects in the

conditioning literature could indicate that the conditioning manipulation did not affect the dependent variable *or* that it did, but that on average the research population was mildly deprived of a resource related to the behavior of interest.

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Whether You Win or Whether You Lose: The Differential Risk of Priming the Deliberative and Affective systems in On-line Auctions

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Consumers' decision processes are generally influenced by both emotional and cognitive systems (Damasio 1994; Lee, Amir and Ariely 2009). Loewenstein and O'Donoghue (2004) have developed a comprehensive two-system model in which a person's behavior is predicted to be the outcome of an interaction between a *deliberative system* that assesses options with a broad, goal-based perspective and an *affective system* that encompasses emotions such as fear and is primarily driven by affective states that are currently activated.

The present research examines in an auction context, the role of the two-system model as a basis for further understanding the loss aversion phenomenon; namely, when a loss of $X is perceived to be more aversive than the attractiveness of an identical gain (Kahneman and Tversky 1979). The research posits that in the case that the affective system is activated, bidders would pay higher prices when they are primed to anticipate not winning the item rather than winning it. On the other hand, when the deliberative system is more accessible, bidders would pay higher prices if induced to be driven from the goals of winning than the potential of losing the auction.

Theoretical background
Recent research provides evidence that consumers can experience loss aversion for goods they never owned, such as choice options that were merely considered as part of making a decision (Carmon et al 2003; Dhar and Simonson 1992). In the context of on-line auctions, Ariely and Simonson (2003) propose that during the process of an auction, consumers may become attached to the items they bid upon, becoming more emotionally attached the longer they are the front runner in the bidding process.

Recent research further explore the reactions to the risk of losing, considering varying types of outcomes (Ariely et al. 2005; Carmon and Ariely 2000; Novemsky and Kahneman 2005), such as enjoying the benefits of possessing the product or the alternative uses of money.

Following this reasoning, in the context of an on-line auction, we propose that the anticipated outcome of winning the item draws the attention to the benefits of possessing the item more than the expected outcome of losing the item. The outcome of winning is therefore generating a form of "pre-endowment" effect, under which consumers are likely to experience loss for product they do not really own. The outcome of losing the product, may bring into the spotlight the possibility of forgoing it, and thus lead the consumer, in a form of defensive stance, to pay attention to other aspects of the auction such as the price paid for the product.

The present conceptualization
The present research considers both the two-model system and the expected outcomes of the on-line auction as determinants of the degree of loss aversion. The interplay between these factors is proposed to yield opposite results in terms of bidding behavior in on-line auctions.

The Risk of Losing under the Deliberative System: When the deliberative system is activated, by asking bidders for example, to think about the steps necessary to take to achieve the outcome of winning the auction, they are expected to experience a greater "pre-endowment" effect than when they are reminded about the potential outcome of not winning the auction. Consequently, when expecting to win the item, bidders are predicted to experience elevated perceived risk and pay higher prices, than when expecting not to win it.

The Risk of Losing under the Affective System: As in the deliberative system, we assume that it is the way in which the results of the auction are framed which makes the difference in terms of perceived risk and given bidding behavior. However, unlike the deliberative system, the direction of effects is proposed to be opposite to the direction of framing.

If one, for example, is asked to imagine how it would feel if they were not to win the item, a greater fear may be in place and therefore an enhanced discomfort in breaking the attachment to the item, than if one is asked to imagine the feeling attained when winning the item. This bidder is expected to experience a greater risk of loss and therefore place higher bids than one that is asked to imagine how it would feel to actually win the item.

Three experiments examined implications of this analysis with all findings being as hypothesized and relatively consistent across studies. Experiment 1 confirmed in a lab setting the contradicting effects of the activation of Deliberative and Affective systems on the perceived risk of losing and the price offered for the item, as a function of priming winning or not winning expectations. Experiment 2 investigated these effects in an on-line simulated auction to supply generalizability to our findings. Finally, the third study was conducted in eBay. It provided evidence that the processes we identified in earlier studies were likely to generalize to consumer decision situations outside the laboratory and in a field environment.

In sum, this research sheds new light on the cognitive facets of loss aversion. Prior research mainly focused on the affective facets of this phenomenon, proposing fear as the main driver for this effect. The current research replicates this notion by activating loss aversion via the expectation of how one's would feel if sh/e lost the auction. It further explains this notion by demonstrating, that priming the goals of winning the auctions through a cognitive route (i.e., detailing the steps necessary to win) increases focus on the product benefits, and therefore the perceived risk of losing the item. That is when the deliberative system is evoked bidders should be reminded of the steps necessary to take to win the auction. When the affective system is evoked, bidders should be reminded of how it feels to lose the item. This suggests that the loss aversion effect can be controlled by the marketer, not the consumer.

In future research, it would be interesting to examine the effect of expected outcomes on different types of products: emotional oriented products (such as a wedding ring) and cognitive oriented products (such as a scientific book). It will also be interesting to explore the association between this research and the regulatory focus stream of research.

From practical perspective, this research offers marketers simple and effective tools for activating the loss aversion effect among consumers. It shows that inserting a short note within the product description, about the possible outcomes of having to not having the product, and about emotional and cognitive aspects of having the product, has an effective influence on the consumers' decision processes.

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Should We Hire David Beckham to Endorse Our Brand? Contextual Interference and Consumer Memory for Celebrity Advertising

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Millions of dollars are spent annually on celebrity endorsements based on the premise that advertising with a famous face can create brand awareness, build brand affinity, and/or persuasively communicate a message. Although the supply of famous faces is vast, it is surprisingly common for different brands to hire the same celebrity. For instance, *Nike, AT&T, Accenture, Gillette, Electronic Arts, Gatorade, Golf Digest, NetJets, UpperDeck, TLC Laser Eye Centers*, and *Tag Heuer* all employ Tiger Woods to endorse their brand. Similarly, *Sharpie, Motorola, Adidas,* and *Emporio Armani* all employ David Beckham to endorse their brand. For brand managers, such a trend begs the question, is joining a celebrity's endorsement portfolio worthwhile to pursue?

Despite the popularity of endorsement portfolios, little is known about how individual brands within an endorsement portfolio are affected by the presence of other brands in the portfolio. Research on the topic of celebrity advertising has typically focused on theories that examine the effectiveness of a celebrity advertising for a *single* brand and has established that the attractiveness of the celebrity (McGuire 1985), credibility of the celebrity (Hovland and Weiss 1951-1952), strength of association between the celebrity and brand (Baker and Churchill 1977; Friedman and Friedman 1979; Kahle and Homer 1985; Kamins 1990; Kirmani and Shiv 1998; Till and Busler 2000), and involvement of the consumer (Petty, Cacioppo, Schumann 1983) affect consumer evaluations of the advertised brand at the time of ad exposure. While this research has been instrumental to understanding what makes celebrity advertising effective/ineffective, it fails to describe how brands in an endorsement portfolio may interact with each other and impact the effectiveness of celebrity advertising for each other beyond initial ad exposure, such as at point of purchase when consumer memory for information contained in the celebrity ad is required. In this paper, we address these issues by answering the following research questions. First, is there an identifiable characteristic of brands that may signal whether or not a brand in an endorsement portfolio may interact and affect the success of celebrity advertising for another brand in the portfolio? More specifically, does the strength of association between a celebrity (e.g., Tiger Woods) and a particular brand in an endorsement portfolio (e.g., *Nike*) affect consumer memory for another brand in the portfolio (e.g., *AT&T*) after initial ad exposure? Second, what cognitive mechanism(s) may explain how the strength of association between a celebrity and a particular brand in an endorsement portfolio affects consumer memory for another brand in the portfolio?

We use memory interference as a theoretical basis to answer these questions. Assuming memory is associative and the celebrity is a memory retrieval cue, we theorize that celebrity endorsement portfolios foster the conditions necessary for contextual interference to occur. We define *contextual interference* as a specific type of memory interference whereby exposure to a similar contextual element (e.g., a picture) hinders one's ability to recall additional, related information from long-term memory (Kumar 2000), and we theorize that contextual interference is high in an endorsement portfolio because all brands in the portfolio depict the same celebrity in their advertising. We theorize that when the celebrity is used as a memory retrieval cue for ad information that is stored in long term memory brands in the endorsement portfolio will compete with one another for recall. As a result, the brand in the portfolio with the strongest or weakest link to the celebrity will win and hinder the recall of moderate brands in the portfolio. We test this hypothesis and examine the underlying cognitive mechanism for the effect in two experimental lab studies.

In Study 1, we use the *"match-up" hypothesis* (Kamins 1990) to define strength of association as the degree of match between a celebrity and the product category of the brand. For example, we argue that the strength of association or match between the professional soccer player David Beckham and the product categories sports drink, mp3 player, and baseball bat are strong, moderate, and weak, respectively. We posit that when strength of association between a celebrity and a particular brand in an endorsement portfolio is strong or weak and the celebrity is used as a memory retrieval cue, the phenomenon of *blocking* (i.e., the "tip-of-the-tongue" cognitive phenomenon whereby information is present in memory but is temporarily inaccessible (Schacter 1999)) will occur. Specifically, we posit that blocking threatens brands in an endorsement portfolio that are

moderately (versus strongly or weakly) associated to the celebrity and thus ad information about brands with a strong or weak (moderate) association to the celebrity will be recalled more (less) than brands with a moderate (strong or weak) association to the celebrity. Study 1 results support these predictions.

In Study 2, we examine an additional type of associative strength between a celebrity and brand. Specifically, we use research on *source congruity* (Kirmani and Shiv 1998) to define strength of association as the degree of congruency between accessible celebrity and brand associations. For example, we argue that the strength of association or congruency between the elite professional soccer player David Beckham and the brands *Apple, Samsung, and Insignia* are strong, moderate, and weak, respectively. We posit that when strength of association between a celebrity and a particular brand in an endorsement portfolio is strong or weak and the celebrity is used a memory retrieval cue *misattribution* (i.e., a phenomenon whereby information is accurately recalled but is misattributed to an incorrect source (Schacter 1999)) will occur. Specifically, we posit that misattribution, like blocking, threatens brands in an endorsement portfolio that are moderately (versus strongly or weakly) associated to the celebrity and thus ad information about brands with a strong or weak (moderate) association to the celebrity will be recalled more (less) than brands with a moderate (strong or weak) association to the celebrity. Also, we posit that ad information about brands with a moderate association to the celebrity will be more likely misattributed to a brand with a strong or weak association to the celebrity. Study 2 examines these predictions.

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How Does Imagery in Interactive Consumption Lead to False Memory? A Reconstructive Memory Perspective

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Consumers often encounter information that contradicts their consumption experience. Contradictory information may be seen while answering surveys or participating in message boards, online discussion groups and/or social networking sites. Even conversations with other consumers or salespeople may expose us to misleading information. Conventional wisdom suggests that consumption experiences lead to lasting impressions that are impervious to misinformation. Yet, anecdotal evidence offers evidence to the contrary. The commotion surrounding "unpatchable" flaws in the Firefox browser during an industry conference highlights this problem. Although untrue, the speed with which news about this "problem" spread and the outpouring of concern among users – even after retraction of the report – underlines the potential effect of post-consumption misinformation on consumer memory.

Academic research demonstrates that exposure to misleading information leads to a post-consumption misinformation effect (Braun, 1999). Findings suggest that while evaluations are susceptible to misinformation, facts - especially those central to the consumption – may be immune (Braun, 1999; Cowley & Janus, 2004). However, conclusions about the immunity of facts centrally related to consumption are based on two implicit premises that may not generalize to a significant chunk of modern consumption. The first premise is that consumption is largely underpinned by reasoning-based or "discursive" information processing (e.g., ELM, Petty & Cacioppo, 1986; Schlosser, 2003, p. 184). The second, stemming from the first premise, is that when facts are judgments about the product, the centrality of a fact might even sharpen memory – possibly due to greater thought (e.g., Cowley & Janus, 2004).

Both these premises are subject to challenge when consumption related information processing is seen from a broader, more inclusive viewpoint. Modern consumption spans both products that may be viewed from a discursive processing lens (such as food products, financial services, and consumer durables) and those that implicate imagery processing (e.g., Green & Brock, 2002; Wyer, Hung, and Jiang, 2008) such as movies, video games, leisure parks and many forms of internet usage. With such products, imagery is not only an integral part of the consumption, but is also intertwined in various post-consumption behaviors. For instance, narrating the experience to a friend, posting on blogs, or responding to market research in these contexts involve imagery. Indeed, previous research on web-based consumption suggests that inferences using a discursive lens may not readily generalize to imagery-rich environments (Schlosser, 2003). When consumption involves imagery, the centrality of a fact may not accord it any particular benefit (in terms of greater thought). This raises the question of memory resilience in such environments.

In this paper we investigate the false memory problem using the misinformation experimental paradigm with interactive consumption as the imagery-based consumption context. Results from three experiments highlight our contribution. In study 1, the experimental design was a 2 (post-consumption misinformation: present, absent) x 3 (elaboration: no elaboration, imagery, cognitive elaboration) between-subjects factorial administered to participants via a computer interface, MediaLab. To minimize demand, the cover story disguised the experiment as a product assessment study. Participants were informed that they would be trying out a gaming product, and subsequently asked for their reactions. Following a brief on-screen description of the game participants were directed to a screen containing the trial version of the game, which they played for four minutes. After an unrelated filler task, consonant with the cover story they were asked to assess the game. Unknown to them, this first set of questions was worded to include (not include) misleading information for the misinformation-present (absent) group. Consistent with our research objectives, we embedded misinformation on the central aspect related to the game by appropriately wording the questions. Study 1 results show that key facets of consumption are susceptible to misinformation, as evidenced by a higher incidence of false recall. These false recall effects are further heightened due to imagery, because it is difficult to monitor the true memory of consumption versus the images generated via imagery.

Experiment 2 employed a 2 (misinformation: present, absent) x 2 (imagery: theme-related, theme-unrelated) factorial design. The procedure, recall measure and coding protocols followed experiment 1 except that imagery was manipulated in two ways. Participants were instructed to imagine themselves either "as explorers digging for artifacts in the ruins of an ancient civilization" (theme-related imagery) or in "a game tournament" (theme-unrelated imagery, as used in Experiment 1). They then stepped through a narrative and completed the fictitious story in their own words. Study 2

results show that imagery that is more focused on the consumption itself reduces consumers' susceptibility to false memory due to additional opportunities to discern between competing sources of information.

Experiment 3 used a single factor design with four attention conditions: attention at encoding, attention at imagery generation, attention at retrieval, and no attention (control). The procedure, recall measure and coding protocol generally follows that of experiments 1 and 2 except that all conditions receive misinformation in this study. For the attention-at-encoding group, participants were encouraged to think carefully about their game experience immediately after the gaming episode and before the presentation of the misinformation stimulus questions. The attention-at-imagery group was asked to think carefully about their game experience while completing the imaginary game tournament scenario. The attention-at-recall group received instructions to think carefully about their game experience immediately before the recall measures. Study 3 results show that attention devoted to the consumption at retrieval helps reduce false memory. All three studies are completed and these and other results will be presented at the conference.

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The False Experience Effect: I Imagine, I Experience, I Like
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False memories refer to the mistaken belief that an event occurred, which in fact did not occur. It is important to understand how false memories develop because such memories may impact future purchase decisions. Therefore, much research has sought to understand how to create a false memory and how false memories differ qualitatively from true memories (see Koriat et al. 2000 for a review). This research has shown that imagery is one route by which false memories can be created (McIntyre et al. 2004). Thus, imagining experiences can render such experiences "real" in memory. However, an examination of how the *consequences* of false memories differ from those of true memories has been relatively sparse. Given that false memory is important to marketers primarily in terms of the consequences that these memories produce (e.g., attitudes, attitude strength, etc.), our research focuses on the *outcomes* of false versus genuine product experience memories. Specifically, we propose that exposure to an imagery-evoking ad may result in the creation of a false product experience memory, or the mistaken belief that a consumer has experience with a product when in fact s/he does not. Further, we suggest that such false memories function akin to genuine product memories with regard to the outcomes that they produce (e.g., consumer attitudes, confidence, and attitude-purchase intent correlations), a finding we call the *false experience effect.* We conduct four empirical studies to test our predictions.

In study 1 we consider the effects of imagery and experience on attitude strength to demonstrate the false experience effect. We utilize a 2 (direct product experience: yes vs. no) x 2 (ad imagery: high vs. low) between-subjects design. Respondents were exposed to a set of five radio advertisements for different products that were either vivid or pallid. Each of the five products was a fictitious product with a real brand name (e.g., Minute Maid Vitalite). In addition, half of the participants were asked to sample the products, while the other half were not. All participants completed the target measures one week later.

Consistent with expectations, we find a significant interaction between imagery and experience on attitude confidence for the target brands ($p = .05$). Participants who viewed the high-imagery ads and did not sample the products ($M = 5.46$) exhibited equivalent attitude confidence as those with product experience ($M_{ExpHighImagery} = 5.42$, $M_{ExpLowImagery} = 5.42$). However, participants who viewed the low-imagery ad and did not sample the product, exhibited weaker attitude confidence ($M = 4.54$) than participants in the other three conditions. An analysis of the attitude-purchase intention correlations revealed a similar pattern of results with all correlations significant except the correlation for participants that were exposed to the low-imagery ad without experience ($r_{LowImag/No\ Exp} = .30$, $p > .1$; $r_{HighImag/No\ Exp} = .49$, $p < .05$; $r_{LowImag/\ Exp} = .51$, $p < .05$; $r_{HighImag/Exp} = .83$, $p < .05$).

Memory measures were used to determine whether false memories were the underlying mechanism responsible for the observed effects. Respondents were presented with a list of products which included the target products and were asked to select all products that they had used at least once. As expected, a significant interaction between ad imagery and experience on product usage memory was found ($p < .05$). Respondents in the high-imagery no experience condition reported having equivalent usage experience with the target products ($M = 0.67$) as participants in the experience conditions ($M_{ExpHighImagery} = 0.59$, $M_{ExpLowImagery} = 0.73$). Respondents in the low-imagery ad- no experience condition reported significantly lower usage memory ($M = 0.39$) than the other three conditions.

In studies 2 and 3, we demonstrate moderators of the false experience effect. Study 2 examined evaluation timing as a boundary condition of the effect utilizing a 2 (ad imagery: high vs. low) x 2 (evaluation timing: immediate vs. one-week delay) between-subjects design. We hypothesized that if false memory underlies the effects demonstrated in study 1, then instructing participants to complete the target measures immediately following exposure to the ads, when memory accuracy errors are usually small, versus following a delay, when memory implantation is expected to occur, should attenuate the false experience effect. Consistent with our expectations, we find that the false experience effect occurs only when participants complete the target measures following a delay, but not immediately following exposure to the ad.

Study 3 examines plausibility as a moderator using a 2 (ad imagery: high vs. low) x 2 (brand name: real vs. fictitious) with a 2-cell control (experience with high real vs. fictitious brand name) between-subjects design. We hypothesized that the false experience effect only arises when past experience with a product is plausible, consistent with past research on memory implantation (Pezdek et al. 1997). We operationalized plausibility by using real brand names (e.g., Gatorade) versus fictitious brand names (e.g., Limca). The results support our hypothesis that the false memory effect only arises when respondents are exposed to a plausible (real) brand.

Overall, our findings contribute to the literature on false memories by focusing on the *consequences* of false memory creation. Specifically, we introduce the false experience effect, and demonstrate moderators of the effect. The finding that exposure to even a single imagery-evoking ad can create false product experience memories that affect how consumers view products and the likelihood of repurchasing those products also holds important implications for consumers, marketers, and public policy makers.

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Session 4.4

From Wealth to Well-Being? Money Matters, but Less than People Think
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A striking inconsistency surrounds the relationship between money and happiness. Despite the fact that money has been shown to have a small – though reliable – effect on happiness in developed countries (Diener & Biswas-Diener, 2002; Frey & Stutzer, 2000), humans devote much of their time and energy to earning it, seemingly motivated by the belief that money will have a substantial impact on their overall life satisfaction. For example, the amount of time the average American spends at work has grown steadily over the past several decades, despite the fact that this occupational investment comes at the cost of family and leisure time (Schor, 1991). What is the source of this apparent contradiction between researchers' conclusions about the relatively modest link between money and happiness versus laypeople's everyday choices and behavior? We suggest that laypeople engage in behaviors designed to increase or maintain their wealth because they overestimate the impact that income has on well-being.

In an effort to more fully delineate the nature of people's understanding of the link between household income and happiness – an important component in understanding why people pursue money when it does not seem to make them much happier – we asked a national sample of respondents from across the income spectrum both to report their own happiness and to predict the happiness of others at different levels of income (Study 1). Demonstrating that people think higher household income is associated with higher levels of happiness for someone else, however, does not necessarily mean that they believe that more money would substantially influence their own happiness; in Study 2, therefore, we also asked respondents to predict how happy they thought they would be given different levels of household income, to directly measure people's beliefs about the impact of money on their own happiness.

Across two national samples, we found that people accurately predicted the moderate emotional benefits associated with being wealthy, but vastly overestimated the emotional costs associated with being poor. That is, whereas predicted and actual happiness closely converged above the median household income, sharp divergences occurred between predicted and actual happiness at lower household income levels. While respondents accurately predicted the modest relationship between higher earnings and happiness at the top levels of household income, they erroneously believed that slightly higher household wages at lower income levels – such as between $25,000 and $55,000 – would be coupled with dramatically different happiness ratings. Given that many of our participants – approximately 33% - earned incomes in this range, this failure of insight is particularly striking.

Taken together, our studies shed light on the discrepancy between people's apparent drive for money and the real but modest relationship between money and happiness. In particular, we demonstrate that adult Americans erroneously believe that earning less than the median household income is associated with severely diminished happiness—a false belief that may lead many people to chase opportunities for increased wealth or forgo a reduction in income for increased free time. Our results are in line with Kahneman et al's (2006) suggestion that people focus too much on the impact of this one variable on their global life satisfaction, part of a more general tendency to overweight single inputs when estimating overall satisfaction (Hsee & Rottenstreich, 2004). This focusing illusion may lead individuals to ignore other avenues shown to impact happiness, such as building social relationships; indeed, while using money to build relationships can lead to increased happiness (Dunn, Aknin, & Norton, 2008), the mere thought of money can discourage people from pursuing this goal (Vohs, Mead, & Goode, 2007). Finally, while our aim was to isolate people's beliefs about the impact of money on happiness, future research should explore the accuracy of people's intuitions about how best to trade off among different pursuits – from making money to building friendships to finding God – on the pathway to happiness.

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Contrasting Against the Future: The Unexpected Effects of Expectation
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We do not just derive utility from our current experience, but also from the anticipation of future experiences (Loewenstein 1987): we dread a visit to the dentist and we savor an upcoming trip to a tropical island. Yet, aside from this direct effect on our current happiness, the anticipation of future events can also change our enjoyment of a specific current experience. For instance, knowing that we are about to embark on a vacation may change how we experience our time at the dentist. Or, similarly, knowing that we are about to visit the dentist may change how much we enjoy our time at the beach.

One possibility is that the anticipatory dread or savoring contaminates our current experience. Or, stated differently, the current experience may be assimilated towards the upcoming experience: the visit to the dentist becomes less painful when anticipating the vacation, while the time at the beach becomes less enjoyable when anticipating the visit to the dentist. This contamination effect has some intuitive appeal: anticipating the vacation makes the visit to the dentist more tolerable, while thoughts of the dentist office makes it harder to enjoy the beach.

However, a second possibility is that we contrast the enjoyment of our current experience against the enjoyment of the anticipated experience: the visit to the dentist becomes even more painful when anticipating the vacation, while the time at the beach becomes even more enjoyable when anticipating the visit to the dentist. Yet, although perceptual contrast is a very robust phenomenon, and although people routinely believe in hedonic contrast, there is little evidence that it actually occurs (Novemsky and Ratner, 2003). Then again, past research has exclusively focused on comparisons with preceding experiences rather than anticipated experiences. Although the current dinner may not taste worse when the previous dinner was fabulous, it may actually taste worse when the next dinner is expected to be fabulous. Indeed, consistent with the forward-looking view of emotion (Frijda 1988), previous research has shown that the anticipation of future experiences is more intense than the reflection on past experiences (Van Boven & Ashworth 2007). If this generalizes to hedonic comparisons, then a visit to the dentist may be more painful when anticipating a vacation, even though it is not more painful following a vacation.

Before testing between these two possible effects (hedonic assimilation versus hedonic contrast), we assessed people's intuitions about the effect of hedonic comparisons. We simply asked participants how their experience of a pleasant (unpleasant) experience would change if it preceded (followed) an unpleasant (pleasant) experience. Consistent with prior research, a clear majority believed in retrospective hedonic contrast effects: 84% believed that being preceded by an unpleasant experience would make a pleasant experience even more pleasant, while 74% believed that being preceded by a pleasant experience would make an unpleasant experience even worse. Interestingly, they had the opposite intuition for comparisons with upcoming events: 92% believed that the anticipation of an unpleasant event would make a pleasant event less pleasant, while 84% believed that the anticipation of a pleasant event would make an unpleasant event less aversive. In other words, participants' intuition suggested forward-looking hedonic assimilation, rather than forward-looking hedonic contrast. We next tested whether these intuitions corresponded to people's actual experiences.

In a first study, all participants listened to pleasant piano music and were asked to indicate how much they enjoyed this music. People in the control condition only listened to the music, while people in the retrospective comparison condition first listened to an annoying sound (noise + music). Finally, people in the prospective comparison condition also first listened to the annoying sound, but in addition anticipated that the sound would return after the pleasant music (noise + music + noise). The results were the exact opposite of the intuitions from the pilot study: Whereas the music did not become more enjoyable when people first listened to the annoying sound, it did become more enjoyable when participants anticipated that the annoying sound would return after the music—consistent with forward-looking hedonic contrast.

We replicated this forward-looking hedonic contrast in a series of subsequent studies. In study 2, we asked participants to listen to a vacuum noise and found that their irritation with this noise did not change as a function of the sound they heard earlier (pleasant piano music or an even more irritating drilling sound), but did depend on the sound they were anticipating to hear afterwards. The vacuum noise became more irritating when people anticipated pleasant music than when they anticipated the drilling noise. In study 3, we demonstrated that this effect was not purely driven by the comparison with the even more irritating drilling noise: 50 secs of vacuum noise was experienced as more irritating when participants anticipated 10 secs of pleasant music than when they anticipated 10 more secs of vacuum noise. In study 4, we found that the comparison was not just sensitive to changes in valence, but also to changes in the magnitude of (dis)pleasure: An annoying sound became more annoying when people anticipated listening to a moderately enjoyable pop song, but even more so when they anticipated listening their favorite pop song.

If people engage in forward-looking hedonic contrast (rather than the hedonic assimilation they intuit), then their preference for improving sequences may sometimes be misguided. Indeed, in study 5, we find that people who taste improving sequences of jellybeans enjoy these jellybeans less than those who taste declining sequences of jellybeans—even though people in both groups strongly prefer the improving sequence. Finally, we conducted two studies to examine the boundary conditions of this hedonic contrast effect. In study 6, we replicate the contrast effect with an unambiguously valenced target experience (a looped vacuum noise), but we observe an assimilation effect with an ambiguously valenced target experience (looped new age music); and in study 7, we replicate the comparison effect when the anticipated experience is expected to immediately follow the target experience, but not when participants first expect more of the target experience.

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Social Comparison and the Construction of Hedonic Value

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Although contrast effects have been demonstrated in various domains of perceptual judgments (e.g., Nakatani 1985; Wedell 1995) and social judgments (e.g., Schwrz and Bless 1992), little evidence has been found for hedonic contrast effects—evidence demonstrating that a negative or positive experience can make subsequent experiences more negative or positive by comparison. An average jellybean, for example, is reported as tasting equally good whether the jellybean eaten before it was better or worse (Novemsky and Ratner 2003). Recently, researchers (Morewedge et al. 2009) explain that hedonic contrast effects are rare because experiences often consume the attention necessary to engage in comparison, making alternatives irrelevant. The purpose of this research is to examine the impact of social comparison, using people as a standard of comparison, on the valuation of hedonic experiences. The key question we ask is whether social comparison evokes hedonic contrast. A rich body of literature has demonstrated that people are especially likely to capture attention and evoke comparison. For example, preferential attention is devoted to faces rather than similar objects (Fantz 1963; Valenza et al., 1996), and the motion of biological entities rather than motion that is artificial or random (Fox& McDaniel, 1982). Social comparison has been shown to significantly influence one's life satisfaction, marital happiness, and salary contentment (e.g., DiTella et al., 2003; Easterlin 1995; Bazerman et al., 1994).

Building upon these prior findings, we propose that social comparison will draw attention to the standards experienced by other people and thus evoke hedonic contrasts between one's own experience and other people's concurrent experience. More specifically, we hypothesize that favorable/ unfavorable social comparison (i.e., other people's experience is superior or inferior to one's own) will make hedonic experiences more positive/ negative. Supporting the theory that attention moderates hedonic contrast effects (Morewedge et al., 2009), we found that hedonic contrasts were attenuated when experiencers had insufficient cognitive resource to compare their experiences with the experience of another person. And dissimilar experiences, which are difficult to compare, were less likely to influence the enjoyment of an experience than more similar experiences. Finally, we found that people are willing to choose a less appealing option than a more appealing option when the latter is similar to third superior option that was given to another person.

More specifically, Study 1 tested whether social comparison evokes hedonic contrast effects that are not otherwise manifested in experience. Participants were presented two food items, Lay's Potato Chips (target food) and another item (standard food), either Godiva Raspberry Chocolate (better standard) or King Oscar canned sardines (worse standard). We manipulated social comparison by telling half of the participants that they will be paired with another participant in the same experiment session and each of them will be randomly assigned to sample different food item (partner condition). The other half of the participants were simply assigned to evaluate one of the two food items (no-partner condition). In both the conditions, the computer assigned participants to evaluate the target food (potato chips). As predicted, participants in the partner condition rated chips more enjoyable when their partner was assigned to sardines as compared to chocolate. However, in the no-partner condition, experiencers enjoyed chips the same no matter what the alternative food was.

To be sure that this finding was not obvious, we recruited a new sample of forecasters and asked them to predict (between subjects) their hedonic reactions to these circumstances. Interestingly, forecasters predicted that hedonic contrasts would occur in both the partner and no-partner conditions.

Study 2 and 3 investigated the underlying mechanism and boundary conditions. To test whether attention is responsible for the potency of the contrast effects, Study 2 employed a 2(cognitive load: low vs. high) x 2(standard food: chocolate vs. sardines) design. All participants were paired with another participant and assigned to evaluate chips. To manipulate cognitive load, participants were asked to remember a series of number and letter, either B4 (low load condition) or 8K3YW17L (high load condition) while performing the food evaluation task. In the low load condition, participants enjoyed chips more when their partner was assigned to sardines than chocolate. However, in the high load condition, enjoyment of chips was the same regardless of the standard. These results are consistent with our prediction that hedonic contrast will be attenuated when experiencers don't have enough cognitive resource to pay attention to other people and compare their experiences.

Study 3 examined whether hedonic contrast occurs because people compare their experience to the alternative enjoyed by another person or because they compare their imagined happiness to another person. All participants were assigned to eat potato chips and their partners were assigned to experience a superior or inferior alternative. Half of the participants were told that their partners were experiencing either chocolate or sardines (similar condition); whereas others were told that their partners were listening to a sound clip of either jungle waterfall or vacuum cleaner, which was rated in a pre-test as being as pleasant as chocolate or sardines, (dissimilar condition). If the first explanation is right, hedonic contrast should occur only in the similar condition. If the second explanation is right, we should observe hedonic contrast in both the similar and dissimilar conditions. We found that hedonic contrast occurred only when partners were experiencing easy-to compare similar alternatives, suggesting that hedonic contrast mainly results from the comparison between people's experience and the alternative enjoyed by another person.

Study 4 directly tested whether people are willing to choose an inferior option in order to avoid comparing their outcome to a better outcome experienced by another person. Upon arrival, participants were paired with another participant and completed an animal trivial. Participants were then asked to choose a prize from a set of four prizes—two from a superior category (chocolates: Godiva & Hershey's) and two from an inferior category (snack bars: Granola Bar & Power Bar). In the social comparison condition, participants were told that their partner was randomly assigned to choose first and Godiva was no longer available after being chosen by the partner. In the control, participants was simply asked to choose a prize

and told that Godiva was out of stock. As predicted, we found that participants in the social comparison condition were more likely to choose the inferior Granola Bar instead of Hershey's than the control.

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Session 4.5

Cross-Cultural Differences in Preference for Consistency: Implications for Interpersonal Persuasion

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Maintaining a consistent self-identity has been viewed as a key foundation of individuals' psychological well-being (e.g., Jourard, 1965). This notion fits well with the ideal of holding a unique, stable identity--an ideal held in individualistic cultures such as the United States (Markus & Kitayama 1991). Yet in collectivist cultures such as East Asia, individuals may perceive a lesser need to maintain internal consistency (English & Chen 2007). This is because those from collectivistic cultures tend to view the self as fundamentally interdependent with others (Markus and Kitayama 1994). Consequently, consistency across situations may be viewed negatively in collectivist cultures. For instance, the person who is consistent across situations could be viewed as rigid, inflexible, and immature (Markus and Kitayama 1994). Indeed, Suh (2002) demonstrated that identity consistency was more predictive of subjective well-being for those in the United States (individualists) than Korea (collectivists).

Yet, consistency appears to be a multidimensional rather than a unidimensional construct (Cialdini et al. 1995). Whereas valuing independence may cause individualists to prefer being internally consistent (e.g., reporting attitudes consistent with their beliefs), valuing interdependence--or their relationships with others--may cause collectivists to prefer the social components of consistency more than individualists do--that is, appearing consistent to others and observing consistency in others. As a result, when discussing products with others, individualists may be influenced more by whether the communicator's message is internally consistent (i.e., whether their reported attitudes are consistent with their expressed beliefs) despite whether it is publicly consistent (i.e., whether their reported attitudes are consistent with a large majority's attitude), whereas collectivists may be influenced more by whether the source's message is publicly consistent. Furthermore, when communicating their preferences to others and faced with being either internally or socially consistent, individualists should have a higher willingness to publicly behave in ways that are internally consistent, whereas collectivists should have a higher willingness to publicly behave in ways that are socially consistent.

The objective of the first study is to establish empirically that individualists prefer internal consistency more than collectivists do, whereas collectivists prefer the social components of consistency more than individualists do. Participants were either Chinese or American college students (the individualist vs. collectivist samples, respectively) who completed Cialdini et al's (1995) preference for consistency scale. A sample item of internal consistency is "It is important to me that my actions are consistent with my beliefs." As predicted, the American participants had a higher preference for this type of consistency than the Chinese participants did. A sample item of public consistency is "Even if my attitudes and actions seemed consistent with one another to me, it would bother me if they did not seem consistent in the eyes of others," and for other consistency is "I prefer to be around people whose reactions I can anticipate." As expected, the Chinese participants held a higher preference for public and other consistency than the American participants did.

The objective of study 2 is to examine the implications for these different types of consistency on the persuasiveness of online product reviews. Prior research has found that individuals are more persuaded by online reviews when the reviews are internally consistent: when the content of the review supports the reviewer's rating (Schlosser 2007). For instance, a review that contains both pros and cons would be more consistent with a moderately favorable rating (4 stars) than an extremely favorable rating (5 stars). We hypothesized that individualists (as compared to collectivists) would be influenced more by the internal consistency of the reviews. Furthermore, we predicted that collectivists would be affected more by the public consistency of the reviewer's rating: whether the reviewer's rating is consistent with the average rating from a large (vs. small) group of reviewers.

American college students were provided with a fictitious online review of a business book that was an adaptation of an actual online review of this book at Epinions.com. Three variables were manipulated: the rating (4 vs. 5 stars), the review (contained only pros vs. both pros and cons), and the number of reviewers (9 vs. 90). The average rating was held constant as the opposite of the reviewer's rating. For instance, when the reviewer's rating was 5 stars, the average rating was 4 stars. Individualism/collectivism was measured (Triandis, McCusker & Hui 1990), and a median split was used to categorize participants as either individualists or collectivists. The results support the hypotheses that individualists were influenced more by the internal than public consistency of the review, whereas collectivists were influenced more by the public than internal consistency of the review.

We designed study 3 to examine the effect of self-construal on how individuals interact with others when confronted with a choice between behaving in an internally versus socially consistent manner. In addition, we used an independence/interdependence self-construal prime. After the prime, participants read about a restaurant and reported their attitudes, which were largely favorable. Participants were then asked what they would do in a scenario in which their public behavior would be inconsistent with their private opinions (i.e., their friends know that they dislike such restaurants but thought it would be fun to try anyway) versus consistent with their private opinions (i.e., they typically like such restaurants, and wonder if they want to join them in going to this restaurant). Those with an independent self construal should be internally consistent: because they privately like the restaurant, they should plan to go regardless of whether their friends think they like or dislike such restaurants. In contrast, those with an interdependent self-construal should act in a socially consistent manner: despite liking the restaurant privately, they should have lower intentions of going to the restaurant when their friends think they dislike such restaurants. The results support these hypotheses.

Collectively, the findings from all three studies suggest a different view of the relationship between culture and consistency, and demonstrate the importance of treating consistency as a multidimensional construct to better understand cultural differences in interpersonal consumer contexts.

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The Relation Between Cultural Orientation and Regulatory Mode and Its Implications for Consumer Behavior

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Research delineates two distinct self-regulatory modes, which have been labeled *assessment* and *locomotion* (Kruglanski et al., 2000). Assessment is the aspect of self-regulation that focuses on comparisons and critical evaluations of entities or states (i.e., goals or means) in relation to different alternatives, whereas locomotion is the aspect of self-regulation that focuses on movement between states and commitment of psychological resources to initiate and maintain goal-related movement. Thus, both assessment and locomotion are important components of any self-regulatory activity. Indeed, regulatory mode has been shown to influence numerous and important marketing phenomena, ranging from product preferences and assessment of value to the relation between product decision strategies and willingness to pay for the selected product (Avnet & Higgins, 2003; Higgins et al., 2003). The present research seeks to examine the relationship between regulatory mode and cultural orientation.

Existing research provides mixed evidence regarding the likely relationship between these important constructs. For example, research indicating that collectivists are more likely to engage in detailed processing regarding social relationships (Avnet & Higgins, 2003) suggests that collectivism should be positively associated with assessment, but the fact that individualist societies are associated with decision-making styles based on careful analysis and rationality (Mintzberg, 1989) indicates that individualism should be positively related to assessment. Research findings related to locomotion are similarly inconclusive. Mintzberg's (1989) findings associating collectivist cultures with an increased reliance on intuition and emotions suggests that collectivism should be positively associated with locomotion, which involves making decisions on the basis of intuition, set rules or personal roles (Weber, Ames, & Blais, 2004). However, the relatively high social mobility characteristic of individualist cultures (Hofstede, 2001) suggests that individualism should be positively related to locomotion.

Five studies using a variety of operationalizations of culture and regulatory mode were conducted in an attempt to elucidate the relationship between these constructs. In the first study, participants completed a 30-item regulatory mode scale (Kruglanski et al., 2000) and indicated the racial group with which they identified. The results showed Westerners scoring significantly higher than Easterners on assessment. This finding supports the hypothesis that individualists are associated with an assessment regulatory mode. However, Westerners and Easterners did not significantly differ on locomotion, although this result could be due to an assimilation of individualist norms for Eastern participants. In order to correct for this, Study 2 utilized a different operationalization of cultural orientation.

In Study 2, participants were primed with self-construal (independent vs. interdependent) and asked to complete the regulatory mode scale. Participants primed with an independent self-construal scored significantly higher on assessment than those primed with an interdependent self-construal. Participants in the interdependent self-construal condition scored higher on locomotion than those in the independent self-construal condition, but this difference was non-significant. However, the non-significant difference in locomotion could be caused by the fact that self-construal primes influence individualistic traits more than collectivistic traits in the U.S. context (Aaker & Williams, 1998). In order to examine the relation more clearly, study 3 operationalized culture based on participants' chronic cultural orientation. Chronic cultural orientation reflects the cultural values espoused by individual respondents and thus might be a stronger predictor of regulatory mode than either race or self-construal prime.

In Study 3, participants completed the regulatory mode questionnaire as well as a cultural orientation scale (Triandis & Gelfand, 1998). Regression analysis revealed that collectivism significantly predicted locomotion but individualism did not and individualism significantly predicted assessment but collectivism did not. These results are consistent with the possibility that individualists focus more on assessment and collectivists focus more on locomotion.

Study 4 extended these findings by examining whether cultural orientation influences respondents' predictions regarding their future behaviors in the context of consumption scenarios. Participants were shown assessment and locomotion scenarios that were developed through pilot testing, and predicted their behavior in each scenario. Participants then completed a cultural orientation scale (Triandis & Gelfand, 1998). Regression analysis revealed that collectivism significantly predicted locomotion but individualism did not and individualism significantly predicted assessment but collectivism did not. For the scenarios, participants who were more assessment oriented indicated they would be more likely to behave in the assessment-consistent ways (i.e. I would be likely to think about how the store could improve), whereas participants who were more locomotion oriented indicated they would be more likely to behave in locomotion-consistent ways (i.e. I would be likely to move on to another store).

To ascertain the robustness of the results from the above studies, a meta-analysis was conducted using the software "Mix" (Bax et al., 2008). The analysis found a strong individualism–assessment link and a strong collectivism-locomotion link. Conversely, the meta-analysis did not support the individualism-locomotion link or the collectivism-assessment link.

Study 5 examined the role of cultural orientation in the relation between regulatory mode and counterfactual thinking. Counterfactual thinking refers to thinking about past decisions in a "if only I had…." way. The degree of counterfactual thinking has been found to be influenced by regulatory

mode, such that individuals with an assessment orientation engage in greater counterfactual thinking than individuals with a locomotion orientation (Pierro et al., 2007). Drawing on these findings, Study 5 tested whether regulatory mode mediates the effect of cultural orientation on counterfactual thinking. Participants were asked to read a scenario and reported their degree of engagement in counterfactual thinking. Participants then completed the locomotion/assessment scale and a cultural orientation measure (Oyserman, 1993). The results showed that individualism but not collectivism was associated with greater counterfactual thinking. This relationship was mediated by assessment but not by locomotion.

The present studies show that culture influences the pursuit of locomotion and assessment regulatory modes. More specifically, the studies suggest that individualists are more likely to emphasize assessment than collectivists, who in turn are more likely to emphasize locomotion. The current research contributes to theory by delineating the exact relationships between the cultural values of individualism and collectivism and locomotion and assessment. Moreover, extending the findings to behavioral scenarios and counterfactual thinking illustrates the significance of regulatory mode as a factor guiding consumer decision-making.

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One Without the Other: The Effects of Priming Individual and Collective Mindsets on Consumer Choice and Valuation

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What is peanut butter without jelly or bacon and lettuce without tomato? What would Ken be without Barbie? What is a belt without its buckle or a shirt without pants? In most consumer settings, products and services can exist not only as independent items but also as items sharing some relationship with other items whether that relationship is obvious or non-obvious. Thus, while a shirt may simply be just a shirt, most clothing retailers take great care in presenting that shirt in the context of an outfit, complete with a matching tie and pants, to emphasize the relationships among these items with the expectation that consumers will purchase more than just the shirt. It may even be possible that consumers feel a sense of incompleteness if they only purchase one item from a perceived set of related products, perhaps accounting for the phenomenon in which consumers often go into a store with the intent to purchase only one item and yet emerge from the store with many more products than they had planned to purchase, unable to bear the thought of consuming one item without the others.

From a managerial perspective, examples of marketing and selling tactics that rely on perceptions of relationships among products are abundant. Take, for example, the practices of up-selling and cross-selling. Up-selling refers to instances in which consumers purchase an item and salespeople then attempt to sell additional features or add-ons for that same product, such as warranties, to increase the value of that purchase. Cross-selling refers to situations in which consumers purchase a product and salespeople try to sell complementary or related goods. Other common practices relying on understanding of relationships among products include product bundling and related product recommendations, such as Amazon.com's "As someone who recently purchased Product X, you might also be interested in Product Y" feature.

Certainly, marketing tactics such as these will not sway every consumer. In our previous shirt example, some consumers intent on purchasing a shirt and only a shirt may likely buy just the shirt, regardless of how well the accompanying tie accents the color of the shirt or the matching pants slenderize the hips. Still, other consumers may be influenced by the relationships among the items and may leave the store with the entire outfit instead of the shirt alone. What could explain the differences in consumer susceptibility to the influence of relationships among products and its effect on purchase behavior?

One potential explanation worth exploring involves differences among consumers with respect to viewing the world discretely and isolated from relationships or viewing the world contextually and via associations or relationships. To explore this idea, we integrated related research in the domains of self-construal and analytic and holistic processing via a situated cognition framework specifically with respect to individual- and collective-mindsets. Across three studies, we show that priming of individual- and collective-mindsets does, in fact, influence a consumer's perception of relationships among products. We demonstrate that consumers primed with collective-mindsets are likely to see more relationships among products than those primed with individual-mindsets. This leads to differences in the initial selection of products in a consumption context: whereas consumers primed with individual-mindsets select more obvious sets of items, those primed with collective-mindsets choose a greater variety of product sets. We also show that consumers primed with collective-mindsets, once having selected their set of products, show a reluctance to break apart those related items or to consume a partial set, whereas those primed with individual-mindsets exhibit no such effect. We then show that we still obtain this difference in tendency to break apart items even when the initial selection of items is controlled for by making the relationships among the items equivalently explicit across the prime groups. Finally, we demonstrate that the observed differences in the primed groups are likely due to a different valuation of relationships among items.

From a theoretical perspective, this paper contributes to a better understanding of the notion of situated cognition via individual- and collective-mindset priming. Previous research focused primarily on either self-construal or processing style without exploring the notion of how priming activates separating and contrasting procedures and connecting and integrating procedures on a broader level. In considering these broader implications of priming, we provide insights into the underlying cognitive processes producing the results beyond interpersonal influence, as in self-construal, and focal or contextual emphasis, as in analytic versus holistic processing. Furthermore, given that the previous research has primarily focused on the influence of interpersonal relationships instead of inter-product relationships, the shifting of attention to both the relationships among products and the use of priming that does not involve the notion of the personal self so directly moves theory in this area into a domain of products and services and away from the notion of self and other.

From a practical perspective, this article suggests several managerial implications. First, the finding that subtle priming of individual- and collective-mindsets can influence consumer decision-making, in general, suggests that marketing managers should be mindful of the content of advertisements and in-store, point-of-purchase displays. Although consumers may not actively attend to in-store displays, one can easily imagine a situation in which the wording or content of an in-store display can influence consumer decision-making as shown in this article. Second, the finding that the presentation of products either in explicit, related groupings or in random, less-obvious groupings can yield different results with respect to initial selection has interesting implications for product presentation. Whether in a retail setting or online, marketing managers should take great care in presenting their products as standalone products or as products that fit within a context of other products. Third, common marketing tactics that rely on relationships among products and services, like product bundling, cross-selling, and up-selling, could be made more efficient as a result of this study's findings. In fact, salespeople may need only to remind consumers about a relationship among products to elicit results comparable to those found in this paper.

Thus, whether it be the marriage of peanut butter and jelly, the combined goodness of marshmallows, chocolate, and graham crackers, or the inseparability of shampoo and conditioner, some product relationships are long-standing and easy for consumers to bring to mind. In addition, new associations like those presented in outfits on mannequins at a clothing store, strategic in-store placement of products, point-of-purchase displays, and the infamous, "You know what would go well with that…," salesperson pitch suggest that relationship perceptions can be influenced in the moment and yet could be just as influential on consumer choice. The idea that consumer preferences regarding relationships can influence consumers in such a subtle manner is fascinating as is the discovery that this influence has downstream effects on consumers' purchasing behaviors.

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The Anchor Contraction Effect in International Marketing Research
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Technological, social, and economic changes are linking an ever growing number of individuals around the world into complex patterns of interdependence (Dicken 2007). Aspects of globalization such as the growth of the Internet, the cosmopolitanism of large cities, and cross-national trade imply that, relative to a few decades ago, a much larger share of marketing research data is now collected from multilingual or multicultural respondents. As a consequence, in many instances, marketing researchers collect data from respondents who are not native speakers of the language in which responses are probed, typically English. For instance, a US-based online retailer with global reach allows customers to rate their preferences for products (e.g., CDs) using the emotional statements "I hate it" and "I love it." Regardless of their native language, consumers around the world contribute ratings to the website. This raises the issue of whether providing responses on rating scales in one's native (henceforth, L1) versus second language (L2) may exert a systematic influence on the responses obtained. The current research documents the Anchor Contraction Effect (ACE) for bilinguals' L2, which is the systematic tendency for individuals to report higher scores of emotional intensity when answering questions using L2 rating scales than when using L1 rating scales. Why does ACE occur?

Perspective theory (Ostrom 1966; Upshaw 1965) suggests that the rating assigned to a particular stimulus is a function of the interpretation of the anchoring points. *Ceteris paribus*, more intense verbal labels on the anchoring points of a rating scale lead informants to move away from the ends of the scale. For example, the same level of experienced happiness should lead individuals to select a lower number on a 7-point unipolar scale when the extreme anchor is worded as "ecstatic" or "overjoyed" than when it is worded as "pleased" or "glad." In addition, recent research shows that bilinguals tend to experience more intense emotions when speaking, reading, or listening to words in L1 than L2 (Altarriba 2003; Harris, Gleason, and Aycicegi 2006; Pavlenko 2005; Puntoni, de Langhe, and van Osselaer 2009). This literature attributes a key role to autobiographical memories in determining the emotional intensity of incoming information (Marian and Kaushanskaya 2004). Due to the language specificity of autobiographical memory (Marian and Neisser 2000), L1 (L2) words automatically trigger an emotional echo from previous L1 (L2) experiences (Puntoni et al. 2009). Because autobiographical memories in one's native language are typically both more frequent (Puntoni et al. 2009) and more emotional (Harris et al. 2006) than L2 autobiographical memories, L1 stimuli tend to elicit more intense emotional experiences.

Thus, if (a) responses to rating scales are determined by the interpretation of the anchoring points, and if (b) textual information presented in L1 is perceived to be more emotionally intense than information presented in L2, the language of the verbal labels of rating scales (L1 or L2) should impact the answers provided by bilingual individuals on emotion-laden items. Specifically, the more intense L1 anchors should lead respondents to move away from the emotional scale-ends. As a result, the same stimuli should be rated as less extreme when the scale anchors are labeled in L1 than in L2. Stated differently, emotional anchoring points presented in L2 should contract the scale relative to anchoring points presented in L1, leading to the prediction that L2 rating scales yield higher levels of emotional intensity than L1 rating scales (i.e., ACE).

ACE was explored in seven experimental studies. The experimental approach was adopted because it allows us to (a) establish ACE by testing the effect of rating scale language across a range of situations and measures, (b) rule out competing explanations based on different cognitive processes, and (c) explore managerially relevant and easily implementable corrective techniques based on the addition of relevant pictorial cues.

Studies 1-4 document ACE, rule out alternative explanations, and assess boundary conditions. In Study 1, Dutch respondents were asked to rate the intensity of positive and negative emotions portrayed in an animated movie using either L1 (Dutch) or L2 (English) rating scales. Because both positive and negative emotions were rated as more intense, this study shows that ACE is symmetrical for positive and negative emotions and, hence, that ACE cannot be explained by greater processing fluency (mere exposure) of one's native language. Study 2 involved a taste test in which speakers of French and Dutch were asked to evaluate a chocolate on a number of emotional dimensions using either French or Dutch rating scales. For half of participants, Dutch was L1 and for half French was L1 (i.e., a balanced bilingual design). Participants rated the intensity of the emotional reactions generated by chocolate higher when using L2 than L1 rating scales, regardless of whether their native language was French or Dutch. This study rules out the possibility that ACE can be explained by sociolinguistic processes (e.g., French generally being a more emotional language than Dutch). By generalizing ACE to bipolar rating scales, and to rating scales in which all individual points of the scale, instead of only the end points, carry a verbal label, Study 3 rules out the possibility that ACE can be explained by the misinterpretation of unipolar rating scales (Russell and Carroll 1999). Study 4 replicates ACE for commonly used product evaluation measures using emotional labels ("I love it" vs. "I hate it"). The results also show that ACE does not extend to product evaluation questions based on "colder" assessments ("well-made" vs. "poorly made").

From a substantive point of view, an important question pertains to what interventions might mitigate or eliminate ACE. Study 5 and Study 6 show that the concomitant presence of nonverbal cues on the rating scales can eliminate ACE. When emoticons (Study 5) or colors with increasing intensity (Study 6) are added to the rating scale ACE is eliminated. Because these corrective techniques are so easy to implement they address virtually all possible situations in which ACE may be a concern.

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Session 4.6

Pay What You Want: On Social Preferences in Markets
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People like to follow social norms, and social norms typically push people to behave pro-socially. However, psychologists and economists alike tend to argue that such norms are generally subservient to self-interest in everyday market environments. Indeed, in the logic of economics, these norms are only regarded as important when they persist in the presence of market pressures encouraging pure selfishness (Meier, 2007; Falk, 2007).

This argument is often correct, but a unique natural experiment highlights its imperfection. In 2007 *Radiohead*, a popular British rock band, released its new album, "In Rainbows," using a "Pay-What-You-Want" (PWYW) scheme: Fans could download the album from the band's website for any price they chose, including $0. If a fan could get the album for free, why would they pay? An independent research group estimated that of about 1 million downloads in the first month, nearly 40% paid *something* for the recording.

Related profit calculations are inevitably hypothetical – we cannot observe what would have happened under an alternative pricing structure. Accordingly, we conducted a field study, which randomly assigned people to either a traditional, or a PWYW, pricing scheme. We sought a market context sharing features with the *Radiohead* situation: a company selling a product with zero marginal cost and immune to customers accumulating and reselling it. To strongly test for the operation of social preferences we used a profit-oriented firm.

Though many industries meet these standards, we identified one that was additionally practical for the manipulation and diverse in sample population —a sightseeing cruise ship company.

Method
The boat tour company operates several ships with daily cruises seven days a week. Each cruise carries at least 50 groups of passengers. When boarding, each group is photographed and informed that photos can be purchased upon return. Participants in the control condition learned that the price would be $15, whereas participants in the PWYW condition were told "usually the price of the pictures is $15, today you can name whatever price you would like to pay." Each cruise was randomly assigned to one of these two conditions. We had a total 20 ships per condition.

Returning passengers walked pass a board displaying all photos and chose whether to buy. Those buying photos answered a 7-point scaled question asking, "Would you recommend this cruise to other people?" The cruise company provided percentage of photos purchased, the average price paid, and the average survey response.

Results
People were more likely to buy a photo when they could name the price (55%) than when it was $15 (23%). Of the 55% who obtained their photos in the PWYW condition, 84% paid more than the minimum amount, and on average, they paid $6.43.

Despite a strong normative prediction to the opposite, the $15 condition was no more profitable than the PWYW condition. In the control treatment,

23% of the photos were bought for $15, an average profit of $3.45 per photo. In the PWYW treatment, 55% of the photos were purchased at the average price of $6.43, netting an average profit of $3.50. See Figure 1.

The absence of a difference in profitability finding is bolstered by observed differences in how likely people are to recommend the cruise. Passengers in the control condition were less likely to recommend the cruise than were passengers in the PWYW condition (*Ms* = 1.05 vs. 1.50, one-tail Mann-Whitney U-Test, *z*=1.42; *p*<.039).

Discussion

How important are social preferences in markets? Laboratory experiments can rule out a purely selfish economic agent, but that hardly rules in a consequential role in economic markets (List, 2006; Levitt and List, 2007).

To date, most field research on social preferences in markets focused on charitable giving, and showed that people are more likely to donate to a charity if they first receive an unconditional gift (Falk, 2007), or when others donate too (Frey & Meier, 2004).

It is harder to find evidence for social preferences with for-profit companies. We study a pricing mechanism, which utilizes social preferences in the market.[4] When people like a company they may pay a price that is "fair" rather than simply the lowest price possible. Despite allowing its customers to pay nothing for the product, the company in our investigation retained its profitability while increasing customer satisfaction.

Figure 1: Passengers from 20 cruises were sold photos for $15 and passengers from 20 other cruises were invited to "Pay What They Want". The top panel reports financial and satisfaction data for the two conditions. The bottom panel shows the distribution of prices and revenue for passengers in the PWYW condition. Data was reported and analyzed at the boat level.

	Fixed $15 Price	Name Your Own Price
Percentage Purchasing Photos	23%	55%*
Average Price Paid	($15)	$6.43
Profit per Photo	$3.45	$3.50
Likelihood of Recommendation	1.05	1.50*
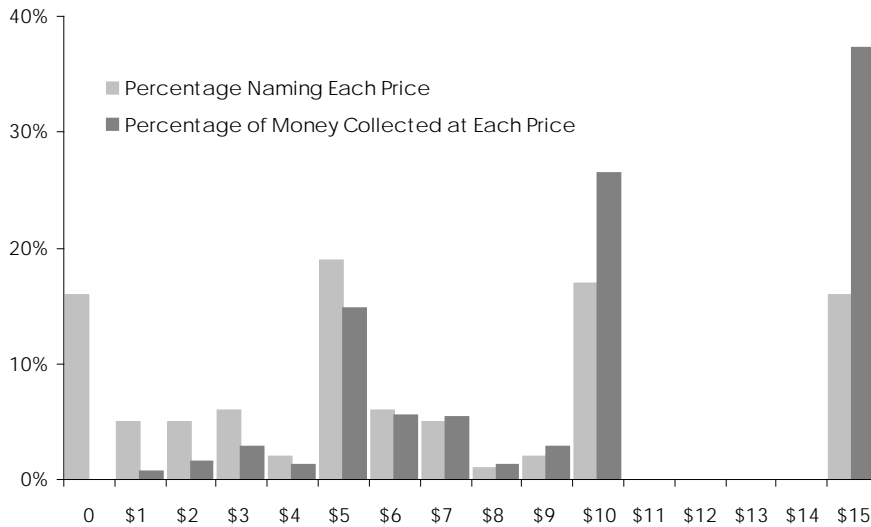
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[4] For studies of PWYW in restaurants, see Kim, Natter and Spann (2008) and Riener (2008).

The Best of Strangers: Context-dependent Willingness to Divulge Personal Information

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In the last decade, more and more people have been leaving an electronic footprint of their daily activities. At the same time, new technologies have enabled marketers to collect personal information about consumers at an unprecedented level of detail. This explosion of personal-level data has led to the adoption of new marketing paradigms such as one-to-one marketing and interactive marketing (Deighton, 1996; Fournier, 1998, Peppers & Rogers, 1993). At the same time as they have opened up new marketing opportunities for sellers, however, these innovations have introduced new privacy perils for consumers (Hoffman, Novak, & Peralta, 1999), who have become wary of releasing their data in many circumstances.

The aim of this paper is to understand when and why consumers are willing or unwilling to divulge personal information. We show that disclosure of personal, and in some cases incriminating, information responds to contextual cues that have little or no connection to the actual costs and benefits of sharing information in a particular situation. Contextual cues that *should* alert a decision maker to an increased threat of privacy can, in fact, have the opposite effect (Studies 1A&B), and contexts with equivalent privacy risks can elicit different levels of disclosure (Studies 2A-C).

In five experiments, participants indicated whether they had engaged in a series of sensitive, and in some cases illegal, behaviors. Between-subjects, we manipulated a contextual factor designed to downplay or activate privacy concern. The primary dependent measure was the proportion of questions answered affirmatively (i.e. admission rate).

Studies 1A&B were inspired by the Facebook group "30 reasons why girls should call it a night!!" in which young women post compromising pictures of themselves that in most other contexts, we suspect, they would be mortified to share. We conjectured that the frivolous nature of the site encouraged self-revelation and suppressed concern for privacy.

In Study 1A, participants were randomly assigned to one of two conditions, differing only in interface and title: frivolous (intended to downplay privacy concerns), or baseline. The former, titled, "How BAD are U??", included a cartoon devil logo and red and yellow comic sans-serif font. The baseline version had a more professional tone. Relative to baseline, participants in the frivolous condition were 1.7 times more likely to admit to having engaged in the behaviors.

In Study 1B, we added a serious condition and modified the baseline condition to be more neutral. Adding a 5-point privacy concern scale also enabled us to link between-condition differences in disclosure to differing privacy concern. Admission rates were higher in the frivolous condition relative to the baseline and serious conditions. They were similar in the latter conditions, suggesting that the effect is driven by facilitation of disclosure in the frivolous condition. Participants in the frivolous condition were on average 1.73 and 1.97 times more likely to admit to having engaged in the behaviors relative to the baseline and serious conditions, respectively.

In contrast to Study 1, in which people were induced to knowingly reveal private information by the seemingly light-hearted context, the contextual manipulations of Studies 2A-C pertain to situations in which people inadvertently disclose.

Study 2A was a 3x3 condition mixed design. Between-subjects, we varied the inquiry method. Control condition participants were asked point-blank, whether they had engaged in each of the behaviors. In the two covert inquiry conditions, participants were not asked directly whether they had engaged in the behaviors, but were asked to rate how unethical they judged them to be. With the explanation that people can only evaluate objectively behaviors that they have or have not engaged in, covert condition participants were instructed to rate the ethicality of the behavior only if they *had* (commission) or *had not* (omission) engaged in it; otherwise, they were to leave the item blank. The covert conditions were designed to make admissions seem secondary, which we predicted would increase self-revelation.

Within-subjects, we manipulated the intrusiveness of the behaviors. As a more nuanced indication that any observed effects are attributable to differences in privacy concern, we hypothesized that the inquiry manipulation would only affect admissions to the intrusive and hence, privacy-relevant, questions. Relative to point-blank, participants were 1.80 and 2.21 times more likely to admit to the sensitive items in the commission and omission conditions, respectively.

In Studies 2B&C, we modified the inquiry method manipulation in order to rule out alternative explanations to Study 2A, thus providing further evidence of consumers' susceptibility to disclosing information inadvertently.

Issues of privacy are becoming increasingly complex given technological advances that have vastly expanded the capabilities for information sharing. This research casts doubt on whether consumers are able to navigate this complexity in a self-interested fashion, and suggests to marketers the conditions under which consumers may be most likely to divulge.

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Investigating Store Loyalty Cards from the Non-Cardholder Perspective

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The use of frequent shopper and loyalty programs has allowed firms to increasingly customize the marketing environment and reward loyal customers. The academic literature contains a number of studies that have examined consumer response to loyalty programs (Kivetz & Simonson, 2002; Nunes & Dreze, 2006). An important gap in the literature concerns the impact of loyalty programs on non-participants. While a majority of sales may come from program members, a sizable portion of sales comes from customers that choose not to participate in these programs. From the perspective of a non-member, promotions that are restricted to members have the potential to be viewed as unfair (Xia et al., 2004; Haws & Bearden, 2006), but may in fact have other consequences in terms of buying behavior.

The primary purpose of our paper is to investigate how a frequent buyer program impacts the behavior of non-cardholders relative to program members. Specifically, we study response to promotions by members and non-members of a food retailer's loyalty card program. We begin with an analysis of grocery purchase by non-cardholders. Specifically we investigate how the prevalence of loyalty card program discounts influences the number of purchases made by non-cardholders. We then decompose the real-world results through two laboratory studies.

Store-level data. The firm is a retailer that operates a small chain of grocery stores. The firm operates a frequent buyer program that allows the firm to offer promotions that are only available to the members of the program. Overall 68.4 % of store visits are by cardholders and 31.6% are from non-cardholders. 20% of revenues are derived from non-cardholders.

At the level of brand choice we find, not surprisingly, that non-members avoid purchasing products that are on card-member restricted promotion. However, interestingly, in the case of hedonic products, non-member avoidance is much less. Moreover, while non-members avoid purchasing products that are on card-only promotion, these customers tend to increase overall expenditures when more promotions are limited to the loyalty card holders. Despite avoiding sale items, the number of items non-cardholders purchase actually goes up as a function of the number of items that are on sale for cardholders. Overall, the data suggest that non-cardholders engage in compensating or coping behaviors that lead to larger basket sizes and tend to purchase more emotionally oriented (hedonic) categories.

Prior research on price fairness has demonstrated that price discrimination policies can be perceived as unfair (e.g., Hawes and Bearden, 2006; Xia et al., 2004); however, the nature of the feeling of unfairness has not been investigated. Based on our data, we argue that the feeling is one of sadness and disappointment, rather than anger or frustration, and this feeling leads to increased purchasing behavior as a way to regulate affect. We predict that seeing more and more items that are on sale and that the non-cardholder is missing out on leads to sadness, and consumers cope with this feeling by making more purchases and in particular by purchasing more hedonic items. We test these possibilities in three studies.

Experiments. The first two experiments utilized a scenario approach. Participants were given a shopping scenario in which they were asked to imagine that they were shopping in a new store close to their office, but did not have a loyalty card and were not able to apply for one on the spot. The key manipulation was the number of items that were on sale for cardholders, either a small proportion of the items (approximately 10%) or a large proportion of the items (about 50%). Participants documented their reactions to missing out on the deals, and answered several questions about their feelings about the store and their current emotional state. In line with our predictions we found that participants in the large proportion condition were significantly sadder than participants in the small proportion condition. However, there was no difference in the anger levels of the two groups. In experiment 1B, we tested a nearly identical scenario but instead of breadth of discount, we manipulated depth. That is, holding constant the percentage of items at 30% (the average of experiment 1A) we manipulated whether items were on sale for 50% off or 10% off. In contrast to experiment 1A we found no difference in emotional state as a function of discount level. A final experiment was conducted in a field setting to examine the behavioral, shopping, and satisfaction outcomes beyond the emotional states observed in studies 1A and 1B.

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Consumer Sensitivity to Firm Rejection

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Most of the literature on product or service failure examines the implications for consumer satisfaction (e.g. Oliver, 1980; Smith, Bolton & Wagner, 1999). But firms do not always have incentives to satisfy consumers (e.g. firms frequently use customer penalties) and sometimes decide not to engage in transactions with potential customers (e.g. banks routinely deny credit). While work exists that addresses *when* firms should strategically select certain customers (e.g. those with high customer lifetime value), little work examines *how* consumers react to rejection. Consumers may simply react to the denial of a desired transaction, or, individuals might read into the rejection, reacting to its implications, rather than its consequences. The current work explores the latter suggestion and investigates whether firm refusals to engage in business can be interpreted as rejection, the specific source of consumers' reactions, and, what firms can do to mitigate responses. The contribution of this work is twofold: first, we examine the implications of firm decisions not to transact with consumers, and, whether such decisions can be interpreted and reacted to as rejection. Most of the work on firm failures has focused on product failures (e.g. Folkes 1984) or on service failures that occur during a transaction or in post-purchase interactions (e.g. Smith and Bolton 2002). To our knowledge, no work has explored the implications of failures in the form of firm decisions to avoid certain consumers. We also test strategies that firms can use to mitigate the impact of such decisions. Second, we contribute to the literature on interpersonal rejection by delineating the distinct sources of individuals' reactions controlling for the tangible consequences of rejection to isolate reactions to its implications. We then examine the impact of such inferences on consumers' reactions to firms that reject them.

Existing work assumes that individuals react primarily to the implications of rejection for their relational value – the extent to which others value having a relationship with them (Buckley, Winkle, and Leary 2004). However, there are a number of distinct elements of rejection that seem capable of inspiring reactions. We argue that reactions to rejection can stem from the tangible loss (e.g. the loss of an interaction partner or the denial of a desired exchange); the implications for individuals' relational value, which we argue can reflect both self- and other-evaluations; and, finally, the perceived fairness of the rejection.

In most cases of interpersonal rejection, rejection entails both the loss of an interaction partner and implications for individuals' relational value. Individuals likely react in somewhat different ways to each, which may help explain the seemingly contradictory reactions observed in the literature (e.g. simultaneously desiring/derogating the rejector). Because rejection in the consumer domain involves being denied access to a particular transaction, rather than access to the firm, we can control these consequences allowing us to isolate reactions to the implications of rejection, rather than those that stem from the failure to achieve a desired outcome.

We also argue that relational value can reflect at least two distinct sources of individuals' chagrin: (1) for what it implies about *others' perceptions* of the rejected individual (e.g. that they are not respected) and (2) for what it implies about *self-evaluations* as the rejection suggests that rejected individuals lack the qualities necessary for acceptance (e.g. believing one is not intelligent enough). In other words, the import of relational value might stem from a combination of both self- and other-evaluations.

Finally, we argue that self-evaluations of performance play another role in consumers' reactions to rejection. Discrepancies between the outcome consumers believe they deserve – based on self-evaluations of their performance – and their actual outcome are likely to evoke fairness concerns. In particular, when consumers believe they have the qualities necessary for acceptance, rejection is likely to be considered unfair, and unfairness is known to exert an important influence on consumers' firm attitudes (e.g. Oliver 1980).

In Study 1, we examined the extent to which consumers' interpreted firm refusals to conduct business as rejection using critical incident methodology. Consumers readily recalled interactions with firms that they classified as rejection and such events led to negative reactions. Studies 2 and 3 provided experimental examinations of the role of self-evaluations in consumers' overall reactions to rejection using credit card scenarios where the applicant was rejected or accepted. In Study 2, we manipulated beliefs about the overall rejection rate (30% vs. 70%), with the goal of affecting whether consumers attributed the rejection/acceptance internally. Internally attributed rejection should be more likely to impact consumers' self-evaluations. In spite of evidence that showed participants understood the rejection rate information, this had little impact on their reactions to rejection, due, we believe, to a defensive bias, whereby consumers externalized the reason for rejection even when the rejection rate was low. Study 3 attempted to provide a manipulation that would be resistant to this bias by linking the rejection/acceptance rate information to non-threatening characteristics that all participants would possess – being a student. Consumers were led to believe that they would most likely be rejected/accepted because of this and held themselves more responsible for the rejection in the first instance, which led to less negative attitudes and intentions towards the firm.

Study 4 was designed to investigate fairness as a source of consumers' reactions to rejection by directly manipulating participants' self-evaluations *prior* to the rejection/acceptance decision by informing them that they either had a good/bad credit history. As expected, when consumers had a good credit history, rejection was seen as more unfair and consequently increased negative attitudes and intentions towards the firm. The final study was designed to investigate ways in which firms can mitigate consumers' reactions to rejection decisions. The best way to mitigate responses should be to disguise the rejection in the first place. We operationalized this by having the firm accept rejected consumers for a lesser credit card – one that they already had, in fact (to control for reactions to the outcome). We found that this method was significantly better than apologizing or taking no action.

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Consumer Disposal Behavior: How Sellers of Used Goods are Influenced by Buyer Usage Intentions

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Consumers routinely dispose of products by discarding, donating, or selling those they no longer wish to keep (Bayus 1991; Cripps and Meyer 1994; Kim et al., unpublished; Okada 2001, 2006). In this research, we focus on the decisions of consumers who are selling used goods in a secondary market (e.g., Craigslist, e-Bay, classified ads, or a garage sale). While negotiating the price of second-hand products in both online and in-person transactions, buyer and sellers often exchange information. We examine how one possible aspect of the exchanged information—a seller's perception of how a buyer plans to use a product—influences seller decisions. Specifically, we investigate how buyer usage intent influences a seller's willingness to sell a used good at a given price. Consider a consumer selling a used guitar who learns that two potential buyers intend to use the guitar in different ways. The lower bidder plans to begin guitar lessons, while the higher bidder plans to hang the guitar on his wall as a decoration. To which of the potential buyers would the consumer decide to sell the guitar? Sellers' decisions are generally assumed to be guided by an aim to maximize profit (Monroe and Della Bitta 1978; Oxenfeldt 1973; Riley and Zeckhauser 1983). In the case of used goods, a rational seller's only interest in a one-time transaction with an anonymous buyer is to obtain as much money as possible in exchange for the used product. Furthermore, a profit motive is particularly suggested by a consumer's decision to sell, rather than to keep, discard, or donate the item. In the example above, a profit-maximizing seller would sell the guitar to the higher bidder, regardless of how the buyer plans to use it.

However, we contend that buyer usage intent can exert a strong influence on consumer disposal behavior. Specifically, we argue that when sellers learn of or infer a buyer's intent to use a product in a particular way, they sometimes offer steeper discounts than would normatively be expected, decline reasonably high offers, and occasionally even reject the highest offer received in favor of a much lower offer. In other words, buyer usage intent can induce sellers to leave money on the table in price negotiations rather than maximizing profit—an effect we term the "find a good home" bias. Across three empirical studies, we examine the impact of buyer usage intentions on the price that sellers are willing to accept for used goods. In study 1, we show that when choosing among multiple buyers, some sellers reject the highest offer and instead select the buyer whose usage intentions best align with their own post-transactional preferences. Study 2 shows, within a single buyer context, that sellers are more [less] likely to sell to buyers who communicate preference-consistent [preference-inconsistent] usage intentions than to buyers who do not reveal usage intentions. Study 3 shows that the "find a good home" bias is stronger for hedonic than utilitarian goods, suggesting that strength of post-transactional preferences moderates the effect.

The first study documents the "find a good home" disposal bias by showing that sellers of used goods forego monetary incentives in an attempt to ensure that their product will be used in a particular way following the transaction. In a hypothetical scenario, participants indicated to which of two interested buyers they would sell their grandmother's cherished piano. Whereas one of the potential buyers planned to play the piano regularly (*preference-consistent* usage intent), the other potential buyer planned to use the piano to enhance her home's décor (*preference-inconsistent* usage intent). Sellers were presented with different pairs of offers from each potential buyer and, for each pair, asked to indicate to which of the two buyers they would sell the piano. The difference between the amounts offered by each potential buyer differed systematically across each pair. Consistent with our theorizing, most sellers expressed a clear preference to sell to the buyer whose usage intent was *preference-consistent* (i.e., the piano player) and many sellers maintained this preference even when the *preference-inconsistent* buyer (i.e., the interior decorator) offered substantially more money. Sellers' choice of a buyer was significantly predicted by self-reports of the relative appropriateness of each buyer's post-transactional product usage intention. Although study 1 examined a scenario in which sellers selected from among multiple buyers, post-transactional preferences should influence disposal behavior even when there is only a single potential buyer. In study 2, we used a 3-condition between-subjects experimental design to demonstrate that communicated buyer usage intentions could influence a seller's decision to accept or reject a single buyer's offer. Participants imagined selling a rare, handmade doll that they had previously loaned to an art museum. In all conditions, sellers were informed that they had received a non-negotiable offer from a prospective buyer that was 75% of their asking price. Those in the *preference-inconsistent* condition were told that the offer came from a "struggling father who wants to buy the rare doll for his young daughters to play with." In the *preference-consistent* condition, the prospective buyer was described as "a struggling art collector who wants to buy the rare doll to display in an art gallery." In the *preference-ignorant* condition, the prospective buyer was not described. As predicted, relative to conditions under which buyer usage intent was unknown, sellers were more likely to accept the low offer from the buyer whose usage intent was *preference-consistent* but less likely to accept the low offer from the buyer whose usage intent was *preference-inconsistent*. In study 3, we examine how the "find a good home" bias is influenced by product type. Specifically, we hypothesize that sellers will have stronger post-transactional preferences for hedonic versus utilitarian products. In a 2 x 2 between-subjects design, sellers indicated whether they would increase, decrease, or maintain the price of a used [hedonic vs. utilitarian] good after learning that a buyer's usage intent was [consistent vs. inconsistent] with their post-transactional preferences. As predicted, sellers were more likely to increase [decrease] the price of a hedonic product than a utilitarian product after learning that a buyer's usage intent was inconsistent [consistent] with their post-transactional preferences.

The "find a good home" disposal bias has important implications for marketing. First, it debunks the long-standing assumption that buyers compete for scarce goods solely on the basis of price and proposes an additional dimension—communicated usage intentions—along which buyers may strategically differentiate themselves. Second, it offers a new approach to companies who wish to encourage consumers to upgrade or trade-in used goods. Our research suggests that instead of using price-promotions, companies could increase product replacement by simply advertising that old products will be used or disposed of in a manner that is consistent with consumer preferences.

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Defending Against Loss: Temperamental Fear Predicts Endowment Effect

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The endowment effect demonstrates one of the essential properties of Tversky and Kahneman's (1991) reference-dependent model in that the psychological effect of a loss is greater than a gain of the same magnitude. What causes this endowment effect? To answer this question, we investigate the fundamental psychological mechanism that might conceivably determine this loss aversion. We posit that the mechanism for loss aversion is *fear.* Fear is our reaction to anticipated loss, whether it is the loss of life itself at one extreme, or the loss of a consumer good in our possession at the other end. Camerer (2005) has previously suggested that the endowment effect may be a short-term fear reaction to anticipated losses and gains.

However, because the behaviors and self-reports of participants in the typical endowment paradigm do not evince fear, one needs to look for alternative methods to determine its effect. We reasoned that, if the endowment effect is essentially determined by fear, then it must be related to the inherent fearfulness of the individual. We suggest that loss aversion is related to one particular *trait variable* that relates to the threat of loss, *temperamental fear* or *trait fear.* We show that in the standard endowment paradigm, prices elicited are dependent upon temperamental fear, particularly among the sellers. We replicate these findings in the second experiment in a different laboratory with additional conditions. In the third study, we show that inducing fear prior to price elicitation enhances the endowment effect.

In the first study, we related the participant's inherent fearfulness to the price offered for buying the focal object and the price demanded for selling the focal object (set of highlighters). Participants were 148 undergraduate students who were randomly assigned as buyers or sellers. Temperament scales were administered prior to the endowment procedure. Temperamental fear was measured by the Fear Survey Schedule II (FSS, Bernstein and Allen 1969). For FSS (alpha=0.83), the subjects reported their fear for fourteen individual objects or situations (such as *getting hurt*, *snakes,* and *public speaking*) on 7-point scale of *none, very little, a little, some, much, very much* and *terror.* As it is important to distinguish temperamental fear from other related trait constructs, we also included other well-known and popular scales for anxiety, depression and prevention and promotion focus (NEO-PI-R, Costa and McCrae, 1992; Lockwood et al. 2002). In addition, current affect was measured by the PANAS scale (Positive and Negative Affect Scale, Watson et al. 1988).

The typical endowment effect was confirmed as sellers demanded twice the amount for the endowed object relative to buyers ($4.08 vs. $1.79, $F(1,224)=140.7$, $p < 0.001$) . Subsequent analyses indicated a significant relationship between the measure of temperamental fear and price demanded by sellers and price offered by buyers. Specifically, we find a positive relationship for sellers (r=0.74) and a negative relationship for buyers (r=-0.36). The results indicated that the main effects of role and FSS, as well as the interaction (FSS x role) were significant [$F (1,124) =61.84$, $p < 0.001$, $\eta^2 = 0.58$]. Planned comparisons revealed that, consistent with our predictions, the endowment effect in the high fear condition (mean difference between seller price and buyer price = 3.45) was significantly greater than the effect in the low fear condition (mean difference between seller price and buyer price = 1.16) ($t = 7.30$, $p < .01$).

None of the interactions between role and each of the other covariates were significant. This result confirms that the effect of temperamental fear on price is related to the role taken by the participant (buyer or seller) and that the effect is unique to fear.

The second study replicated the central relationship between temperamental fear and price in the endowment effect in a different laboratory setting. In addition the study was designed to further illuminate the fear effect among buyers. Previous work on the endowment effect has emphasized the loss aversion among only among sellers, but our results indicated a role for fear among buyers also. We therefore compared the standard 'buy' condition with the 'choose' condition (Becker et al. 1963; Kahneman et al. 1990). Whereas the buyers exchange their money for the focal object, the choosers chose between the object and different sums of money. Participants were 210 undergraduate students who were randomly assigned as buyers, sellers or choosers. The results of this study replicated the positive relation with fear scores among sellers (beta=0.39, p<0.01), and the negative relation with fear scores among buyers (beta=-0.29, p<0.05). They also confirmed that there was no relation between between FSS scores and price among choosers (beta =0.03, *ns*). We suggest that relationship to temperamental fear is determined by the anticipation of loss; among the sellers, this is the anticipation of losing the endowed object and among buyers, it is the anticipation of losing money.

In the third study, we examined the causal role for fear in the endowment effect. Subjects randomly assigned as sellers or buyers (standard buy condition) underwent an emotion induction procedure prior to price elicitation. Subjects were told to read and empathize with either a fearful scenario (imminent diagnosis of fatal illness) or a neutral scenario (chance meeting between friends, Raghunathan and Pham, 1999). Manipulation tests indicated that the fear scenario was effective in inducing fear relative to the neutral scenario. The two-way interaction between role and emotion was significant ($F (1,78) = 3.95$, $p < .05$, $\eta^2 = 0.13$). Planned comparisons revealed that, consistent with our predictions, the endowment effect in the fear condition (mean difference between seller price and buyer price = US $1.07) was significantly greater than the effect in the neutral condition (mean difference between seller price and buyer price =US $ 0.30) ($t = 2.43$, $p < .05$).

These studies indicate that fear predicts the value assigned to objects in the endowment effect. More specifically, the results indicate that fear is the mechanism for loss aversion under conditions of both buying and selling.

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Arousal Congruency and Consumer Choice

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Although arousal is one of the two critical components of mood (Mehrabian and Russell 1974; Russell 1980; Russell and Barrett 1999), little research in marketing has examined this phenomenon (Shapiro, MacInnis and Park 2002). Instead, the majority of research in marketing examining mood has focused on the other critical element of mood -- valence (i.e., Cunningham 1979; Goldberg and Gorn 1987; Goldberg, Gorn and Basu 1993). Given the lack of research on arousal, this paper proposes an in-depth investigation into the phenomenon of arousal-congruency – consumers' tendency to make choices that are congruent with their level of felt arousal.

We contribute to the mood literature by showing that arousal influences choice and by developing a theoretical model (shown below) detailing how arousal congruency affects consumer choice. This model suggests that the relationship between level of arousal and choice is influenced by two factors. First, we posit that this relationship is mediated by Product Specific Affect (PSA) – a consumer's feeling towards using a product or engaging in a consumption experience. Imagine that a consumer is asked to choose between playing golf and playing tennis. If the consumer likes golf, but does not like tennis, then he will have a more positive PSA towards playing golf and a less positive PSA towards playing tennis. Because the consumer has more positive feelings towards playing golf, he is more likely to select playing golf over playing tennis. In this research, we posit that the level of arousal that consumers experience will influence their PSA towards various products or consumption experiences, and that PSA will ultimately influence choice. Second, we posit that a consumer's mood (i.e. positive or negative) will influence their PSA towards various products or consumption experiences, and will influence whether they make arousal-congruent choices (this will be tested in future studies). Overall, the theoretical model posits a moderated mediation effect – i.e., the effect of the interaction between level of arousal and mood valence on choice is mediated by PSA.

Theoretical Model:
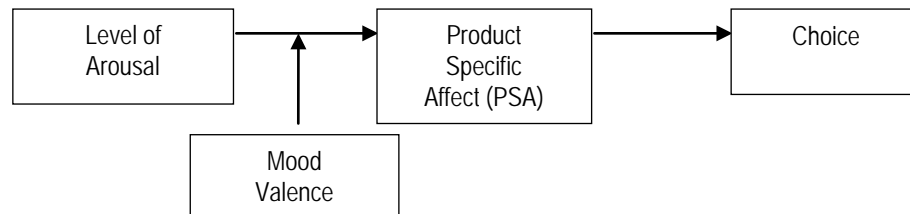
Below, we discuss the results of two completed studies.

Study 1

Purpose. The purpose of Study 1 is to establish the basic relationship between level of arousal and choice. This is accomplished by testing the congruency hypothesis: are consumers who are feeling low-levels (high-levels) of arousal more likely to choose a low-arousal (high-arousal) consumption experience?(H_1)

Participants and Design. Seventy-four undergraduate students participated in this study. A between-subjects design with two experimental conditions -- low-arousal condition (blue background screen) and high-arousal condition (red background screen) – was utilized.

Stimuli. The colors that we utilized were chosen using the hue, saturation, and brightness (HSB) model (Gorn et al 2004). The characteristics of the low-arousal color were blue 240, chroma 42, value 100, while the characteristics of the high-arousal color were red 360, chroma 100 value 58 (Gorn et al 2004). The choice of consumption experience (these were pre-tested) was between playing golf (low-arousal) and playing tennis (high-arousal).

Results. The results support Hypothesis 1. A binary logistic regression, with choice of consumption experience as the dependent variable, and level of arousal as the independent variable, shows that level of arousal significantly predicts consumer choice (Wald = 11.94, p = 0.001). Follow-up Chi-Square tests showed that low-arousal consumers were more likely to choose playing golf over playing tennis ($\square$) = 5.16, p = 0.023), while high-arousal consumers were more likely to select playing tennis over playing golf ($\square$) = 4, p = 0.046).

Study 2

Purpose. The purpose of Study 2 is to examine the potential mediating role of PSA in arousal congruent decision making. Two hypotheses are tested: (1) consumers will have a more positive PSA towards engaging in an arousal-congruent consumption experience than towards engaging in an arousal-incongruent consumption experience (H_2); and (2) PSA mediates the relationship between level of arousal and choice (H_3).

Participants and Design. Sixty undergraduate students participated in this study. We utilized the same design as in Study 1.

Stimuli. The same colors that were used in Study 1 were also used in this study. The choice of consumption experience (these were pre-tested) was between lying on the beach (low-arousal) and surfing (high-arousal).

Results. The results support Hypothesis 2, as consumers in a low arousal state had a more positive PSA to engaging in a low-arousal consumption experience than to engaging in a high-arousal consumption experience ($M_{PSA} = M_{low-arousalCE} - M_{high-arousalCE} = 1.43$, $t = 3.87$, $p = .001$). Similarly, participants in a high arousal state had a more positive PSA to engaging in a high-arousal consumption experience than to engaging in a low-arousal consumption experience ($M_{PSA} = M_{low-arousalCE} - M_{high-arousalCE} = -1.45$, $t = -4.23$, $p < .001$).

To test Hypothesis 3, the Baron and Kenny (1986) procedure was utilized. First, the effect of level of arousal on choice was examined (step 1). Regressing level of arousal on choice, we found that level of arousal has a significant effect on choice ($\square = 0.92$; *Wald* $= 9.16$, $p = .002$). Furthermore, follow-up Chi-square tests show that low-arousal participants were more likely to select a low-arousal consumption experience ($\square$) $= 6.53$, $p = .011$), while high-arousal participants were more likely to select a high-arousal consumption experience ($\square$) $= 8.53$, $p = .003$). Next, the effect of level of arousal on PSA is examined (step 2). It is found that level of arousal has a significant effect on PSA ($\square = 1.22$; $t = 4.82$, $p < .001$). Next, the impact of PSA on choice is examined (step 3). The analysis indicates that PSA is significantly related to choice ($\square = 3.92$; Wald $= 7.61$, $p = .006$). Finally, the effect of level of arousal on choice when controlling for PSA is examined (step 4). It is found that the impact of PSA on choice remains significant ($\square = 4.63$; *Wald* $= 6.15$, $p = .013$); however, the effect of level of arousal is no longer significant ($\square = 1.06$; *Wald* $= 1.08$, $p = .30$). Therefore, these results show that PSA mediates the relationship between level of arousal and choice.

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When Does Scarcity Increase Product Evaluation? Role of Decision Reversibility and Persuasion Knowledge
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Marketers often use scarcity to influence consumers, where scarcity is defined as restriction in product supply or availability time[1]. For example, products are often accompanied by scarcity announcements such as "hurry, limited quantities" or "exclusive offer, limited time only." Past research indicates that scarcity generally has a positive effect on product evaluation, because consumers infer that scarcity is a consequence of high demand for the product, which in turn arises from superior value offered by the product[2,3]. In the present research, we argue that consumers can also make a second type of inference about scarcity – namely that scarcity is an artificial sales tactic deployed by marketers to increase demand for the product. For example, it is possible for marketers to artificially restrict the quantity of product being offered in a given retail outlet or sales territory, and thus send a false signal of popularity among consumers. In summary, therefore, we argue that two kinds of inferences are possible when consumers are faced with scarcity: value inference and sales tactic inference. Greater the value inference, the more positive would be the effect of scarcity on product evaluation; the greater the sales tactic inference, the less positive would be the effect of scarcity on product evaluation. In two studies we identify a motivational factor, namely decision reversibility (study 1), and an ability factor, namely persuasion knowledge (study 2), that determine the type of inferences consumers make about scarcity, and hence the effect of scarcity on product evaluation.

Study 1 focused on decision reversibility, defined as the ability to undo a purchase decision[4]. We argued that when a product is unconditionally refundable ("30-day unconditional money-back guarantee"), people feel that the seller does not have any intention to entice the buyer to purchase a low quality product; rather, the seller is seen to have confidence in the product's quality. Past research suggests that guarantees for reversibility of decision can make consumers less motivated to infer potential negative consequences in consumption[5]. Therefore, when scarcity claims are presented along with guarantees allowing for the reversibility of decision, people should be less motivated to infer a hidden sales tactic beyond the persuasion message. As a result, when faced with scarcity claims, people are more likely to fall back on the inference that "what is rare is good"; hence scarcity should have a strong positive influence on product evaluation. In contrast, if a scarce product cannot be refunded once purchased (e.g., "Hurry, few items left in stock. All sales are final"), people may think that the seller is not confident about product quality and wants to eliminate an unpopular low-quality item. Consequently, they should be motivated to make a negative inference that scarcity is a sales tactic designed to eliminate an unpopular low-quality item by creating a sense of urgency. Therefore, in this case, the positive effect of scarcity claims on product evaluation would be diluted. Thus in summary, we hypothesized that scarcity would have a stronger positive effect on product evaluation when reversibility of decision is high, compared to low (H1). In addition, we posited that scarcity is more likely to be perceived as a sales tactic when reversibility of decision is low, compared to high (H2). One hundred student participants were randomly assigned to a 2 (Scarcity: High vs. Low) x 2 (Decision Reversibility: High vs. Low) between-subject design. The participants were asked to rate a new line of sunglasses available through an online shopping website. A printout of the online shopping webpage manipulated scarcity using limited quantities of the product, as well as reversibility using a method validated in past research[6]. The dependent variable of product evaluation was measured by an item assessing willingness to pay (WTP). We developed a two-item scale to measure the inference of scarcity claims as a sales tactic: "The ad was being honest about the number of sunglasses available for sale" and "The ad tried to artificially increase sales by mentioning the number of sunglasses available for sale." This two-item scale was adapted from the six-item scale measuring inferences of manipulative intent validated in past research[7]. There was a significant interaction of scarcity and decision reversibility on WTP ($F(1,96)=5.19$, $p<.05$). As predicted by H1, scarcity increased WTP when decision reversibility was high ($M=\$39.80$ vs. $\$62.47$, $t(48)=2.65$, $p<.05$), but not when decision reversibility was low ($M=\$40.59$ vs. $\$37.20$, $t(48)=-.44$, $p=.65$). Consistent with H2, the interaction of scarcity and decision reversibility on the two-item scale for sales tactic inference was significant ($F(1,96)=10.96$, $p<.001$). Respondents were more likely to perceive scarcity as a sales tactic when decision reversibility was low, compared to high ($M=6.60$ vs. $M=4.86$, $t(48)=-3.17$, $p<.001$).

Study 2 focused on persuasion knowledge, defined as individuals' knowledge about persuasion tactics[8,9]. We argued that when salience of persuasion knowledge is high, consumers are likely to think about why the marketer is using scarcity claims. This questioning of marketers' motives, in turn, is likely to prompt inferences that the scarcity information is a sales tactic designed to boost demand. And greater these negative inferences

about sales tactic, the less positive will be the effect of scarcity on product evaluation. In contrast, when salience of persuasion knowledge is low, consumers are likely to fall back on the inference that scarcity implies value. Consequently, scarcity would have a stronger positive effect on product evaluation when salience of persuasion knowledge is low. Thus, in summary, we hypothesized that scarcity has a stronger positive effect on product evaluation when salience of persuasion knowledge is low, compared to high (H3). In addition, we posited that scarcity is more likely to be perceived as a sales tactic when salience of persuasion knowledge is high, compared to low (H4). One hundred student participants were randomly assigned to a 2 (Scarcity: High vs. Low) x 2 (Salience of Persuasion Knowledge: High vs. Low) between-subject design. Participants were told that they were participating in two independent experiments. The first experiment manipulated salience of persuasion knowledge using a priming procedure validated in previous research[9]. The second experiment presented participants with a hypothetical retail scenario, which included an ad for a wristwatch. The ad manipulated scarcity, in terms of limited quantities. The dependent variable of product evaluation was measured by a single item, nine-point scale for purchase intent. Inferences about scarcity were measured by coding thought listings from study participants after they evaluated the target product. Two independent raters blind to the hypotheses coded inference of scarcity claims as a sales tactic as 'commented' or 'non-commented', depending on whether participants mentioned suspicion related to authenticity of the scarcity claim. There was a significant interaction of scarcity and salience of persuasion knowledge ($F(1,96)=4.18$, $p<.05$). As predicted by H3, scarcity increased purchase intent when salience of persuasion knowledge was low ($M=2.95$ vs. 4.08, $t(48)=1.97$, $p<.05$), but not when salience of persuasion knowledge was high ($M=3.23$ vs. 2.76, $t(48)=-.87$, $p=.38$). Consistent with H4, 61% of participants under the high salience of persuasion knowledge condition expressed doubt and skepticism about the scarcity announcement, while only 29% of participants under the low salience of persuasion knowledge condition perceived scarcity as a sales tactic (χ^2 (df=1)=5.26, $p<.05$). To sum up, the two studies reported herein make two theoretical contributions to the literature on

scarcity. First, we identify two new variables that moderate the effect of scarcity on product evaluation. Second, we specify an inference-based mechanism that underlies these effects of scarcity on product evaluation.

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Session 5.1

When Does Being Good Imply Doing Good?: Exploring Context Effects on Corporate Social Responsibility
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Sucharita Chandran, Boston University

Prior research on CSR has primarily focused on the strategic advantages of a positive CSR reputation (Du, Bhattacharya and Sen 2007). A company's involvement in CSR activities acts as a testimonial to its fundamental character and personality and differentiates it from competitors who may lag behind on such activities. Such a positive reflection of character may confer strategic advantages such as mitigating negative actions should the company face adversity in some unrelated domain (Klein and Dawar 2004). In this paper, drawing upon the inclusion/exclusion model of context effects (Schwarz and Bless 2007), we explore the double-edged nature of a positive CSR reputation: sometime it may actually hurt to have a positive CSR reputation.

In line with the inclusion/exclusion model, we contend that, when CSR reputation is used to interpret company action, assimilation effect will occur and an uncertain, ambiguous action will be judged positively for a socially responsible company; when CSR reputation is used to form judgment standard against which the company is compared, contrast effect would occur and an ambiguous action will be evaluated negatively for a socially responsible company. Furthermore, we argue that the presence or absence of information on competitor actions influences which context effect, assimilation or contrast, will occur. When information on competitor actions is lacking, assimilation effect is likely to occur and a socially responsible company will get the benefit of doubt for their ambiguous actions at times of a crisis. However, the presence of information on competitor actions is likely to prompt the formation of judgment standard, leading to a contrast effect because a socially responsible company will be held to a higher standard and thus be punished for ambiguous actions.

Study 1 explores a product-harm crisis wherein a company is purported to have precipitated a health crisis due to consumers' consumption of its defective product. Apart from manipulating CSR reputation (positive, negative) we also manipulate the response of the company which is positive, indecisive/ambiguous, or negative. We did not provide any information on competitors' actions in similar circumstances. Results of this study indicate an assimilation effect. When the focal company enjoyed a positive CSR reputation, an ambiguous, somewhat less than definitive action on the part of the company in response to the product-harm crisis resulted in more positive attitudes, as if the action is positive. However, when the company's CSR reputation was negative, an ambiguous action led to more negative attitudes, as if the action is negative. This assimilation effect manifests across both measures of company evaluation and company beliefs (based on a 3 item index of whether the company is trustworthy, has consumers' best interests in mind, is concerned abut consumer welfare).

Our more interesting finding comes in Study 2. Here too we manipulate both the focal company's CSR reputation and its action in an adverse situation as being positive, ambiguous, or negative. However, we also include information on the competitors' actions in each instance. Our results suggest a contrast effect. The company with a positive CSR reputation was held to a higher standard (i.e., it was compared to those competitors who provided a superior response in the crisis) and its ambiguous action was seen as negative or inadequate; the company was punished with lower ratings of company evaluation and company beliefs relative to those in the case of a positive action. However, the company with a negative CSR reputation was held to a lower standard (i.e., it was compared to those competitors who provided an inferior response in the crisis), and its

ambiguous action resulted in higher ratings of company evaluation and company beliefs relative to those in the case of a negative action. This study demonstrates a previously neglected aspect of having a positive CSR reputation, that is, its high maintenance cost. Although, socially responsible companies may enjoy a halo effect when their ambiguous actions are viewed in isolation, if attention is drawn to competitors with a superior response, they are likely to be punished for inadequate actions.

Our research not only complements the existing CSR literature by documenting the double-edged nature of CSR reputation, but also contributes to the research on context effects by suggesting a new variable, the presence/absence of information on competitor actions, which influences whether assimilation or contrast effect will happen. Furthermore, our findings suggest that information internal (i.e., CSR reputation) as well as that external to the focal company (i.e., actions of competitors) will jointly determine the formation of comparison standard against which the company will be evaluated. Prior research on contrast effect has focused on either internal (i.e., information about the company itself) or external (e.g., information about other companies) information but not both.

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When Can CSR Associations Be Considered for Product Evaluation by Consumers not Concerned about CSR Issues?
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Consumers increasingly believe that companies must promote values in a society beyond making profits. For example, 60% of consumers in a survey said that when they make purchase decisions, they take into account social and environmental factors (Holston, 2008). For this reason, corporate social responsibility or CSR is increasingly considered as a business imperative.

When committing to a CSR practice, marketers certainly wish that consumers would eventually reward them by endorsing their products. Unfortunately, it is still questionable as to whether CSR practices are, indeed, rewarded by consumers. In particular, when consumers are not particularly concerned about CSR issues, the effectiveness of CSR becomes even more doubtful. For example, a coffee chain's free-trade coffee policy may not appeal to consumers who are aloof about the type of coffee suppliers; therefore, whether the coffee was free-traded or not would be deemed less relevant in evaluating their coffee choices. Consequently, to some extent, virtually all CSR practices can only appeal to a portion of their consumer base. This issue will be critical for marketers who try to make their CSR practices more aligned with the needs of business in the current economic downturn.

This research examines the conditions under which CSR associations that consumers hold can be considered in their product evaluation, especially for consumers not particularly involved in CSR issues. We assume that the issues a corporation endorses (e.g., a clean environment or helping the poor, etc.) will be represented as a societal value to a consumer because those issues entail "a desired end state" (Schwartz & Blisky, 1987). To examine this issue, we employed construal-level theory (CLT; Liberman, Sagristano, & Trope, 2002). CLT suggests that as the psychological distance from a behavior increases, the values involved in the behavior are more significantly considered (Trope & Liberman, 2003). Therefore, we expected that as the psychological distance of purchasing a product increases, consumers will be more concerned about the value represented in CSR associations related to product evaluation, even among consumers who did not initially endorse the CSR issue. Although those who already *do* care about the issue are not the primary focus of the current research, we expected that their product evaluation would be affected by CSR associations, irrespective of the psychological distance from product purchase, given that the value is chronically important to them, and is therefore likely to guide their judgments.

These predicted findings are important for multiple reasons. Theoretically, this research can contribute to the CSR literature in that we identified the conditions in which consumers use CSR associations for product evaluation by affecting their psychological distance from product purchases. In addition, our findings give insights from which marketers can make their CSR efforts more accountable by making these CSR associations more influential in product evaluation, not only for those who already care about the issue, but also for those who did not initially care.

In experiment 1, we chose workplace diversity issue as a CSR issue and a *Sharp* calculator as a product for participants to evaluate. We varied the psychological distance of product purchase by asking participants to imagine either a temporally near or distant product purchase (Lieberman et al., 2002). Also, we varied the valence of the CSR associations and measured participants' chronic support for workplace diversity. Regression on product evaluation with Temporal Distance, Valence of CSR associations, support level, and their interactions as predictors generated the predicted three-way interaction, $\beta = -.53$, $t = -2.32$, $p < .05$. We performed simple slope tests on product evaluation when the support level was centered at 1 standard deviation above and below the mean. As predicted, for participants with low support for the issue, Temporal Distance × Valence of CSR interacted, $\beta = .65$, $t = 2.92$, $p < .01$. That is, for low-support participants, they rated the calculator more favorably in the positive CSR association condition than in the negative CSR association condition ($M_{\text{positive CSR vs. negative CSR}} = 5.21$ vs. 3.95; $t = 2.35$, $p < .05$) in the distant-future purchase condition. However, in the near-future condition, their product evaluation did not differ based on the valence of CSR associations ($t = -1.78$, $p > .05$). This finding supports our notion that when consumers construe a psychologically distant (versus near) purchase, they consider CSR associations as relevant for product evaluation, presumably because the values represented in the CSR practice is weighed more significantly in the psychologically distant (versus near) situation. For high-support participants, only the predicted main effect of valence appeared, $\beta = .49$, $t = 2.76$, $p < .01$. That is, for them, the values represented in the CSR practice were chronically salient, and therefore, deemed relevant for product evaluation, irrespective of the psychological distance of the product purchase.

In experiment 2, so as to increase generalizability, we used a different product—a *Canon* printer—and a different CSR issue—environmental protection. Also, support for the CSR issue was measured in terms of actual involvement in the issue regarding people's lifestyles (e.g., "I myself sort and separate all of the home garbage for recycling and composting.[5]"). Regression on product evaluation with Temporal Distance, Valence of CSR associations, involvement, and their interactions as predictors generated a significant three-way interaction, $\beta = -.41$, $t = -2.03$, $p < .05$. When involvement level was centered at 1 standard deviation above and below the mean, for low-involvement participants, the predicted interaction effect between Temporal Distance × Valence of CSR was marginally significant ($\beta = .48$, $t = 1.72$, $p = .089$), indicating that participants evaluated the same printer differently as a function of temporal distance and the valence of CSR associations. For high-involvement participants (+1SD), however, the interaction effect between Temporal Distance × Valence of CSR was not as significant as predicted ($\beta = -.34$, $t = -1.21$, $p > .1$). Taken together, these results provide converging evidence that CSR associations become influential in product evaluation for those with low initial concern about the CSR issue when they are induced to construe a product purchase as psychologically distant (vs. near).

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It's the Thought that Counts: The Ironic Effects of Intentions on Compensatory Reasoning
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Imagine a consumer who is shopping for a new brand of laundry detergent.   We know that he or she will consider many attributes about the detergent, including the product's stated benefits, its performance compared to competing brands, and perhaps even more indirect properties, such as the detergent's potential impact on the environment. However, little is known about what type of information, if any, consumers will consider regarding the firm's intentions in creating the product. Does it matter at all what the company *intended* to do when making the detergent?

Previous research indicates that inferences about an individual or group's intentions are central to a wide array of judgments, including moral reasoning, assessments of cause and effect, and adequate interpretation of an actor's goal. For example, whether or not we judge an act as morally permissible may depend critically on whether the person's actions are judged to be intentional (e.g., Nagel 1986; Royzman and Baron 2002). However, despite the centrality of intentional reasoning to many areas of cognition, its application to consumer behavior has been relatively limited. In the present studies, we explore the potential impact of intentional reasoning on consumer preferences. Specifically, we examine the role of intentions in the domain of compensatory reasoning, a well-studied phenomenon concerning inferences about the tradeoff between various product attributes (e.g., Chernev and Carpenter 2001; Chernev 2007).

The present studies demonstrate that when a company *intentionally* makes a product that specializes on one attribute (e.g., it is better for the environment than competing brands), participants see the specialized improvement as pulling away resources from traditional performance attributes (e.g., the ability to remove stains) and putting them toward the specialized benefit (cf. Chernev 2007). However, when the same specialized improvement is described as an *unintended* side effect, participants now rate the product's quality as better on traditional performance attributes. Thus, we demonstrate a somewhat ironic effect of intentions on compensatory inferences in that *intending* to enhance a product may actually lead to worse perceptions of the product's overall quality.

The present studies also identified the mechanisms underlying the perceived differences between intended versus unintended improvements. Specifically, we demonstrate that the effects of intentions on quality judgments are explained by underlying beliefs about the degree to which the improvement resulted from some type of innovation (e.g., a new type of car engine that is both better for the environment and performs better) versus a tradeoff in quality. We demonstrate that *unintended* improvements trigger more inferences about innovations than do *intended* ones, and in turn, this difference explains the observed differences in ratings of quality. The basic *intended* versus *unintended* difference is demonstrated across three studies, as are the underlying mechanisms concerning inferences about tradeoffs in quality versus inferences about innovations.

Study 1 was modeled closely on Chernev (2007) and was modified to describe scenarios in which a company created a new product that was better for the environment than competing brands. Each participant evaluated four different commercial products (laundry detergent, shaving cream, toothpaste, and cold relief medicine). Half of the participants were randomly assigned to the *Intentional* condition and for each product read that, "*A well-known company that manufactures (laundry detergent) decided to develop a new product. As intended, this product was better for the environment than competing brands.*" Participants then rated the product on two separate performance attributes (e.g., the color protection properties of the detergent and the ability of the detergent to remove stains), as well as the perceived environmental benefit.   The other half of the participants, were assigned to the *Unintentional* condition and completed a nearly identical questionnaire. However, the phrase "*As intended…*" was replaced with "*As an unintended side effect…*" All other aspects of the study were held constant across the two conditions. As predicted, when the green improvement was described as *intentional*, participants rated the performance attributes of the product as *worse* than when the green improvement was described as an *unintended* side effect. No differences were observed in ratings of the environmental benefit. This pattern of results was consistent with the hypothesis that intended improvements are seen as pulling away quality from other attributes, while unintended improvements are inferred to reflect innovations that improve both specialized attributes and performance attributes at once.

Study 2 examined the underlying mechanism. Specifically, we hypothesized that the difference between intended and unintended improvements was

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[5] Experiment 2 was conducted in Korea, where a significant portion of the population engages in detailed home recycling procedures. Experiment 1 was conducted in the U.S.

explained by the underlying belief that intended improvements pull away quality from other attributes, while unintended improvements reflect innovations that improve both specialized attributes and performance attributes at once. The procedure was similar to Study 1, except that for each item, participants responded to two additional questions that assessed the degree to which they thought that the specialized improvement pulled away quality from performance attributes, and the degree to which they thought that the specialized improvement resulted from some type of innovation. Additionally, we wanted to replicate the effects in a second domain, so two new conditions were added in which a company made a product that was "*healthier for consumers than competing brands*" and manipulated whether the health improvement was intended or unintended. Results replicated the principle finding of Study 1 in both the environmental and health domains, where products were judged to be *worse* in quality when the specialized improvement was *intended* versus *unintended.* Moreover, the degree of perceived innovation mediated the effects of intended versus unintended improvements on ratings of perceived quality.

In the final study we explored potential boundary conditions of this effect. Study 2 demonstrated that judgments about the tradeoff in quality are reduced when people believe that the green improvement reflects an innovation. Therefore, in Study 3, participants were simply told that the company has had previous experience with similar product enhancements—e.g., the company knows what they are doing and has made environmental improvements in the past. Results indicated that participants were now more likely to assume that an innovation has occurred rather than a tradeoff in quality and therefore, rated the product with the *intended* improvement as better in quality than the *unintended* one.

Overall, this work serves to highlight the importance and centrality of intentional attributions and provides one of the first applications of intentional reasoning to the domain of consumer behavior.

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The Moral Discount: Can Being Socially Responsible Hurt Your Brand?
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Corporate social responsibility (CSR) can be used as an effective marketing technique and, to media and consumer praise, companies spent $4.4 billion on CSR in 2007 (Lawrence & Mukai, 2008). CSR, defined as a "company's status and activities with respect to its perceived societal obligations" (Brown & Dacin, 1997, 68), can increase customer satisfaction with the company (Marin & Ruiz, 2007), enhance brand evaluations (Brown & Dacin, 1997), and increase consumer willingness-to-pay (Creyer & Ross, 1997). However, recent research suggests consumers perceive more ethical brands to be less effective (Luchs et al., 2008). Here, we investigate this "moral discount" and find that the impact of CSR on product evaluations depends on two factors: brand strength and the nature of the "ethical element" (type of CSR attribute).

When a brand engages in a typical CSR campaign (e.g. donating money), the CSR attribute becomes an important piece of accessible information for consumers to use when evaluating the brand. According to the accessibility-diagnosticity model, accessible information will be used as input into judgment if the information is perceived to be more diagnostic than other accessible inputs (Feldman & Lynch, 1988). When accessible and diagnostic, consumers use memory-based and context-based information (Menon, Raghubir, & Schwarz, 1995). Context-based information, information given during the time of the decision, is used when memory-based information is not accessible. When memory-based information is accessible and diagnostic, context-based information is not used. With an unfamiliar brand, consumers can not rely on previous associations of the brand and therefore, the context-based information of the CSR attribute becomes diagnostic. We predict that when context-based information is related to CSR attributes, consumers will fall prey to Luchs et al. (2008) 'ethical equals less effective' lay theory. However, when a familiar brand engages in CSR, memory-based cues become diagnostic when evaluating the brand. Therefore, consumers will use this context-based information in conjunction with the memory-based cues of the brand (Menon et al., 1995). Thus, the CSR attribute will be inferred to be consistent with the memory-based evaluation of the brand (Dick, Chakravarti, & Beihal, 1990). We predict that a brand with a CSR attribute will increase (decrease) perceived (1) brand effectiveness and (2) willingness to pay for a familiar (unfamiliar) brand.

In study 1, we test whether the type of brand, familiar versus unfamiliar, is helped or hindered by a typical CSR attribute, donating money to non-profit organization. Participants were exposed to one of four conditions in a 2 (familiar vs. unfamiliar brand) X 2 (CSR attribute vs. non-CSR attribute) between-subjects design. Participants were shown a picture of a candy bar and told that this was a new product on the market and asked questions related to their anticipated taste ratings and willingness to pay for the product. We conducted two, 2 X 2 ANOVAs with the anticipated taste rating and willingness to pay as the dependent variables. For both variables, there is a significant CSR x Brand interaction, (taste=F (1, 171) = 5.538, p < .05) (willingness to pay=F (1, 171) = 3.752, p=.05). These results support our prediction above.

Study 1 addresses a typical CSR attribute, charity donations, that is *extrinsically* tied to the brand. CSR attributes can also be intrinsically related to the product (e.g., earth-friendly ingredients). Consumers use both extrinsic and intrinsic cues (e.g., attributes) simultaneously when making evaluations of a brand (Jacoby, Olson, & Haddock, 1973). For a familiar brand, an intrinsic CSR attribute presents contradictory evidence to the memory-based perceptions of the brand's physical make-up. While the CSR intrinsic attribute is not necessarily negative, it possesses the same characteristics as a negative cue and alters the perceptions of the brand's quality (Ahluwalia, 2002). Therefore, one might predict that with a familiar brand, consumers will perceive a CSR intrinsic attribute more negatively than a CSR extrinsic attribute. For an unfamiliar brand, the consumer does not have memory-based information to judge the new CSR attributes and therefore an intrinsic CSR attribute does not provide inconsistent information to the consumer. We propose that an intrinsic CSR attribute therefore helps an unfamiliar brand because the attribute becomes part of

the contextual cues used to define the product. However, extrinsic CSR attributes do not provide the same depth of contextual information about the unfamiliar brand and therefore are not strong indicators of the product.

In study 2, we test whether the type of CSR attribute, acting as an extrinsic vs. intrinsic cue, helps or hurts a familiar vs. unfamiliar brand. We conducted 2 (familiar vs. unfamiliar) X 2 (extrinsic CSR attribute vs. intrinsic CSR attribute) between-subjects design. Participants were shown a picture of detergent and rated the effectiveness of the detergent and their willingness to pay. We conducted a 2 X 2 ANOVA with detergent effectiveness as the dependent variable. There is a significant CSR X Brand interaction (F(1,233) =4.07, p<.05), which shows that with an unfamiliar brand, effectiveness ratings are higher for intrinsic versus extrinsic CSR attributes, however with a familiar brand, effectiveness ratings are equal for extrinsic versus intrinsic CSR attributes. Unlike detergent effectiveness, we do not see a significant interaction for consumers' willingness to pay (F=.33). These results show that consumers perceive an unfamiliar brand with an intrinsic CSR attribute as more effective than an unfamiliar brand with an extrinsic attribute. However, for familiar brands, the data show no difference in the efficacy of extrinsic versus intrinsic CSR attributes.

This research demonstrates that, in promoting socially responsible products, managers should carefully consider both their brand's strength and the type of CSR attribute. Familiar brands may be better able to benefit from extrinsic and intrinsic attributes. However, brands new to the marketplace may want to avoid extrinsic CSR attributes, thus avoiding the moral discount bias.

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Session 5.2

Self-Schema as Goal Standard: Understanding Self-Regulation via Sequential Behaviors

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Researchers have shown considerable interest in the effects on self-regulatory failure on subsequent behavior over the last few decades (Carver and Scheier 1998; Fishbach, Dhar and Zhang 2006). One common assumption inherent to this body of literature is that consumers can easily and unambiguously categorize certain behaviors as a failure (e.g., indulging in a chocolate cake). In reality, however, neither do people have a single isolated goal to pursue nor a constant self-focus in place to be able to constantly monitor their goal progress (Bargh 1990). A particular behavior may be recognized as a lapse or self-regulatory failure under certain conditions whereas it might be recognized as a success under other circumstances. The present research asks what these conditions are and how they influence the consequences of regulatory failures. In particular, we are interested in exploring when self-regulation failures have a (de)motivating effect on subsequent goal pursuit and increase the (de)valuation of goal-specific means.

To address these questions, we adopt a self-concept based goal-theoretic framework. The symbolic self-completion theory predicts that failing toward a self-defining goal propels individuals to self-symbolizing efforts aimed at winning back a renewed sense of completeness (Brunstein and Gollwitzer 1996; Wicklund and Gollwitzer 1982). However, the self-concept is known to be multifaceted, malleable and context-dependent and all dimensions of the self-concept cannot be accessible in one's mind at a given moment. Instead, only a subset of the universe of self-conceptions is active at a time depending on situational contexts or current experiences (Markus and Kunda 1986; Wheeler, DeMarree and Petty 2007). Once activated, a particular self-schema has relative dominance over other aspects of the self-concept and creates a motivational state by serving as an ideal standard to attain. When a behavior incongruent with the active self-schema is performed, the regulatory system will identify it as a failure and the person will engage in self-symbolizing behaviors in order to reduce the discrepancy between current and ideal states (Carver and Scheier 1998; Fishbach et al. 2006).

We hypothesize that self-symbolizing will take the form of valuation of schema-congruent and devaluation of schema-incongruent means. In the absence of an active self-schema; however, the same behavior might not be indicative of increased distance from a desired end, but may imply low commitment to the goal and enhance disengagement from the pursuit (Fishbach and Dhar 2005; Fishbach et al. 2006). In this case, a self-perception-like process of reinforcement (Bem 1972) will dominate wherein an initial behavior activates a goal, increasing the likelihood of performing similar behaviors. If a schema-congruent behavior is performed, the discrepancy between actual and ideal selves will decrease. This perceived goal progress might reduce the regulatory tension and liberate people from further self-symbolizing efforts (Fishbach et al. 2006). As a result, the value derived from schema-congruent and schema-incongruent means are expected to converge.

We test these predictions in two experiments using a setting of sequential food consumption. Study 1 has a 3 (Self-schema: Healthy vs. Hedonic vs. Control) x 2 (Meal Choice: Healthy vs. Unhealthy) between-participants design. Healthy and hedonic self-schemas are activated by asking participants to write a self-portrayal in a way to describe themselves as a health-conscious or pleasure-seeking person, respectively. A positively worded description of health consciousness and pleasure-seeking was also provided. After working on the self-portrayal essay for five minutes, participants read a vignette, which described lunchtime on a regular day where they make a healthy (i.e., green salad and water) or unhealthy (i.e., pizza and cola) food choice. The participants were then shown a number of healthy and unhealthy food items and asked to rate how much they would want to eat each item after the given lunch.

There was a significant self-schema by meal choice interaction (F(2, 102) = 3.76, p < .03). Consistent with our prediction, people in the healthy schema showed a greater preference for healthy food after eating an unhealthy lunch than a healthy lunch (F(1, 102) = 3.80, p = .05). On the other

hand, people in the hedonic schema showed a greater preference for unhealthy food after eating a healthy (vs. unhealthy) lunch ($F(1, 102) = 5.49$, $p = .02$). Participants in the control condition showed a slightly higher preference for unhealthy food after unhealthy (vs. healthy) lunch ($F(1, 102) = 1.59$, $p = .21$). In support of our predictions, there was no significant difference between healthy and unhealthy food ratings in healthy or hedonic schema following a schema-congruent initial choice (both Fs < 1).

In study 1, we show that a schema-incongruent behavior leads to enhanced self-regulation toward the focal goal whereas a schema-congruent behavior releases ongoing self-regulation. If our theoretical framework holds, than the strength of the initial behavior should affect the magnitude of self-regulatory failure thereby strengthening the subsequent urge for symbolic self-completion. This prediction is tested in study 2, which uses similar procedures as in study 1 in a 2 (Self-schema: Healthy vs. Hedonic) x 2 (Meal Choice: Healthy vs. Unhealthy) x 2 (Meal Size: Small vs. Large) between-participants design. To manipulate meal choice and meal size, we created four different vignettes. We expected that a large and unhealthy meal would serve as a big self-regulatory failure in healthy self-schema whereas a small and healthy meal would be the big failure in a hedonic self-schema. We predict that the strongest self-regulatory effort should be found in these conditions. Following up on a significant three-way interaction ($F(1, 189) = 4.57$, $p = .03$), we find that the greatest preference for healthy food occurred after a large failure in a healthy self-schema and the greatest preference for unhealthy food occurred after a large failure in a hedonic self-schema.

As such, in two studies, we provide support for the predictions of our self-schema activation framework of self-regulatory failures and establish the magnitude of failure as a significant moderator. The proposed framework fits nicely with and contributes to recent developments on sequential consumer choice (Huber, Goldsmith, and Mogilner 2008) by focusing on the background goals driving the direction of choice sequences. Past research has exclusively focused on the bottom-up effects of "temptations." Our studies provide novel insight into the self-regulation process, by showing that hedonic goals may also operate in a top-down direction when they temporarily dominate the self-concept.

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Nonconscious Goal Pursuit in the Presence of a Conscious Goal
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Research on nonconscious goals have shown that goals can be activated and operate outside of awareness, and in turn, exert a wide range of effects on cognition and behavior (Chartrand & Bargh, 1996; Bargh, Gollwitzer, Lee-Chai, Barndollar, & Trötschel, 2001). The behavioral outcomes resulting from these goals are known to be qualitatively equivalent to those conscious goals produce (Chartrand & Bargh, 2002). Yet, aside from this notion of comparable quality, there has been little research with regard to the interplay of conscious and nonconscious goals. One exception is recent research on multifinality (Chun & Kruglanski, 2005), where individuals choose between choice options that are equally instrumental to a conscious goal while a nonconscious goal favors one of the options. Under these circumstances, the nonconscious goal acts as a tiebreaker.

In the current research, we question whether a nonconscious goal is always less prioritized than a conscious goal; can it go beyond its role as a tiebreaker and play a central role in choice? To test this, 94 participants were given two iced tea alternatives in the guise of a taste test with the conscious goal of "choosing the better tasting drink." One alternative satisfied the conscious goal of taste (pure tea paired with a health-neutral label), while the other satisfied the nonconscious goal of being healthy (diluted tea paired with a health-oriented label). Pretests confirmed that the alternatives differed with respect to their perceived instrumentality in satisfying health and taste. In contrast to a control condition (and a blind taste test) where individuals chose the pure alternative according to their conscious goal, individuals who were primed with the goal of being healthy chose the diluted yet healthy alternative ($\chi^2(1, N = 94) = 4.172$, $p = .04$). These results were obtained 5 minutes after priming, a time lapse which has previously been used to ensure a goal-based account for choice (Bargh et al., 2001).

In experiment 2, we examine whether goal priming favorably distorted the perception of the diluted alternative in the first experiment; this account is plausible given that higher-order information about a liquid can affect its perceived taste (e.g., Lee, Frederick, & Ariely, 2006). We replicate the procedures of experiment 1 with 140 participants but pair both drinks with health-instrumental labels. Of key interest is the choice pattern in the experimental condition. Since both alternatives are equally instrumental to health, the positive expectancy of nonconscious goal attainment should now produce similar taste experiences. If this occurs, participants who are primed should choose randomly between the two drinks, resulting in an even split between alternatives. As expected, the choice pattern in the experimental condition indicates that a *change* in taste perception occurred due to the priming of the nonconscious goal since a similar proportion of participants chose each of the two drinks (diluted: 47.8% vs. pure: 52.2%).

The control condition, on the other hand, revealed a stronger preference for the pure alternative ($\chi^2(1, N = 140) = 5.358$, $p = .02$), replicating the results of the blind taste test in the first experiment.

In experiment 3, 103 participants were given verbal information about two cars as a basis for choice; one satisfied the conscious goal buying a dependable car, while the other satisfied the nonconscious goal of buying an attractive car. Unlike the first two experiments where individuals made perceptual judgments, we examine whether a similar effect will occur with verbal information which requires more cognitive resources when making a choice. Based on research that suggests conscious and nonconscious goal pursuit are reflective of a controlled, effortful process and an automatic, effortless process respectively (Bargh & Chartrand, 1999), we predict that a high cognitive load will deter conscious goal pursuit while nonconscious goal pursuit remains relatively intact. We employ a 2 (goal priming: priming vs. no priming) x 2 (cognitive load: low vs. how) between-subjects design where half the participants were subliminally primed with constructs related (vs. unrelated) to their nonconscious goal of

attractiveness and were given a 9-digit (vs. 2-digit) number to rehearse when making their choice. As in the first two experiments, participants were given a 5-minute filler task between the priming and choice tasks. To control for individual differences in values placed on dependable versus attractive goals when purchasing a car, the difference between participants' goal importance ratings of dependability and attractiveness was used as a covariate measure in choice analyses.

Goal priming, cognitive load, their interaction, and relative goal importance were submitted to a logistic regression predicting choice for the attractive car. We obtained simple effects of relative goal importance (β = -.611, p = .00) and cognitive load (β = 1.793, p = .01). Of importance, this latter effect is qualified by the predicted interaction between goal priming and cognitive load (β = -2.385, p = .02). When participants were only given a conscious goal, the majority of them (64% under high, 69.2% under low cognitive load) **chose the dependable car irrespective of cognitive load** (χ^2 (1, N = 51) = .157, p = .70). When the nonconscious goal was additionally primed, however, choice differed depending on the level of cognitive load; 57.7% of the participants chose the attractive car under a high cognitive load while only 26.9% chose it under a low cognitive load (χ^2 (1, N = 52) = 5.042, p = .03). These results indicate that a high cognitive load alone was insufficient to alter choice toward the nonconscious goal satisfying option, but additionally priming the nonconscious goal led participants to *actively* choose this car.

Together, our findings show that a nonconscious goal can override a conscious goal when choice options pit them against each other; accordingly, participants provided explanations that were inconsistent with their nonconscious goal-driven behavior and showed no awareness of the actual source of their behavior during funneled debriefings. Our findings are based on contexts where few cognitive resources were used in making a choice. Identifying other situations when a nonconscious goal will dominate choice remains an important avenue for future research.

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When Flippers Flop: Goal Reversion in Consumer Choice

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Imagine choosing between two restaurants (A and B), one which has tastier food and one which has healthier food. Suppose you first learn that Restaurant A has very decadent food, which is good because it fits one of your goals – to have a delicious meal. Next, you learn that Restaurant B uses fresh, local ingredients, which fits another of your goals – to eat healthfully. Though you were leaning towards Restaurant A originally, this new information causes you to switch your preference to Restaurant B (i.e., you flip from A to B). Suppose you then encounter additional information about the two restaurants. How does your prior decision process, particularly the inhibition of the initial goal, impact your final restaurant choice?

We argue that because the two choice options align with different goals (to eat tasty food and to eat healthy), a consumer's restaurant preference at any point during the choice process can be used to infer which goal is more activate at that point. Further, when a consumer switches preference from one option to another (as in the example above), they must inhibit one goal to pursue the other. This inhibition of the original goal should cause it to increase in activation (Atkinson and Birch 1970; Bargh et al. 2001). Therefore, we predict that when a consumer inhibits one goal to pursue another (by switching their preference from A to B), the original goal should increase in activation, leading the individual to be more likely to switch back to the original option when given the opportunity (i.e., upon encountering additional information). We refer to this as the *goal reversion hypothesis*. In this paper we report findings from three studies designed to test this hypothesis.

Participants in study 1 chose between two unfamiliar restaurants based on four attributes that they read in sequence. The initial two attributes revealed that one of the restaurants had food that was more decadent and tasty. The third attribute revealed that the other restaurant had food that was healthier. We expected that this ordering of the information would establish the more decadent restaurant as preferred after the first two attributes, and that many participants would switch to the healthier restaurant after reading the third attribute (to pursue the competing goal). This subset of participants constitutes our focal sample, because these participants have inhibited one goal in pursuit of another. Our main interest is what happens to preferences of participants in the focal sample upon reading an additional attribute that is uncorrelated with tastiness or healthiness of the food. The goal reversion hypothesis predicts that a greater proportion of subjects should be expected to flop back to the more decadent option than would be normatively expected. Our results support this hypothesis. Forty-six percent of participants in the focal sample reverted back to the initial choice option after viewing the final attribute. This proportion was significantly greater than predicted by normative standards (χ^2 = 6.47, p < .01).

In study 2, we replicate the findings from study 1 and examine whether goal reversion is symmetric for different goal types. We also identify an individual difference which moderates the results. Participants again read four attributes about two restaurants. Based on the ordering of the information, half the participants were led to favor the healthy option first, while the other half were led to favor the tasty option. Reversion rates for both groups were significantly higher than that predicted by normative standards (both ps < .01), replicating the results from study 1 and supporting the goal reversion hypothesis. In addition, participants who started with a taste goal were marginally more likely to revert to the original goal than those who started with a health goal. This result fits with the idea that the goal to eat tasty is more desirable and so is more goal-like than the goal to eat healthy. An examination of various individual difference measures revealed that reversion is not a function of self-control or preference for consistency, but is related to an individual's Need for Decisiveness. Specifically, those high in Need for Decisiveness are less likely to exhibit goal reversion.

In study 3, we examine the impact of goal importance on goal reversion and introduce a delay. We predict that the more important the inhibited goal, the greater the increase in activation when it is inhibited, and hence, the higher the likelihood of reversion. Further, we expect these effects to be heightened after a delay (Atkinson and Birch 1970; Bargh et al. 2001; Chartrand et al. 2008; Sela and Shiv 2009). Participants again read four attributes about two restaurants. However, for half of the participants a brief delay (~ 1 min) was imposed after the fourth attribute. Participants were then asked to indicate their preference. Consistent with our hypotheses, we again observed reversion rates (43% of participants reverted in the baseline condition) that were significantly higher than normatively expected (p < .05). Further, adding a delay marginally increased the rate of reversion (51% of participants reverted after the delay; p = .07). As predicted, the impact of the delay was largest for participants who reported that the taste goal was very important.

These findings provide support for the goal reversion hypothesis, and increase our understanding of the role goals play in the earliest stages of preference construction. In addition, our methodology illustrates a new technique for tracking which goal is most active at any point of a choice process. Specifically, we examine which option is leading in a choice process with competing goals and use these preferences to infer which goal is active at a particular time. The advantage of this procedure is that it can be used to study the effects of self-inhibition of goals and how consumers switch between goals during a choice process with minimal interference of the choice process itself. Our findings highlight the importance of understanding order effects and preference reversals during choice processes and suggest that managers may want to consider the timing of information that could help an initial goal re-emerge.

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When Small Steps Become Big Leaps: How Goal-Consistency Judgments Bias Goal Progress Evaluations
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Consumer behavior is often guided by goals that call for a series of actions, each contributing to achieving the desired end-state. An important aspect of achieving such goals involves evaluating the degree to which each individual action contributes to the ultimate goal. This process of monitoring goal progress plays an important role in regulating consumer behavior by informing individuals about the relative contribution of each step they make toward the goal.

Despite the importance of understanding the processes that consumers use to evaluate their goal progress, relatively little research has been done in this area. Moreover, most research has focused on how consumers estimate the *degree* of progress toward their set goal. Building on the existing research, we argue that in addition to evaluating the degree of progress accomplished by a given action, consumers often form judgments of whether their actions are aligned with the desired goal. Thus, we argue that in addition to thinking in terms of the *degree* to which a particular decision contributes to advancing toward an active goal (i.e., "How much progress am I making toward the goal?"), consumers also evaluate the outcome of an action in terms of whether it is *consistent* with the active goal (i.e., "Will this help me reach my goal?").

We further propose that evaluating actions in terms of their consistency with the active goal (rather than based solely on the degree of progress) can lead to biased goal-progress estimates. In particular, we argue that in the case of actions associated with relatively minor goal progress, forming goal-consistency judgments leads to an overestimation of the actual goal progress, leading consumers to believe they have achieved significantly greater progress than they have in reality. We attribute this overestimation bias to the differential modes of processing the available information—qualitative vs. quantitative—which in turn influence the estimate of goal progress. In this context, we argue that forming qualitative judgments (goal-consistency) leads to biased quantitative estimates of goal progress (degree of progress).

We test these predictions in a series of four experiments. Our first experiment documents that goal-consistency evaluations lead to an overestimation of the perceived degree of progress. We record this bias across three different domains, representing three different goals: saving money, controlling calorie intake, and buying a fuel-efficient car. Building on the findings of the first experiment, in Experiment 2 we show that goal-consistency evaluations lead to polarization of goal-progress evaluations in the case of both positive and negative goal progress. Experiment 3 provides further support of our theory by documenting that the overestimation bias is more likely to occur in cases when the actual goal progress is small and is attenuated when the actual goal progress is large. Finally, in Experiment 4 we show that the overestimation bias stemming from goal-consistency evaluations can occur spontaneously when consumers are presented with a series of choices associated with the same goal.

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Session 5.3

Imagery and Consumer Information Processing: The Role of Visual and Verbal Processing Strategies in Comprehension and Integration
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Advertisements normally use both pictures and words to create a favorable impression of the products they are promoting. Consumers may consider information in both modalities when they form an overall impression of the product being advertised. However, their *comprehension* and *integration* of this information can be influenced by their disposition to process information verbally or visually.

Several effects of these dispositions on consumer information processing have been identified (Childers and Yang 2008; Jiang and Wyer 2009; Wyer, Hung and Jiang 2008). Consumers who process information verbally are likely to interpret it in terms of semantic concepts independently of the modality in which the information is presented and to base their judgments on the evaluative implications of these semantic encodings. In contrast, consumers who process information visually are likely to form a visual image of the objects being described as a whole regardless of whether the information is conveyed in pictures or verbally, and base their evaluations on their reactions on this holistic image. The effects of ad information on product evaluations may differ, depending on which processing strategy is invoked.

We investigated the nature and implications of this difference in responses to "problem-solving" print ads. These ads typically have a description of a problem that the product purports to eliminate, and a description of the consequences of using it (the solution). In our research, for example, participants received an ad for herbal tea describing the feelings of tension that the tea would eliminate the results of drinking it (relaxation). In some cases, however, both the problem and solution were pictured; in other cases, both components were described verbally, and in still other cases, one component was pictured and the other was verbal.

We assumed that individuals would find it more or less difficult to construe the implications of these ads, depending on the processing strategy they employed, and that this difficulty would influence their evaluation of the product being advertised (Janiszewski and Meyvis 2001; Lee and Labroo 2004; Schwarz 2004). We further assumed that this difficulty could occur both (a) at the *comprehension* stage, when individual pieces of information are comprehended and (b) at the *integration* stage when the implications of this interpretation are integrated to form an overall judgment.

When consumers employ a verbal processing strategy, differences in their ease of processing, and in the judgments that result from this processing, were expected to be localized at the comprehension stage. These consumers presumably extract the semantic implications of each piece of information separately and integrate its implications in a manner suggested by theories of information integration (Anderson 1971; Fishbein 1963). If parts of the information are nonverbal, however, they may recode them semantically. Therefore, their ease of processing may increase with the number of components that require this recoding. Once these transformations have been performed, however, the ease of integrating their implications should be similar and independent of the modality in which the information was first presented.

Correspondingly, consumers who employ a visual processing strategy may find it easier to comprehend information if it is conveyed visually than if it is conveyed verbally and a transformation into a visual code is required. However, differences in their ease of processing may occur at the integration stage as well. These individuals typically attempt to construct a coherent visual representation of the sequence of events being described as a whole (Adaval, Isbell and Wyer 2007; Black, Turner and Bower 1979). Thus, their difficulty in constructing the representation may depend on whether the two components can be easily integrated into a single visual representation.

Three experiments examined implications of this analysis. Experiment 1 confirmed the different effects of processing style strategies at the comprehension stage. Participants who were disposed to employ either a verbal or a visual processing strategy read problem-solving ads that varied in the modality of both the problem description (visual vs. verbal) and the solution description (see figure 1). When participants were disposed to process information verbally, the ease of processing the information and the overall evaluation of the product and of the ad increased with the number of components that were conveyed verbally. When participants were induced to use a visual processing strategy, however, the ease of understanding and the extracted implications of the ad were higher when both components were pictured than when only one component was pictured.

Experiment 2 investigated the impact of processing strategies at the integration stage, as reflected in their responses to ads whose components either could or could not be easily integrated into a single coherent visual image. In this experiment, all ads contained one verbal and one visual component, thus controlling for differences in the ease of processing at the comprehension stage (see figure 2). In some cases, however, both components referred to the same point in time (either the conditions that precede the use of the tea or the situation that results from drinking it). In other cases, the components referred to different points in time. Individuals who employed a visual processing strategy found it more difficult to integrate the information in the latter case than in the former and evaluated the product less favorable. Individuals who employed a verbal processing strategy made similar evaluations in both cases. This was true regardless of whether differences in processing strategy were chronic or situationally induced.

Experiment 3 provided evidence that these processes are likely to generalize to consumers' actual product choices. In both a laboratory and a field setting, individuals who employed a visual processing strategy were more likely to choose a product if the pictured and verbal descriptions of it in an

ad conveyed compatible images than if they did not. This was not true of verbal information processors.

Figure 1

Text-text advertisement
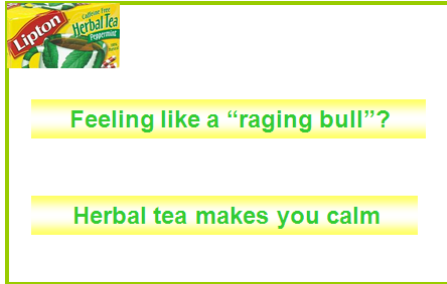
Picture-Picture advertisement
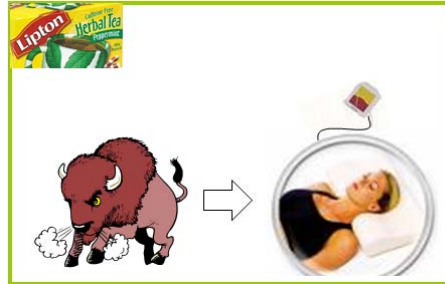
Picture-text advertisement

Text-picture advertisement

Figure 2

Compatible advertisements

Non-compatible advertisements

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The Role of Visual and Verbal Information Processing in Omission Neglect

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Consumers rarely have complete information when making judgments, and judgments based on insufficient evidence are often extreme and held with overconfidence. Consumers insensitive toward omitted information tend to overestimate the importance of given information and underestimate the diagnosticity of information not presented. The present research investigates the influence of picture color on consumer sensitivity towards missing information.

Prior research shows that sensitivity toward omissions can be increased by the presence of a comparative judgment context. The comparative stimuli shift judgment criteria by changing perceived relevancy and sufficiency of given information. For example, pairing a target product with a context product, described with relevant but different attribute dimensions, highlights the absence of the unique attributes in the target product. Importantly, a heightened cognizance of omissions can be created in a context product category (i.e., soybeans) completely irrelevant to the target product category (i.e., a camera) when a relatively large amount of information is provided for the context product.

Because visual and verbal information are processed in fundamentally different ways, judgment context embedded with both types of information may facilitate omission detection. Omission awareness is more likely when the combined presentation of visual and verbal information encourages consumers to consider and integrate multiple dimensions of judgment. The presence of a picture increases the accessibility and adoption of a visual (vs. verbal) strategy. When a visual strategy is applied, verbal information is likely to be encoded visually, resulting in a mental image containing implications suggested by both types of information. When the combined implications cannot be integrated into a coherent mental image, adding a picture in an ad can actually undermine the persuasiveness and result in a less favorable evaluation of the product.

This study hypothesizes that relative to a B/W picture, the presence of a colorful picture may situationally increase the tendency to process information visually (vs. verbally), accentuating the incompatibility between visual and verbal information when the combined information impedes the construction of a mental image. The inconsistency may become a contextual cue that signals the insufficiency of given information for judgment making. These considerations suggest that colorfulness of a picture may increase sensitivity toward unstated product features when the picture provides a different implication than the verbal information does. Three experiments were conducted to investigate the combined impact of color and verbal information on omission detection.

Experiment 1 investigated the possibility that a colorful picture would increase sensitivity toward omissions. 106 participants received a brochure with a tropical photo (either in B/W or color) and a description of a trip to Hawaii. The description of the trip's feature activities (unrelated to the photo) were either in narrative format or feature-listed format.   Participants were then asked to indicate their overall impression of the trip, evaluate presented and omitted feature activities, and indicate their perception of information sufficiency (the extent to which they wished to know more information about the trip).

Results revealed that when participants were shown a colorful (vs. B/W) ad, overall impression of the trip was lower and omitted attributes were evaluated less favorably . Correspondingly, those who saw the B/W picture rated presented attributes more favorably, while those who saw the color picture exhibited a higher need for more information. Additionally, describing the trip in narrative-like (vs. feature-listing) language led to higher overall impressions.

Results support the hypothesis that a colorful picture increases sensitivity toward omissions when a mental image is hard to construct on the basis of available visual and verbal information. To provide further evidence for this underlying process, increasing the match in the implications suggested by visual and verbal information should decrease the difficulty of mental image construction, thus attenuating the deleterious effect of the colorful picture.

Experiment 2 investigated this possibility by embedding a colorful picture with multiple images to increase the match between verbal and visual information. As expected, participants with the color ad evaluated the apartment more favorably than those who did not see the picture. In the color condition (vs. B/W), presented attributes were rated significantly more favorable, but omitted attributes were not rated less favorably. No difference in the perceived sufficiency of presented information was observed across conditions.

Experiment 3 was needed to investigate picture presentation order as a possible confound since research shows that interference inherent across verbal and visual modalities is greater when pictures are shown before verbal information . Because visual information isn't spontaneously encoded semantically, presenting visual information prior to verbal information necessitates semantic encoding of the visual symbols into verbal terms. When visual information is recoded semantically for judgment purposes, discrepancies between these two types of information become noticeable, increasing omission detection. Therefore, omission detection should be most likely when a colorful picture is presented prior to product attributes on a separate page, further demonstrating the detrimental effect of a colorful picture.

210 participants were asked to evaluate a European restaurant. The conditions varied over the cells of a 2(Picture order: picture prior to attributes vs. picture with attributes) x 2(Picture color: B/W vs. color) x 2(Picture type: one picture vs. four pictures) , and a no-picture control condition. Analysis of the overall evaluation of the restaurant as well as the extent of "wishing to know more information"   yielded three-way interactions among picture type, picture order, and picture color.

In the one-picture condition when the picture was presented with the attributes, picture color had a substantial positive effect on both restaurant evaluation and presented attributes.   Conversely, the color picture presented prior to the attributes had a negative effect on the evaluation, and the participants requested more information. The evaluation of presented attributes as a function of picture type, picture order and picture color revealed a significant three-way interaction. Consistent to the results obtained in Experiments 1 and 2, presented attributes received a significantly inferior evaluation when the picture was in color and when it was presented prior to (vs. with) the attributes.

Three experiments provide strong evidence that the extent of compatibility between processing visual and verbal information leads to differential sensitivity toward missing information. This research furthers our understanding of the detrimental effect of a color picture embedded in an ad through the omission neglect framework. Experiment 1 replicates this effect; Experiments 2 and 3 demonstrate that sensitivity toward missing information is most likely when the picture is in color and when it is presented before the verbal attributes of the product under evaluation.

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The Semantic and Aesthetic Impact of Smell on Touch

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The marketing literature has received a marked increase in scholarly attention devoted to the impact of sensory perception on consumer behavior (see Peck and Childers 2008). Not surprisingly, much of this exploration has shown the effects of the senses on consumer behavior in isolation from one another. Research on the impact of smell on memory (Morrin and Ratneshwar 2003), music on shopping behavior (Yalch and Spangenberg 2000), and touch on feelings of ownership (Peck and Shu 2009) highlight some of the fascinating results from this primary focus. Despite the need to continue exploring the impact of senses in isolation, the foundation now exists to support studies on the interaction of senses. We contribute to the literature on multisensory interactions by showing the sensory aesthetic (we define sensory aesthetics as the combined hedonically pleasing effects of sensory inputs) and semantic impact of smell on touch. Across three studies we show that the scent of a product can impact haptic perceptions, with these effects being moderated by the level of congruity between the sensory stimuli.

Multisensory Interactions and Consumer Behavior

The overall neural representations of product experiences rely on a combination of all sensory inputs. Recent studies within consumer behavior have explored these cross-modal interactions, including touch and taste (Krishna and Morrin 2008), smell and sound (Matilla and Wirtz 2001), sound and vision (Russell 2002), vision and taste (Hoegg and Alba 2007), as well as multiple sensory inputs and taste (Elder and Krishna 2010). These cross-modal interactions between senses have important consequences on consumer perceptions and behavior.

The specific combination of smell and haptics has not received attention within the marketing literature despite the acknowledgement that both scent and touch in isolation greatly impact consumer behavior (e.g., Morrin and Ratneshwar 2000; Peck and Wiggins 2006). However, recent research within psychology provides preliminary evidence that these sensory inputs do interact. Dematte and colleagues (2006) show that scent can impact touch, wherein a positive scent leads to better fabric perceptions than an unpleasant scent. In addition to this overall halo effect of smell on touch, we anticipate that semantic associations of the scent, as well as the congruence of these associations and the tactile properties of the stimulus, will further affect perceptions of the product. Whether learned or automatic, scents are not devoid of meaning. Indeed, the meaning of scents can affect not only perceptions, but actual behavior (Holland et al. 2005). Our current work explores not only the aesthetic impacts of smell on touch (pilot), but also boundary conditions for this effect (study 1), and the import of semantic congruence within the cross-modal interaction (study 2).

Pilot

We employed a one-factor design to replicate prior results showing a positive aesthetic impact of smell on touch. Participants rated the haptic quality of facial tissue that was either experimentally infused with a scent or not. We found a significant impact of scent on haptic quality (M_{scent} = 5.48, $M_{no\ scent}$ = 4.50), ($p < .05$). These results replicate prior findings showing the positive aesthetic impact of smell on touch.

Study 1

Study 1 was designed to explore boundary conditions for the effect found in the pilot study and within the literature. Specifically, we wanted to find conditions where smell did not significantly increase haptic perceptions. For this study we chose hand lotion as the stimulus to be evaluated.
Design and Procedure. We employed a 2 (lotion: thick or thin) x 2 (scent: yes or no) full factorial design. We pretested the fit of the scent and haptic quality of the lotion. Participants rated the fit of the thick lotion and no scent, as well as the thin lotion and scent significantly higher than the contrary pairs. We anticipate that this fit will drive perceptions of haptic quality for the lotion. Eighty-nine participants were instructed to use a small amount of lotion on the back of their hands. Again, no mention was made of the scent. Participants then evaluated the feel and quality of the lotion.
Results. As expected, we found a significant interaction of lotion and scent ($p < .05$). No other effects were significant. Follow-up contrasts showed that within the thick lotion condition, no scent was rated higher on haptic quality than the scented condition. In contrast, within the thin lotion condition, the scented condition was rated higher than the no scent condition. These results establish boundary conditions for the prior literature, showing that scent does not always have a positive impact on touch perceptions.

Study 2

The second study built on the prior studies and explored not only the aesthetic impact of smell on touch, but also semantic associations and congruity. As we were interested in drawing semantic associations from the smell to the haptic experience, we needed to find a way to match the

stimuli. The specific question to be addressed is whether a masculine or feminine smell can impact texture perceptions of paper matched for congruity (rough and smooth paper, respectively). We carefully pretested masculine and feminine smells, as well as rough and smooth paper for equal likeability as well as equal distances from the midpoint on a masculine/feminine scale.

Design and Procedure. Seventy-three undergraduate participants were randomly assigned to one of the four conditions. Each was given a scented piece of paper to evaluate. In contrast to the prior studies, participants were told to touch and also smell the fragrance on the paper. Following ratings of the smell, participants rated the overall texture of the paper.

Results. We found a significant main effect of texture ($p < .001$) as well as a significant interaction of paper type and smell on perceived texture of the paper ($p < .005$). Follow-up contrasts on the interaction revealed that within the smooth paper condition, the feminine smell lead to significantly smoother perceptions than the masculine smell. Similarly, in the rough paper condition, the masculine smell lead to significantly rougher perceptions than the feminine smell. The results support the semantic associations of smell as well as congruence effects. We show that scents do have meanings, and that these meanings can have a significant impact on other sensory inputs, such as touch.

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Do Not Listen to What I Say but Look at What I do: How Facial Judgments and Behavioral Intentions Differ as a Function of Implicit-Theory

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Research suggests that people base trait inferences on faces (Todorov 2008), and that these inferences affect judgments (Little et al. 2007) and influence subsequent behaviors (Bagchi, Chakravarti, and Sinha 2008). The role of observer characteristics on interpretation and its effects on downstream variables is less clearly understood (Gorn, Jiang, and Johar 2008). We extend the current understanding on how faces impact social cognition by highlighting the role of the observer's implicit-theory orientation on face-effect.

Implicit-theory suggests that people differ in their beliefs about the fixedness of traits and attributes (Dweck, Chiu, and Hong 1995). Entity-theorists believe that the world is fixed and stable and that people do not change very easily. In contrast, incremental-theorists believe that traits are malleable and that people can change. These theories are central to people's tools for interpreting their world and individuals rely on these theories to explain and predict several phenomena (Levy, Stroessner, and Dweck 1998). We posit and find that these theories also influence how people judge faces and affect subsequent behaviors.

In particular, we find that when asked to provide face-based trait judgments, evaluations of entity-theorists do not differ from those of incremental-theorists. Thus, it appears that faces do not affect entity- and implicit-theorists differentially. However, when asked to report behavioral intentions, ratings differ significantly. Entity-theorists anchor more on the face than do incremental-theorists. Consequently, even subsequent diagnostic information has a smaller effect on entity-theorists than on incremental-theorists. We report findings from two completed studies.

STUDY 1: IMPLICIT-THEORY AND NEUTRAL FACE EFFECTS

Eighty undergraduates completed the implicit-theory scale, an unrelated filler task, followed by the focal 'bakery-study.' The scenario indicated that on visiting their local bakery, participants saw a new baker and that they may have seen the face before in the local newspaper. On returning home, they read the newspaper article and learned that the new baker, Adam, was a convicted felon and had spent 30 days in a county jail for petty theft. He had since relocated to their neighborhood and was trying to get his life back on track. Participants then saw a face (said to be Adam's; the face was previously calibrated as being neutral on several traits) and provided judgments on several traits, measures of their perception of Adam's efforts to turn his life around and their own intention to stop visiting the bakery.

Results
A multivariate ANOVA on face-based assessments (with implicit-theory as the independent variable) indicated that face-based judgments were not influenced by theory ($F < 1$). In contrast, and importantly, ANOVAs on the behavioral intentions measures revealed that incremental- (vs. entity-) theorists' assessments were more (vs. less) positive. Incremental- (vs. entity-) theorists believed that the baker would be able to turn his life around ($M_{IT} = 4.89$, $M_{ET} = 3.90$; $p = .04$), would be less likely to commit another crime ($M_{IT} = 2.89$ vs. $M_{ET} = 4.33$), disagreed that the bakery should not have hired him ($M_{IT} = 1.67$, $M_{ET} = 3.29$), and that they would be less likely to stop visiting the bakery ($M_{IT} = 1.56$, $M_{ET} = 3.19$; all $ps < .01$).

Discussion
Although both theorists rendered similar face-based trait judgments, behavioral intentions differed as a function of theory. Incremental- (vs. entity-) theorists had more positive intentions. Thus, it appears that face-based trait assessments of incremental- and entity-theorists do not reflect their true behavioral intentions. However, in this study information was provided independent of the face. It is possible that differences in ability to assimilate information could have been responsible for these effects. In the next study, we strengthen these preliminary findings by using a negatively valenced face (previously calibrated as being negative on several traits). The face acts as the primary source of information. We also assess how providing additional diagnostic information about the person can affect intentions.

STUDY 2: IMPLICIT-THEORY AND NEGATIVE FACE EFFECTS

One-hundred-and-fourteen respondents participated in a 2(implicit-theory) X 2(diagnostic information: positive versus negative) between-subjects study.

Based on Poon and Koehler (2006), implicit-theory was manipulated using proverbs that stressed on the fixedness or malleability of human traits. Respondents were then asked to imagine that they were waiting in a coffee shop for Adam. As they were waiting, they see a stranger sitting on a nearby table. They were then shown the stranger's face (previously calibrated as being negative on several traits) and asked to provide trait judgments and indicate willingness to hire his professional services (pre-information ratings).

We then provided diagnostic information about the stranger. Participants learned that the stranger was Adam and that he was a financial advisor. They were meeting to discuss investing $10,000. In the positive information condition participants learned that Adam was recently recognized for stringent adherence to investment rules, while in the negative information condition he was charged with violating some minor investment rules. Respondents were then asked to indicate how much of the $10,000 they would invest based on Adam's advice (post-information ratings).

Results

A multivariate-ANOVA (with implicit-theory as the independent variable) revealed that individual theorists did not judge the target face differently (Fs < 1). The pre-information measure of hiring willingness elicited a main effect of theory. Incremental- (vs. entity-) theorists reported higher willingness to hire Adam (M_{IT} = 2.91, M_{ET} = 2.40, p < .05). When the post-information measure of amount of money invested was regressed on implicit-theory and information, a main effect of information (p < .0001) and a theory by information interaction (p < .04) emerged. Expectedly, respondents were willing to invest more money when information was positive ($M_{Positive}$ = 4.36, $M_{Negative}$ = 2.86). The two-way interaction indicated that information had a stronger impact on incremental-theorists than on entity-theorists. While no difference emerged when information was negative (M_{IT} = 2.81, M_{ET} = 2.94, p > .7), incremental-theorists were likely to invest more money relative to entity-theorists when information was positive (M_{IT} = 4.83, M_{ET} = 3.88, p < .01).

Discussion

Although face-based trait judgments were not influenced by theory, the negatively valenced face reduced hiring intentions of entity-theorists relative to incremental-theorists. Providing more diagnostic information about the person also had a smaller effect on entity-theorists than on incremental-theorists indicating that these respondents were more reluctant to change assessments that were made earlier based on the face.

CONCLUSION

Taken together, these studies show that implicit theories impact how face cues are incorporated into judgment and decision-making. These findings are likely to be of importance in many marketing contexts (e.g., personal selling, communication, persuasion) where faces are used to influence consumer evaluations. The role of individual differences in face evaluations are also likely to be of interest to marketers and may provide fruitful avenues for future research.

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Session 5.4

Accentuate the Positive, Eliminate the Negative: Attention and Emotion Regulation
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Individuals frequently manage their emotions, such as during a sad television commercial, looking at a soothing picture in a waiting room, or avoiding a plate of cookies at a party. In marketing, there is growing interest in understanding these emotion regulation processes and which strategies consumers use in various situations. Research (e.g., Gross 1998) has proposed five classes of emotion regulation strategies: situation selection, situation modification, attention deployment, cognitive change, and response modulation. To date, the bulk of research has focused on cognitive change and response modulation (Gross and Levenson 1993), while newer work has explored situation selection (e.g., Andrade and Cohen 2007). While each of these papers contributes to a deeper understanding of emotion regulation and its psychological components, certain strategies remain under-investigated.

This paper proposes process of attention deployment, whereby individuals strategically shift their attention toward and away from emotional stimuli to manage emotional experiences. Two studies demonstrate that people use attention shifts when presented with emotional stimuli, and a third shows that these changes in attention influence the intensity of experienced emotion, supporting an attention-based emotion regulation strategy.
Two studies tested whether individuals use attention shifts to regulate emotions when they encounter emotional stimuli. In order to examine these strategic attention shifts, a novel paradigm was created combining attention measures with emotional experiences. Attention was indexed by participants' reaction time and accuracy as they identified rapidly presented targets. These measures captured whether the individual was focusing closely on the target or diverting attention away from it. Thus, participants were asked across many iterations to indicate whether a letter "T" was presented either upside-down or right-side-up as quickly as possible (the "T task"). To understand whether attention is shifted in response to emotional stimuli, participants were also exposed to a series of pictures, intermixed with the "Ts". These pictures were taken from the International Affective Picture System (IAPS: Lang, Bradley and Cuthbert 2005), and have been used to reliably elicit emotional responses. The pictures appeared in the location of the target intermittently throughout the study. Thus, if participants shift attention toward and away from emotional triggers, response time and accuracy should change for the "Ts" which follow the emotional pictures.

In the first study, participants were exposed to pictures that were positive (e.g., puppies) and negative (e.g., car crashes). Results showed that participants performed worse, both with respect to correct identification and reaction time, on the T task following negatively valenced emotional stimuli ($p < .001$). This suggests that individuals are diverting their attention away from the target when they encounter a negative stimulus, versus focusing their attention on the target when it was positive.

To test the influence of specific emotions on the efficacy of attention shifts, the second study involved a two-group design. Positive pictures were shown with negative pictures that were either fearful (e.g., attacks) or sad (e.g., crying children) pictures. Research has shown differences between emotions of the same valence, such as fear and sadness; both are negative but fear is characterized by uncertainty and heuristic processing, while sadness is certain and engenders systematic processing (Tiedens and Linton 2001). In the fear condition, attention was unchanged across emotional stimuli (both RT and accuracy; $p > .25$), but in the sadness condition, performance worsened after a negative (sad) versus positive picture—as in study 1 ($p < .01$). This would suggest that in the sad condition, participants are strategically shifting their attention away from negative stimuli. However, for fearful stimuli, attention seems to remain focused on the target, reducing the likelihood that an individual could shift attention away from fearful stimuli. The results from studies one and two suggest that individuals naturally use attention shifts when encountering emotional stimuli, however certain negative emotions (fear) may be resistant to an attention based emotion regulation strategy.

These two studies support attention as a key moderator of emotional experience, but do not connect these shifts to emotional experience. The third study captured this effect. Participants watched an emotional video clip (sad, fearful) under attention instructions. Participants were told to either focus on the faces of the actors (directing attention toward emotional cues) or on set design (diverting attention away from emotional cues). By manipulating participants' attention, the study assessed whether diverting attention away from emotional cues (versus directing attention toward) would reduce the intensity of emotion. Results show that within the sad condition, participants who directed their attention toward emotional cues (faces) experienced higher levels of sadness ($M = 5.04$) than those who diverted attention away from emotional cues (scenes: $M = 3.69$, $p < .05$). This pattern supports the hypothesized function of attention: when attention is directed onto emotional cues the intensity of emotion increases, but when attention is diverted away from these cues intensity decreases. For ratings of fear, however, the attention manipulation was non-significant ($p > .20$). These studies demonstrate that individuals shift their attention in response to emotional stimuli, and that changes in attention influence the experience of emotion. Representing an under-researched emotion regulation strategy, this work presents a novel paradigm that connects attention and emotion in order to capture attention shifts. Additionally, these results identify specific emotions which are more or less susceptible to regulation via attention deployment—an important boundary condition. Taken together, these studies certify that attention can be used to effectively manage emotional experiences, suggesting new directions for emotion regulation and consumer research.

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Can We Help Consumers Make Healthier Food Choices? The Role of Product Associations

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It is lunch time and Mary heads to the fast food restaurant near her office. She was about to order the usual Combo # 1, featuring a chicken sandwich and fries, when she notices that the restaurant introduced a second option, Combo # 2. This option features the same chicken sandwich available in Combo # 1and mixed greens salad. Mary likes fries and salad to the same extent, so what will determine whether she chooses Combo # 1 or Combo # 2? A common mechanism for explaining choice of foods with varying degrees of healthiness is self-control. The choice might be explained by whether consumers feel they have made enough progress on a healthy eating goal recently (Fishbach and Dhar 2005), by the amount of self-control resources available to consumers at the time of choice (Baumeister, et al. 1998, Vohs and Faber 2007), and might also be explained by the most activated goal (i.e., healthy eating or indulgence) at the time of choice (Chartrand, et al. 2008).

Our research adds to the growing interest in understanding the role of presentation format on consumers' evaluations and choices of healthy vs. unhealthy food pairings (e.g., Fishbach and Zhang 2008, Wilcox, et al. 2009). We propose that a mechanism of protection of associations can change the salience of each option in the scenario described above (Cunha, Janiszewski and Laran 2008, Kruschke, Kappenman and Hetrick, 2005). We show that consumers adopt strategies to protect associations between items and their respective pairings and that these strategies have a strong influence on evaluation and choice of food pairings. We also show how this protection mechanism can contribute to understanding the process via which resources depletion and goal priming may operate as drivers of self control.

Consumers develop a large number of associations throughout their lifetime. For example, through repetition and co-occurrence, consumers learn that bacon and eggs, hamburger and Coke, tuna and mayonnaise go well together. Protecting these learned associations from interfering associations decreases cognitive costs and helps consumers more rapidly learn and adapt to their environment. The idea of protection of associations is grounded in attentional learning theory (Cunha, et al. 2008, Cunha and Laran 2009, Kruschke 2001) and is predicted to occur when the cognitive system directs attention to information that can solve this potential conflict in the knowledge structure. Attention is then steered toward information that is useful in acquiring novel knowledge while still protecting prior knowledge.

For instance, when Mary first learned about Combo #1, featuring chicken sandwich and fries, there was no previous association between the food items and "Combo #1". Therefore, it is likely that both food items became associated with Combo # 1. When Mary became aware of Combo # 2, featuring chicken sandwich and salad, a conflict occurred (chicken sandwich partially defines Combo #1). Combo # 2 features a new food item (salad) that can facilitate the acquisition of new knowledge while preserving prior knowledge. Because reassessing and updating the prior associations of Combo # 1, which could be cognitively taxing, Mary can solve the conflict by simply shifting attention away from "chicken sandwich" and toward "salad" when presented with Combo # 2. As a result, "chicken sandwich" should become more strongly associated with Combo # 1 than with Combo # 2, whereas "salad" should become more strongly associated with Combo # 2 than "fries" are associated with Combo # 1. If Mary finds the chicken sandwich to be more desirable than the distinct items, she will judge Combo #1 to be more desirable overall. If she finds the distinct items to be more desirable than the chicken sandwich, she will judge Combo #2 to be more desirable overall.

The experiments involved the sequential presentation of food pairings followed by judgments of likelihood to consume each pairing. The sequential presentation was used to influence the strength of associations between food-items and their respective pairings. The value of the distinct food items, relative to shared food items, were manipulated to test whether participants would prefer a combo over another even when both combos were equally valued in as a function of the food items they featured. Study 1 shows that food item-pairing associations influence the perceptions of equally valued food pairings. It also shows that these associations may determine whether food choices are healthy or unhealthy. Studies 2 and 3 show how common self-control and goal manipulations interact with the mechanism of association protection we propose. Study 2 shows that depleting consumers of their self-control resources affects their attentional capacity. This capacity is the main driver of the allocation of attention of the protection mechanism. As a consequence, we observe an amplification of the basic effect reported in Study 1. Study 3 shows that priming information associated with health directs attention to healthier food items, which may attenuate or increase the effects predicted by the association protection mechanism. This study also shows that goal priming effects in the context of presentation format are fully mediated by the associative process. Finally, study 4 shows that the protection mechanism may determine the healthiness perceptions associated with similarly healthy or unhealthy food pairings and influence consumer choice. Taken together, our studies show that the association protection mechanism not only allows us to predict how presentation format can influence the choice of healthy vs. unhealthy food pairings but can also contribute to explain how depletion and primes may operate.

An important question stemming from our research is how policy makers and marketers can use our results? Policy makers can raise consumers' awareness of their tendency to protect associations so that they can more efficiently allocate attention when making choices with implications for consumer welfare. Legislators can also enforce that marketers design product displays, in a way that directs attention to specific options first, which will drive subsequent attention and choice.

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Sticky Desires or Tricky Self-Control: Dynamic Processes in Attention Bias Towards Temptation

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A rich body of literature has looked at impulsive or indulgent behaviors through the lens of self-control, suggesting that such behaviors arise due to weakness of will or failures in self-control. Implicit in this argument is that impulsiveness is an extreme position on a bipolar scale. We propose an alternative view, suggesting a larger role for desires than previously thought. Specifically, we suggest that impulsiveness arises due to a strong attentional bias towards temptations that manifests in greater and more recurrent desires.

Previous literature has identified two types of attentional bias: *orientation bias* that results in spontaneous attraction towards stimulus and *maintenance or engagement bias* that results in continued engagement with the stimulus. Hungry individuals have been shown to spontaneously orient their attention towards food-related cues (e.g. Mogg et al. 1998, Mathews and MacLeod 1994). Other research has shown that individuals linger for a longer time looking at preferred choices, suggesting an engagement bias (Shimojo et al. 2003). In three studies, we extend the existing literature by showing that engagement bias better predicts people's yield to temptation and stems from people's tendency to approach temptations rather than a diminution in their ability to avoid.

Experiment 1 seeks to determine the nature of attentional biases towards temptations among impulsive vs. prudent people and whether indulgent behavior results from attentional bias. Participants first completed a scrambled sentence task that was either neutral or designed to activate the need for something sweet. They then engaged in a visual probe task (Bradley et al. 2002), in which participants were required to respond as quickly as possible to a small dot probe which was presented immediately after the display of a pair of pictures. Stimuli consisted of 18 color photographs of tempting desserts (e.g., ice-cream, lemon meringue, chocolate cake), each paired with a photograph of a sweet but healthy option (fruit salads, cut fruits). Each picture pair was chosen on the basis of matched liking, vividness and attractiveness as well as size. Pictures were also matched as far as possible on colors. Eight pairs of neutral objects (e.g., shoes, ties) were used on practice rounds. Picture pairs were presented for either 100 ms or 1250 ms on the screen after a fixation cross that appeared for 500, 750 or 1250 ms at random. These were followed by a dot probe that appeared in one of the two positions and remained on screen till the respondent's response. Attentional bias scores were computed for each participant by subtracting mean RTs to probes replacing pictures of desserts from the mean RTs to probes replacing the pictures of fruits. Positive values indicate greater vigilance for temptations. Positive values at the 100 ms exposure level indicate automatic visual orientation towards temptations, while those at the 1250 ms level indicate continued attention towards desserts even when the probe appeared in the position of the fruit. After the dot probe task, participants were given the opportunity to take cookies from a filled tray as an unrelated study. Finally, impulsivity was measured via the Consumer Impulsiveness Scale (Puri 1996) two weeks after the study. Results showed that impulsive individuals exhibited an orientation bias towards temptations. In addition, impulsive individuals who were primed with hedonic goal showed greater engagement with pictures of temptations. More importantly, those who exhibited the engagement bias took more cookies than those who exhibited orientation bias or no attentional bias, implying that maintenance bias towards temptations leads to subsequent indulgent behaviors.

Experiment 2 examines the psychological processes underlying such attentional biases. In particular, we were interested in the dynamics of desire and avoidance towards the temptation in an attempt to determine whether indulgence is caused by strengthened desire or weakened avoidance. Following the same priming procedure and dot probe task as in study 1, participants were presented with a tray filled with chocolate snacks and asked to move a mouse cursor continuously for 60 seconds within a 2-D grid. The grid was designed to simultaneously measure continuous desire and avoidance feelings over time. Participants indicated whether they felt little or a lot of desire towards the snack right at the moment on one dimension, and little or a lot of avoidance towards the snack on the other dimension. Results of the dynamic data reconciled with study 1 and provided new insights for the observed behavior: desire for the temptation was significantly higher for impulsive individuals when the hedonic goal is activated. Furthermore, these individuals also exhibited an engagement bias towards the pictures of desserts. More importantly, the higher level of desire towards temptation was mediated by maintenance bias towards pictures of desserts among impulsive individuals with an activated hedonic goal but not among impulsive individuals without an activated hedonic goal. Critically, however, there was no significant difference in avoidance among different conditions. Additionally, non-impulsive individuals exhibited a reactance towards activated hedonic goal by indicating a low level of desire towards the temptation through shifting their attention away from pictures of dessert.

In experiment 3, we followed the same procedure as in experiment 2 except that we manipulated rather than measured engagement bias. In the previous studies, attentional bias was a result of priming and then measured for analysis. In this study, we changed the design of the task such that the dot probe would appear more frequently either at the location of the dessert picture or the fruit picture, thus manipulating attention in one direction. Subsequently, we measured desire-avoidance reactions towards a tempting chocolate snack on the 2-D grid. Using a new technique from dynamical psychology called Recurrence Analysis, we examined the trajectories followed by the time series for desires and avoidance, specifically looking for the extent to which the trajectories visited the same region in state space over time. Results confirmed that impulsive individuals who were manipulated to attend to desserts showed higher recurrence of desires and remained longer in a state of desire, suggesting these individuals kept revisiting the same hedonic goal and were trapped in that goal state for a longer period of time. This phenomenon of trapped states is described in dynamical system theory as a "fixed point attractor" wherein individuals keep returning to a given state or goal despite occasional fluctuation (Carver 2004, Vallacher and Nowak 1999). In contrast, non-impulsive individuals exhibited reactance towards temptation when they were forced to attend to desserts by showing a higher level of avoidance.

In summary, our research demonstrates that indulgent behavior exhibited by impulsive individuals is an immediate consequence of an engagement bias towards temptation that results in greater desires rather than weaker self-control. However, strengthened desire is not only limited to an

elevated level of desire, but also extends to a more frequent recurrence of desire state and a longer trap time in that state. Diverting attention away from the temptation helps reduce this recurrence pattern, but does not strengthen avoidance reactions.

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Shaping Customer Satisfaction through Self-Awareness Cues

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Improving customer satisfaction is of great importance to marketers. Although satisfaction is obviously a function of the level of product/service performance vis-à-vis customers' expectations, it also depends on the attributions that consumers made about good or bad product/service outcomes. Studies generally find that, in case of delivery failure, dissatisfaction with the provider is stronger if the failure is attributed to the provider than if it is attributed to the customer or to an external cause. On the other hand, in case of delivery success, satisfaction with the provider tends to be greater if the success is attributed to the provider than if it is attributed to the customer or to an external factor.

Findings from the social psychology literature suggest a person's state of self-awareness can influence people's attributions. In particular, high self-awareness prompts people to make more internal attributions, and does so *independently* of the outcome to be attributed. If customer satisfaction is a function of the perceived locus of responsibility for product/service performance, and if the perceived locus of responsibility can be shifted by states of self-awareness, it should be possible to influence customers' satisfaction by varying the customers' level of self-awareness while holding objective product/service performance constant. This prediction was tested in a series of seven studies among more than 800 participants, including two field experiments, involving four different types of service interactions and four different manipulations of self-awareness (small mirrors, videotaping, asking of personal questions, being observed, priming of self concepts).

In each study, participants whose self-awareness was manipulated were exposed to information about different service interactions and asked to rate their satisfaction with the service. The first two experiments tested the basic prediction that mere exposure to innocuous cues that heighten self-awareness can influence customers' satisfaction with a service provider. It was found, across two different service interactions and across two different self-awareness manipulations, that heightened self-awareness increased satisfaction when the outcome of the interaction was unfavorable, but lowered satisfaction when the outcome was favorable. These effects were mediated by an increased perceived responsibility of the self for the outcome under high self-awareness.

The third experiment tested whether the effects of self-awareness on customer satisfaction are driven by changes in the encoding of the service interaction or by changes in the summary interpretation of the interactions. The results favor the latter explanation.

Given these results, the fourth experiment examined whether the same effect would hold if the service interaction occurred much earlier (e.g., several months ago). College students whose self-awareness was manipulated were asked to assess their satisfactions with college courses they were currently taking versus courses they had taken earlier. The results showed the self-awareness on satisfaction extends to current satisfaction with real service interactions that occurred much earlier. This latter finding reinforced Study 3's interpretation that the source of self-awareness effects on satisfaction lies at the moment of impression formation rather than at the encoding of the service interaction. From a substantive standpoint, the finding suggests that marketers may be able to shape not only satisfaction with recent service interactions but also satisfaction with past ones.

The fifth experiment replicated these effects in a field setting. Students and employees who had just finished a meal at a university cafeteria were approached by a female experimenter as they were exiting the cafeteria. Participants were initially asked whether they liked the meal they just had at the cafeteria: those who did were assigned to the positive-outcome condition; those who did not were assigned to the negative-outcome condition. Participants were then asked to complete a satisfaction survey. Those in the high-self-awareness condition completed the survey while the experimenter, standing less than two feet away, silently observed them, whereas participants in the low-self-awareness condition completed the survey while the experimenter, standing more than six feet away, ostensibly looked away. Consistent with the results of the first two studies, compared to those who were less self-aware, participants who were made self-aware were more satisfied with the meal if they had initially disliked, but less satisfied with the meal if they had initially liked it.

The fifth experiment identified a boundary condition for the above-found effects. That is, the results of this study showed that while raising self-awareness may increase the overall satisfaction with service interactions with an unfavorable outcome, it will only do so when there is mixed responsibility for the outcome. If responsibility for the outcome rests entirely with the provider, raising the customer's self-awareness may backfire and further decrease his or her satisfaction. This backfiring effect seems to be due to the triggering of ego-defense mechanisms under high self-awareness when the customer bears no responsibility for the outcome.

A sixth, field experiment, shows that the key effect—the increase in satisfaction after negative outcome interactions—also holds in a real retail setting. The study was conducted in a clothing retail store in New York City. The results show that customers who were about to return or exchange

merchandize at the store's customer service desk were more satisfied (less dissatisfied) with the merchandize they were about to return when mirrors were placed in the customer service desk area than when they were no mirrors.

In sum, these six studies provide strong evidence that subtle cues that raise self-awareness can influence satisfaction with service providers, even if the objective service performance remains constant. This effect has obvious managerial implications for marketers looking for ways to improve their customers' satisfaction following delivery failures. Satisfaction-through-self-awareness tactics can be implemented relatively inexpensively (e.g., mirrors at customer service desk, addressing customers by their names, etc.), especially compared to the cost of true product/service delivery improvements.

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Does Higher Construal Level Increase or Decrease Indulgence? Solving the Myopia versus Hyperopia Puzzle

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The classic literature on self-control focuses on myopic behavior, suggesting that individuals demonstrate self-control failure i.e. yield to immediate hedonic temptations when they focus on short-term benefits versus long-term goals (Trope and Fishbach 2000; Fujita et al. 2006). One way to reduce myopia is to induce a higher construal level, so that individuals focus on long-term benefits (Fujita et al. 2006; Liberman et al. 2007). However, recent research on hyperopia suggests an opposite form of self-control failure, namely many individuals have excessive farsightedness, thus they over-control themselves and constantly choose virtue over vice (e.g., Kivetz and Keinan 2006). Such a tendency is likely to evoke feelings of missing out in life and regret over time. One way to overcome hyperopia is to introduce a higher construal level (e.g., introducing greater temporal perspective; Keinan and Kivetz 2008), so that individuals will foresee their regret and consequently engage in indulgence to correct their hyperopic tendency.

The above two lines of research reveal an inconsistency. While the classic literature on myopia suggests that a higher construal level should lead to less indulgence (Fujita et al. 2006), recent work on hyperopia implies just the opposite. This research aims to offer reconciliation to the above described inconsistency.

We propose that construal level interacts with self-focus, which jointly determines an individual's present indulgence level. Specifically, when self is being explicitly primed, individuals will become aware of their chronic tendencies. Because a wide range of consumers experience some degree of tightwaddedness and perceive themselves as having insufficient indulgence (Kivetz and Simonson 2002), self prime is likely to make people realize their hyperopic tendency. Further, because a high construal level prompts people to think about their lives in the grand scheme of things, it may cause people to experience or foresee regret as they believe they have overly deprived themselves of pleasures in life. Thus, these individuals will try to correct their hyperopic tendency by engaging in more indulgence, such as spending more on hedonic products at the present moment. In contrast, when these self-focused individuals are primed with a low construal level, they should behave according to their immediately accessible chronic disposition. Thus, they would follow their hyperopic tendency, shying away from indulgence. In other words, when self is made salient, we expect to replicate findings from the hyperopia literature, i.e., a high versus low construal level should lead to more indulgence.

On the other hand, when self is not made salient, we expect that people may not become consciously aware of their chronic behavioral tendency. Consequently, the more salient manipulation of construal level will override any people's chronic tendency and determine indulgence level. Here, we expect to replicate the findings observed in the traditional research on myopia, namely a high versus low construal level should lead to less indulgence (e.g., Fujita et al. 2006; Trope et al. 2007).

A set of five experiments were conducted which offer support to our theory. Study 1 tests our above predictions directly by manipulating construal level (high vs. low) and self focus (self vs. control). The focal task involved presenting participants with a list of the hedonic and utilitarian products and asking them to indicate their highest willingness-to-pay (WTP) for each item. Higher WTP indicates greater indulgence. As expected, when self was not made salient, we replicated findings in the myopia literature, such that participants indicated higher WTP for both types of products (utilitarian and hedonic) when they were in low versus high construal level. However, when self was made salient, we observed the anticipated reversal as predicted in the hyperopia literature, but only for hedonic products (i.e., a high versus low construal level led to greater WTP). For utilitarian products, however, construal level did not affect these self-focused individuals' WTP, presumably because utilitarian products may not provide the kind of indulgence that hyperopic individuals are looking for at the high construal level. Thus, in the subsequent studies, only hedonic products were included.

While study 1 offer reconciliation to the inconsistency in the self-control literature, it does not shed light on the well-established resource-depletion model of self-control. This model posits that individuals have limited resources, and depletion in resources leads to myopia (Vohs and Schemeichel 2003). Although a large number of studies have established the resource-depletion effect, it is not entirely clear why resource depletion leads to myopia. Building on our theorizing and findings from study 1, we propose that resource availability can affect individuals' construal level, which consequently affects indulgence. Limited (ample) resources are likely to cause individuals to construe things at a lower (higher) level, thus leading to greater (less) indulgence. If the above hypothesis is true, we should also observe the moderating effect of self focus on the relationship between resource availability and indulgence level. We test these theorizing in the next two studies.

Study 2 tests the hypothesis that resource level affects construal level which subsequently influences indulgence. Resource level was manipulated via having participants remember either a two-digit (high resource level) or an eight-digit (low level) number, and participants' current construal level was measured via the 25-item BIF scale (Vallacher and Wegner 1989). The focal task involved having participants indicate their WTP for the five hedonic products as used in study1. Replicating prior research, we found that resource depletion (vs. ample resources) led to higher indulgence (i.e., WTP). More importantly this relationship was mediated by construal level.

Building on study 2, study 3 aims to replicate study 1 results by replacing construal level with resource level. Thus, this study employed a 2 (self focus: self vs. control) X 2 (resource level: high vs. low) between subjects design. Results from this study provided theoretical replication of study 1. Specifically, when self was made salient, participants revealed greater indulgence when they had high versus low resources. However, when self was not primed, we replicated the resource depletion model prediction, i.e. greater indulgence when people had low versus high resources. Study 4 extends on our basic theorizing by identifying an important moderator, namely individuals' chronic hyperopia tendency. We propose and find that the two-way interaction between resource level and self focus as shown above is only salient among high hyperopia individuals. Finally, study 5 demonstrates that our effects are specific to hyperopia individuals, who experience regret about their self-control behavior. If for certain individuals, they do not experience regret about their self-control tendency, like those who are high on the self-control scale, the above interaction was not expected, nor observed.

In sum, this research reconciles an apparent discrepancy in the self-control literature, thus bridging two separate lines of research (i.e., myopia and hyperopia). In addition, we add to the construal level literature by demonstrating that resource availability affects construal level, which subsequently determines individuals' current indulgence.

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Consumer Comparison to the Product User Prototype Affects Brand Attitudes
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Think of an ad for any brand of men's basketball shoes. Chances are what comes to mind is an execution that features NBA superstars like LeBron James (Nike), Allen Iverson (Reebok), or Kevin Garnett (Adidas). Firms hope that exposure to such ads endows their offerings in consumers' minds with the qualities associated with the endorsers. Over time, such exposure might even create a personification embodying these qualities–a men's basketball shoe user prototype. Consumers then make favorable comparisons between themselves and this prototype, categorize the product as for them, and exhibit positive target marketing effects. If a product user prototype is too narrowly defined, however, it may inadvertently limit a product's appeal to just a subset of the company's intended consumer base, excluding some consumers the company actually wants to target.

Rapid, binary categorizations of the self as me/target market or not me/non-target market constitute the boundary conditions of the impact of a comparison of the self with a product user prototype on target market effects. We propose that when the potential for multiple categorizations exists, ambiguity and dissonance occur that give rise to more complex self comparison processes that influence product attitudes. Normative valuations associated with these categorizations further influence the valence of resulting self comparison processes. For example, some white customers who perceive themselves as included in the target market for basketball shoes based on shared membership in the athlete category with the product user prototype may simultaneously perceive themselves as outside the target market based on exclusion from the black ethnoracial group category also associated with the product user prototype. Further, exposure to a typical advertisement in the category featuring a black NBA spokesperson may activate a stereotype that contains information suggesting that blacks are better athletes than whites (Stone et al. 1999). Accurate or not, this unfavorable comparison between the white self as an inferior athlete and the superior black product user prototype has a detrimental effect on the white consumer's attitude toward the product, even though he had initially perceived himself as in the target market for basketball shoes.

We propose that the association of a specific product or product category with a specific consumer segment creates a product user prototype which influences how some people outside that consumer segment process advertising for that product or category. This product user prototype may be elicited by an ad for the product or category, and under certain conditions provides a basis for comparison with the viewing consumers. When the ad elicits knowledge about a product user prototype that is different from and superior to the viewer on some relevant dimension, the viewer experiences a loss of collective self-esteem caused by the unfavorable comparison between self and the product user prototype, resulting in lowered product attitudes.

We explore this phenomenon in three studies. In Study 1, we demonstrate that the proposed product user prototype effect occurs when the product user prototype is made salient by targeted advertisements. Once a relevant trait is made salient and places the viewer at a disadvantage relative to the user prototype (here, female targets vs. science-favorable male stereotypes), consumers' associated collective self-esteem drops and attitudes toward the promoted product worsen. Study 2 shows that the use of spokespeople similar to the consumer, intended to induce favorable ad-based target market effects, does not mitigate the negative effects that unfavorable comparisons to product user prototype evoked. In fact, consumers who note their similarity with spokespeople on traits that do not match this prototype suffer losses in collective self-esteem and express less favorable attitudes toward the promoted product. Finally, we show in Study 3 that strong identification with one's devalued or stigmatized in-group attenuates the previously demonstrated effects of unfavorable comparisons with a superior product user prototype on collective self-esteem.

We make contributions to three distinct areas of theoretical interest to consumer psychology. First, we extend non-target market research findings by demonstrating that non-target marketing effects occur not only at the advertising level as previous research has shown, but also at the product level via comparisons between consumer's self-concept and a product user prototype. In addition to making me/not me comparisons with ad sources, people also compare themselves to a prototypical user associated with a product or product category. When this comparison is unfavorable and made relevant by ad cues or personal characteristics, non-target market processes that reduce attitude toward the product will occur. Specifically, we show that one such non-target market process is the loss of collective self-esteem that results from the downward comparison of the self with a more highly valued product user prototype. To maintain cognitive consistency and balance in the face this loss of self-esteem, product attitudes are reduced, creating the product-related non-target market effect we observe.

Second, we integrate and extend related research on collective self-esteem (Aberson et al. 2000; Luhtanen and Crocker 1992) and stereotype threat (Davies et al. 2002; Steele, Spencer, and Aronson 2002) as a way to explain the mechanism by which product-based non-target market effects occur. Our results show that when this stereotype threat is in the form of a negative comparison between the self and a superior product user product type, a loss in collective self-esteem occurs that ultimately lowers attitude toward the product with which the user prototype is associated, hurting the company's target marketing efforts.

Finally, we extend the Unified Theory (Greenwald et al. 2002) and its associated balanced identity designs to make the link between product user prototypes, one's identity, and product attitudes. Consumers who are exposed to a product user prototype that places their self-identity at a disadvantage will need to have a negatively valenced association with this category in order to maintain cognitive consistency. In our studies, women exposed to the valued math-science-male product user prototype demonstrated lowered attitudes toward math/science products when the prototype was made relevant. This was the result of maintaining balance between one's self, the product promoted, the product user prototype associated with the product, and valenced attitudes.

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Hola or Hello: The Effects of Bilinguals' Language Selection and Stereotype Activation on Negotiations Satisfaction and Outcomes
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Motivation:
For consumers who speak multiple languages, there is always a question of which language to use in a given situation. Many consumer transactions are increasingly involving negotiations, and one might be interested in knowing which language would lead to greater objective success or satisfaction. Yet, despite the enormous literature on cultural differences in negotiations (e.g., Adair, Okumura & Brett, 2001; Graham & Mintu-Wimsat, 1997; Metcalf, Bird, Shankarmahesh, Aycan, Larimo, & Valselamar, 2006; Salacuse, 1998), there has been very little research that has specifically investigated the role of language independent of the role of culture. Indeed, the little available research on this topic addresses the role of language on negotiation processes; we found almost no research specifically addressing the role of language on negotiation outcomes, such as satisfaction or attainment of objective negotiation goals. Thus, this research begins to address this void.

Conceptualization:
In the United States, Hispanics are an extremely important consumer segment to study. They are not only the largest minority group but also one of the fastest growing and the youngest cultural segment, as compared to other racial/ethnic groups (Ramirez, 2004). Moreover, it is well known that some people, including bilinguals themselves, may associate the speaking of certain languages with different stereotypes or images (Grosjean, 1982; Lambert & Lambert, 1973; Montes-Alcala, 2000; Peñalosa, 1980). Past research suggests that the English-speaker stereotype is more favorable compared to Spanish-speaker stereotype among Hispanics (Peñalosa, 1980).

According to Steele (1997), a stereotype threat arises when one is in a situation for which a negative stereotype about one's group applies. When participants implicitly feel the threat of being stereotyped and negatively judged, their anxiety about possibly confirming the negative stereotype results in reduced performance. Under these circumstances, judgments and behavior consistent with the activated stereotype are likely to occur, leading to the enactment of stereotype-consistent behaviors, unwittingly confirming the stereotype (Steele & Aronson 1995; Steele, 1997). Thus, language is likely to affect negotiation outcomes if language implicitly activates a negative stereotype associated with the ethnic group that speaks that language.

In a related work, Alvarez (2007) examined language effects on advertising among bilingual Hispanics. She studied identical advertisements for fictional products, varying only the language used in the advertisement (English or Spanish). She found that that among Hispanic bilinguals, the stereotype of a Spanish speaker was less favorable compared to that of an English speaker, and that the stereotype also moderated the effects of language on product attitudes and spokesperson's credibility. English communications elicited more favorable product attitudes compared to Spanish communications among Hispanics that hold an unfavorable cultural stereotype of Spanish-speakers. In contrast, no differences were found among Hispanics who held a favorable cultural stereotype of Spanish-speakers.

We, therefore, investigate both consumers' language usage (English or Spanish) and language stereotypes to demonstrate how they impact negotiations outcomes. We hypothesize that objective negotiations outcomes, satisfaction and attractiveness of the negotiating counterpart would be higher for the English language negotiators than for the Spanish language ones, but that these effects would be moderated by the language stereotype. We also propose that the attractiveness ratings would mediate the effect of language on satisfaction judgments.

Methodology:
Two studies of U.S. bilingual Hispanics and non-Hispanics were conducted to test the hypotheses. A total of 167 MBA students enrolled in a negotiations course participated in the studies as part of class activities. After first identifying themselves as Hispanics or not, and bilingual (Spanish/English) or not, they were randomly assigned to a role, a counterpart, and a language in order to conduct a mock negotiation role play exercise. The first study was a 3x2 between participants design which examined the effect of language used and ethnic group (Hispanics in English, Hispanics in Spanish, and Non-Hispanics in English) and language stereotype (which was a measured variable and assigned via median split) on objective negotiation outcomes. All participants were equally incentivized to maximize their individual negotiations outcomes (as measured by a point scale) because the negotiations were part of their course grade. Study two was a 2x2 design using language used (English and Spanish) and language stereotype (favorable and unfavorable) as independent variables and looking at satisfaction with both the process and outcome of the negotiation, as well as the attractiveness of the negotiating counterpart (i.e., the desire to negotiate with them again).

Major Findings:
There were a number of major findings of this research which will add substantially to the literatures on bilingual consumers, cross-cultural negotiation, and stereotype activation. First, our hypothesis that objective negotiation outcomes would be higher for English speakers (M=61.52) than for Spanish speakers (M=53.12) was supported (t = 2.77, df = 66, p < .01). The next hypotheses predicted that the individual outcomes of negotiators would be higher if the negotiation was conducted in English rather than Spanish when bilinguals held unfavorable stereotypes of the Spanish language, but not when they held favorable stereotypes. The pairwise comparisons of means supported these predictions. Our results also provide evidence against self-construal orientation mechanisms. The outcomes of non-Hispanics negotiating in English were not significantly different from the outcomes of Hispanics negotiating in Spanish (M = 53.13 t < 1, df = 67) and they were significantly lower than the outcomes of Hispanics negotiating in English (t = 2.54, df = 73, p < .01).

Next, we made predictions regarding satisfaction with the negotiating process and the outcome, as well as the attractiveness of the negotiating counterpart. As expected, language showed a significant main effect on outcome satisfaction (F (1, 49) = 5.43, p < .05) and process satisfaction (F (1, 49) = 4.65, p < .05), with participants reporting higher outcome satisfaction when the negotiation was conducted in English (M = 5.75) rather than in Spanish (M = 4.73). Similarly, participants reported higher satisfaction with the negotiation process when the negotiation was conducted in English (M = 5.48) rather than in Spanish (M = 4.48). Also as expected, both of these effects were moderated by the Spanish-language stereotype, such that higher levels were found for English speakers than for Spanish speakers only when the participant held a negatively-stereotyped view of Spanish speakers. These results were also replicated for the ratings of the attractiveness of the negotiating counterpart. Additionally, the attractiveness measure was found to mediate the effect of language on the satisfaction measures.

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Session 5.6

Stimulating Referral May Backfire - The Effect of Referral Failure on Susceptibility to External Influence
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Consumers often rely on vicarious experience information when deciding about a product or service (Herr, Kardes, & Kim 1991). The effects of WOM behavior on the receiver of the information conveyed have extensively been investigated. Amazingly, little is known about the effect of WOM on the sender, although senders are crucial agents in the WOM process (Goldenberg, Han, Lehmann, & Hong, 2009), and may well react differently depending on whether or not their recommendations are followed.

Illustrative is the dramatic case of the Apple Newton community, where users heralding qualities of this product stubbornly refused to progress on to new technologies, even when this product was abandoned by its manufacturer (Muñiz & Jensen Schau, 2005). Similar but smaller effects might be more generally present in simple WOM situations. We distinguish the situation in which the sender's recommendations were followed (what we call referral success), or ignored (referral failure) and look at the sender's subsequent openness to new information.

Giving advice goes beyond giving information. It also implies that one subjects oneself to the scrutiny of the information receiver. Not following advice may signal that the receiver does not value the sender's judgment, even doubt the sender's expertise. The mere act of exposing oneself to public evaluation has been found to lead to ego-boosting as a way to compensate for the threat of failure (compensatory self-inflation) (Greenberg & Pyszczynski 1985). Steele (1988) stated that when the self is threatened in one domain, the ego is boosted in a general way, a thesis denoted as the "fluid compensation" principle. Accordingly, Rudman, Dohn, and Fairchild (2007) show self-worth compensation in response to threats to the self involving identity and social rejection as subtle as losing as small football knowledge quiz, something quite comparable to being questioned about product knowledge through referral failure. Additionally, Sherman, Presson and Chassin (1984) state that, when the self is threatened, perceived consensus for one's beliefs may increase, possibly leading to a greater attachment to those beliefs. Furthermore, Sivanathan et al. (2008) indicate that self-affirmation – like ego-boosting – brings about a need to self-justify.

Based on these findings we hypothesize that referral failure will lead to a lower subsequent susceptibility to external influence, and that this effect will be driven by a need to self-enhance. We tested these proposed effects in four studies.

In study one, we tested the effect of referral outcome on subsequent susceptibility to advice originating from a third person, avoiding the alternative explanation of retaliation or reciprocity. In this first assessment of the effects of referral outcome on subsequent susceptibility to persuasion, we wanted to avoid effects of interaction between different genders. Therefore, we used only men. The participants in this study were told that they were testing a communication setup for online interactions between two consumer labs over the internet. The actual task involved recommending products to a person in the other lab, of whom they saw a photograph. This (preprogrammed) interaction partner then chose products from sets of three products, based on the subjects' recommendations. The preprogrammed interaction partner was set to follow the subject's recommendation either five out of six, or one out of six times, which comprises the manipulation of referral outcome. Subsequently the roles were reversed, but the participant was teamed up with another partner. The dependent measure was the number of times the subject followed the new interaction partner's advice. The results were in line with our expectations, yielding less susceptibility to advice after referral failure in the first phase.

Study two used a scenario to induce referral failure, where participants were asked to imagine being the child of a movie theater owner, which allowed them to preview movies. Their friends either always or seldom followed up on their recommendations of movies. This study also included a baseline measure, where no recommendations had to be made. The dependent measure, ostensibly unrelated to this manipulation, required them to read an expert's report in a magazine and choose combinations of products of which some were, and some were not, recommended in the report. In this study, the sample also included women, as in all further studies. We replicated the results of study one, generalizing the effect towards other products and women, and we showed that referral failure rather than success affect subsequent willingness to follow advice.

In study three, participants had to choose their favorite movie poster and motivate their choice to another – preprogrammed – participant. This preprogrammed participant then either indicated that he or she would be unlikely or likely to switch his or her own choice towards that of the participant. To assess the process underlying the effect of referral outcome, we included an explicit self-enhancement measure. The dependent measure was similar to that of study two. Again, we found that participants were less willing to follow advice after referral failure in the first phase. Importantly, we found that differences in self-enhancement mediated the effect of referral outcome.

In study four, we aimed at replicating the results of study three, using a similar manipulation and dependant measure as study one. In this study, participants were assessed for differences in self-enhancement by means of a measure of the Name Letter effect (Koole, Dijksterhuis, & van Knippenberg, 2001). Results replicated the effect of referral failure on subsequent susceptibility to external influence, as well as these results being mediated by self-enhancement. An additional analysis showed that in case of referral failure, those with a strong self-enhancement tendency started doubting their persuasion knowledge-specific self-confidence when they followed the preprogrammed participant's advice but were indistinguishable from those in the referral success conditions when they declined the other's advice. This lends further support to our suggestion that not following advice serves to restore self-worth.

Overall, these studies establish the referral backfire effect and show that this effect is mediated by differences in self-enhancement. One implication is that consumers that openly champion one product and are less successful in referring are less susceptible to give up this position in favor of new product developments.

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A Value-Decomposition Theory for Scope-Sensitivity
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This paper presents a new account for preference reversal between pricing and attractiveness rating. I propose that the value of an object can be decomposed as "symbolic value" and "intrinsic value", where the symbolic value refers to factors such as rank, rarity, certainty, extremeness that does not benefit actual consumption. The symbolic value is only taken into account in rating tasks but not in pricing. Therefore, objects strong in symbolic value receive higher ratings, but are not priced as high. Evidences from two experiments are presented. The relationship between the current theory and previous theories of preference reversal is discussed.

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Ironic Effects of Personalized Product Recommendations on Subjective Consumer Decision Outcomes
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Many important consumer decisions are made in the presence of some form of personalized product recommendations that are designed to identify the most attractive available alternatives based on an understanding of a consumer's idiosyncratic preference (Ariely, Lynch, and Aparicio 2004; Häubl and Murray 2003). Such decision assistance may be provided either by a human advisor (e.g., a salesperson, realtor, or financial consultant) or by a computer-based system (e.g., a recommendation agent on the Internet). While prior research has shown that personalized recommendations can enable consumers to achieve objectively superior decision outcomes (Diehl, Kornish, and Lynch 2003; Häubl and Trifts 2000), their effects on subjective decision outcomes – such as consumers' satisfaction with the chosen product – are not well understood.

In this paper, we introduce and test the hypothesis that, while enabling consumers to make objectively better choices, personalized product recommendations tend to have a *negative* influence on consumers' subjective appraisal of their chosen alternatives. We propose that this is due to the inherent properties of this form of decision assistance. In particular, (1) the differences among the recommended alternatives in terms of their subjective attractiveness to the consumer tend to be small and (2) personalized recommendations result in a lack of exposure to alternatives that are clearly unattractive to the consumer.

By selectively drawing attention to alternatives that are highly attractive to the consumer and, therefore, very close to one another in terms of their overall attractiveness, personalized product recommendations tend to increase the difficulty of making a choice – i.e., they make it more challenging for the consumer to identify the subjectively most attractive alternative (see Shugan 1980). We propose that such an increase in choice difficulty reduces consumers' subjective assessment of, and satisfaction with, the chosen alternative (Iyengar and Lepper 2000). Paradoxically, the better the recommendations are (i.e., the more closely they reflect the consumer's true preference), the more intense this effect becomes.

Moreover, if a consumer's satisfaction with a chosen product is a function not only of the subjective attractiveness of that alternative, but also of the attractiveness of other available alternatives that were not selected (Mellers 2000; Mellers, Schwartz, Ho, and Ritov 1997), not being exposed to unattractive alternatives can diminish satisfaction with the chosen alternative. Therefore, personalized product recommendations may also reduce subjective decision outcomes by "protecting" consumers from considering products that poorly match their subjective preferences.

We report the results of three experiments that (1) demonstrate that personalized product recommendations can indeed cause consumers to make better choices and yet feel less satisfied with their chosen alternatives, and (2) examine the psychological mechanism underlying this phenomenon. Our evidence suggests that the negative effect of personalized recommendations on subjective decision outcomes is driven by the closeness of the recommended alternatives in terms of their attractiveness to the consumer – with perceived choice difficulty being a key mediator of this effect – rather than by the lack of exposure to unattractive alternatives.

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The Role of Consumer Reviews in Attitude Formation, Communication and Persistence

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Increasingly, consumers are involved in reading as well as writing reviews about their consumption experiences. Although many studies have explored the influence of consumer-created content on attitudes and behaviors of the audience (Chen and Xie 2008; Chevalier and Mayzlin 2006), few have looked at the creation process itself. This paper considers a number of questions related to review writing and evaluation, from the perspectives of both review writers and readers. In particular, we explore the extent to which the relative order of a consumer review vs. attitude assessment affects the process of review writing and its enduring consequences.

We consider two different scenarios, in which consumers write a review either *after* or *before* reporting their attitude towards the experience, and suggest that this order has direct and indirect effects on the information processing that occurs during reviewing and evaluation (Strack, Martin, and Schwarz 1988). In the first case, reviewers who have already reported their attitudes are likely to feel committed to their ratings and seek to justify them in their reviews (Schlosser 2005). However, given that individuals are often poor at recognizing the reasons underlying their preferences (Nisbett and Wilson 1977; Wilson and Schooler 1991), we suggest that the resulting reviews may not provide useful explanations, or even cohere well with the ratings reported. In contrast, when the reviewing task precedes any global evaluation assessment, reviewers are not bound by prior commitment but rather free to consider any relevant aspects of their experience. We suggest that this leads to a more open-ended, introspective review process, allowing the reviewer to elaborate extensively on her reactions to different aspects of the experience. A consequence of this elaboration for attitude assessment is the enhanced accessibility of a wide variety of diagnostic, attitude-relevant information (Feldman and Lynch 1988), leading in turn to stronger and more stable attitudes.

In a series of lab experiments, we examined hypotheses related to the two different scenarios above. Study 1 explored the effect of task order on attitude dispersion and actual review content. Based on the arguments above, we predicted that when attitude assessment follows a review task: 1) individuals' attitudes will be more polarized, resulting in greater overall variance, and 2) review content will reflect greater elaboration and balance. In the experiment, undergraduate participants (N=93) watched a short animated movie and were then given different instructions according to condition. *Review-first* conditions were asked to generate one of two kinds of written review: *unguided* (an open-ended format) or *guided* (dealing with specific attributes of the clip). Next, they rated the movie on four 7-point attitude scales. Participants in the *attitude-first* conditions completed these steps in the opposite order. A *control* group provided attitude ratings without writing a review.

Composite attitude measures were formed by averaging the four scale items. The mean attitude towards the movie did not differ across conditions; however, as predicted, analyses revealed that the variance of attitudes was considerably greater for *review-first* conditions, suggesting that their attitudes were better formed as a result of cognitive reflection. In order to examine review content, we utilized the Linguistic Inquiry and Word Count tool (LIWC – Pennabaker and Francis 2001) to analyze reviews written by the two *unguided review* conditions. This analysis revealed a number of differences consistent with expectations. Among other findings: the *review-first* group wrote significantly more words than the *attitude-first* group, indicating more elaboration of the experience; the ratio of positive-to-negative words used was closer to unity for the *review-first* group, indicating greater balance; and the *attitude-first* group used fewer articles and more quantifiers, indicating a less integrated writing style focused on justification rather than introspection.

Study 2 examined whether the differences revealed above will influence readers' ability to infer the attitude of the reviewer. Among the *guided* reviews written by participants in Study 1, six each were selected from the *review-first* group and the *attitude-first* group. Participants (N=68) were asked to read the reviews and estimate the ratings assigned by the authors to the movie, along with their confidence in these estimates. Rating discrepancies were calculated by taking the absolute difference between a reader's estimated rating and the actual rating assigned by the reviewer. As expected, analyses indicated that rating discrepancies were lower for reviews written by the *review-first* group than those written by the *attitude-first* group. However, participants were more confident in their estimates for reviews from the *attitude-first* group. Thus, reviews written prior to attitude assessment appeared more ambiguous to readers, but conveyed writers' attitudes more effectively.

Study 3 examined the impact of review writing on attitude persistence. Contrasting classic elaboration models with literature on reasoned attitudes (Wilson and Schooler 1991; Nordgren and Dijksterhuis 2009), we predicted that writing a review before (but not after) attitude assessment will enhance the stability of that attitude over time. Therefore, we followed up with participants of Study 1 after a one-month delay. Participants were reminded of the film title, and then asked to evaluate it using the same attitude scales of the first study. Attitude persistence was measured both by the absolute change in attitudes from t1 to t2, and by their correlation. As predicted, both measures showed greater persistence for the *review-first* group than the *attitude-first* or *control* groups.

Overall, our results provide initial evidence that the timing of a review task systematically influences review content, attitude formation and persistence, and readers' inferences about the review. These findings bear important implications for subsequent research into the review-writing process, and also for marketing practitioners interested in utilizing consumer-created content.

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Negative Health Experiences and Preference for Communications:
Different Effects on Goal Orientation for Self versus Others' Experiences
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Diet, exercise and obesity have become increasingly important topics recently due to the rising health problems associated with them. Approximately two-thirds of the US population is overweight or obese and the costs of associated health problems are predicted to have a large economic impact (e.g., estimated at $117 billion following the Health and Nutrition Examination Survey, 1999-2000). Finding ways to encourage people to engage in preventative health care is a challenging but necessary endeavor.

One way behavior change may be achieved is through tailoring messages to groups of people. Extant literature shows that people are more persuaded by messages that match their particular decision stage or their chronic goal orientation (see Rothman and Kiviniemi 1999 for a review). For example, Easterners who tend to have a prevention focus are more persuaded by prevention focus messages (e.g., Briley and Aaker 2006). In attempting to tailor messages to particular people, it is also important to understand characteristics of those people that are likely to interact with the type of message used. In the case of goal orientation, the literature is extensive. However, there is relatively little evidence on the origins of individual differences in chronic goal orientation.

The current research attempts both to understand how health experiences will change individual differences in goal orientation (both chronic and acute) and to create appropriate messages that will have motivational impact for change in health behaviors, such as increasing eating of healthy foods. In three studies, we examine the relationship between health experience (in self or others) and goal orientation, and measure participants' involvement in health behaviors and activities (study 1) and their preference for different health messages (studies 2a and 2b). We use older adults in much of this research, as this is a population that typically has greater experience with negative health events (both their own and others' experiences).

Drawing on past research (Lockwood, Chasteen and Wong 2005) and theories of adult development (e.g., Baltes and Baltes 1990), which propose that experiencing loss in a domain will result in an orientation towards avoiding further loss rather than on achieving gains, we expect that older adults who experience health loss will show greater prevention focus in the health domain. However, we suspect that the impact of health loss on goal orientation and motivation may depend on whether the health loss occurs to the self or to others. In a social comparison study, Lockwood (2002) found that experience with others' losses often fails to impact participants, and only increases prevention focus when participants feel highly vulnerable to experiencing a similar loss. Instead, experiencing another's loss of health, without experiencing vulnerability, may provide motivation to achieve gains in health, consistent with an increased promotion focus. We explore these ideas around self and others' health losses in our studies.

In study 1, we measure actual health experiences for both the self and close others along with health intentions, activities, and chronic regulatory focus. In studies 2a and 2b, we manipulate salience of health experience by participants to remember a past negative health experience of their own or of a friend or relative and record preferences for promotion and prevention focused health messages.

In study 1, older consumers (mean age was 72.5 years) completed a questionnaire on health activities they enjoy and engage in (such as exercise and diet behaviors), health losses they've experienced or seen someone close to them experience (e.g., friends or close relatives), current health, and regulatory focus. First, as expected, we found that prevention focus was significantly correlated with health loss for the self, but that promotion focus was correlated with loss relating to a close friend or relative. Second, promotion focus, and not prevention focus, correlated with greater motivation around positive actions and activities: people with greater promotion focus were more likely to do exercises that improve physical strength, flexibility and healthy diet.

In studies 2a and 2b, we extend these findings by employing three conditions manipulating thinking about a negative health experience. Consumers aged 65-75 years (study 2a) and aged 35-65 (study 2b) were randomly assigned to write about a health experience in one of three conditions: a negative health experience that they *themselves* have gone through; a health experience that they saw a friend/relative go through; or a health experience that a friend/relative went through which the participant described as if they themselves were in the situation. The idea behind this third condition was to increase participants' involvement in another's negative health experience by "putting themselves in someone else's shoes" without experiencing the vulnerability associated with a negative health experience for the self. Participants then indicated their preference for either promotion or prevention oriented messages for four healthy foods.

Results found that older consumers in all three conditions differed in their preference for promotion-oriented messages only. Participants who imagined themselves experiencing another's negative event liked the promotion-oriented messages more than participants in the other two conditions, who did not differ from each other in their preferences. In contrast, younger consumers differed in their preference for prevention-oriented messages only, with those in the imagine condition showing the strongest preference. So considering another's negative health experience can impact goal orientation, as long as the person imagines him or herself in that situation. Its effect in older consumers is to increase promotion focus, with no additional impact on prevention focus, while in younger consumers its effect is the opposite, increasing prevention focus with no additional impact on promotion focus. This influence of another's health experience on promotion focus for older consumers is consistent with our results in study 1 which also used older consumers. The lack of effect on prevention focus in older consumers, in contrast to the Lockwood study with young

adults, appears to reflect a ceiling effect for prevention focus in this group of relatively prevention-focused consumers. Consistent with this, our younger consumers (in study 2b), who tend to be promotion-focused for health goals, showed results consistent with the Lockwood study.

Overall, we show that experience plays an important role in people's goal orientation and preference for health messages. We examine this by studying people who tend to have different relative experience with negative health episodes and different goal orientations for health issues (older and younger adults) and we are able to observe effects of both chronic goal orientation and of a more acute or immediate manipulation on motivation and on preference for health messages.

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Educating Older Adults about Health: A Paradoxical Effect on Memory and Behavioral Intentions

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Most consumers are exposed to many messages about health and medical care, which are often complex, sometimes contradictory, and can be difficult to remember. The diverse sources of health-related messages include medical professionals, news reports, television shows, unknown websites, and friends and family. A major goal of public information campaigns about health is to ensure that consumers' health behaviors are influenced by correct information from a credible source. Older adults, as the biggest consumers of health care, are perhaps at most risk for harm if they act on incorrect information. The near-universal approach of professional medical sources in correcting wrong information is educational measures that correct misconceptions. For instance, the US Centers for Disease Control and Prevention (CDC) published a flier about the flu vaccine. The flier describes "facts and myths" about the vaccine with a short paragraph of additional information about each fact and myth. This approach rests on the reasonable assumption that warning people about false information will keep them from thinking that it is true.

However, research on component processes of memory suggests that attempts to warn consumers about false information can backfire and unintentionally increase consumers' belief, and that older consumers may be especially susceptible. Specifically, sometimes consumers can remember the basic content of a message without remembering the details of its presentation. When faced with this sort of incomplete memory for information, people show a marked tendency to think of the information as true (e.g., Skurnik, Yoon, Park, & Schwarz, 2005). In other words, mentioning misinformation in order to discredit it risks enhancing its perceived truth. Moreover, this effect is stronger in older adults than in younger adults because of a particular pattern of memory decline with age. Relative to younger adults, older adults show a systematic decline in memory for contextual details, but intact feelings of familiarity for information they have seen before. Hence older adults are especially likely to remember false information without remembering that it has been discredited.

We had older and younger adults read the published CDC "Flu Facts and Myths" flier, and then, either immediately or after ½ an hour, we tested their memory for the flier's information and asked about their personal beliefs and intentions toward the disease and the vaccine. For comparison, other participants read an altered version of the flier that included the same information but restated the "myths" in factual form, so that no false information was presented. A third group of participants answered the questions about flu knowledge and intentions to get the vaccine without having read any flier.

Immediately after reading the CDC Facts & Myths flyer, participants showed no truth bias in their memory of the flyer claims. However, after ½ an hour, older adults tended to misremember the flyer's myths as facts. That is, they misidentified more than 20% of the myths as facts, but misidentified only 5% of the facts as myths. Younger adults showed a similar trend in their memory for the flyer's claims after ½ an hour, but it was much less pronounced than that of the older adults.

Perhaps most striking is that memory for the false claims had implications for older adults' intentions to get flu vaccines in the upcoming flu season. Since the flu "myths" generally allege some drawback of the vaccine, belief in them should make getting a vaccine less attractive (an example is "The side effects of the vaccine are worse than the flu"). The flyer was effective right after it was read: immediately after reading either version of the flyer, older adults reported increased likelihood to get a flu vaccine for the upcoming flu season, compared to older adults who didn't read any flyer. For older adults who read the Facts-Only flyer, self-reported likelihood to vaccinate was still increased after ½ an hour. However, after ½ an hour older adults who read the Facts and Myths flyer reported a reduced likelihood to get a vaccine in the future season, and thought that the flu would interfere with their lives less in the event that they got the disease. In addition, after half an hour, older adults who read the Facts and Myths flyer reported the lowest likelihood to vaccinate of any other group in the study, including those who read no flyer at all. In essence, this particular public health campaign about vaccination left older adults worse off than seeing no information about vaccination at all.

Follow-up studies are currently under way to assess whether the behavioral intention effects depend on drawing attention to one's own subjective cognitive experience. This research will help distinguish between two theoretical explanations of the illusion of truth effect, as caused either by feelings of familiarity, or by preferential encoding of true information. Knowing the role of this potentially limiting factor will help to gauge how widespread the effect may be in spontaneous everyday judgments, and will help craft effective communication strategies to avoid unwanted behavioral effects. A related set of follow-up studies addresses the role of this memory illusion in knowledge of nutrition and obesity-prone behaviors.

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Assessing Consumer Reaction to New Product Ideas: Does it Matter How Old You Are and What Your Regulatory Focus Is?

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We build on prior work by studying how age and regulatory focus affect how people respond to information about new products. The underlying theme is that these variables affect the kind of information consumers use to understand a new product, which eventually lead to differences in product evaluations.

We categorize new product information in two different ways. First we separate factual information from emotional information. For example, a cereal bar manufacturer can list all the nutritional ingredients contained in the bar, or show that people feel energetic after eating the cereal bars. According to socioemotional selectivity theory, as people age regulating feeling states becomes more important than priorities such as acquiring knowledge (Carstensen 2006). As a result, older adults prefer and have better recall for emotional information than factual information, whereas younger adults prefer and have better recall for factual information than emotional information (Fung and Carstensen 2003; Williams and Drolet 2005). Several possible explanations account for the increased attention to emotions with age. First, age-associated reductions in working memory capacity may similarly increase reliance on emotional reactions (Hasher and Zacks 1988). Another compelling explanation is that being able to understand and integrate emotional information is an adaptive skill that improves with age (Labouvie-Vief 1998). Finally, a third explanation is that perceived limitations of time lead to motivational shifts, which direct attention to emotionally meaningful goals (Carstensen, Fung, and Charles 2003; Williams and Drolet 2005). What has not been tested is whether older adults will actively seek out emotional vs. factual information. Based on previous research, we predict:

H1: Older adults will search for more emotional information than younger adults.
H2: Younger adults will search for more factual information than older adults.

Another way to categorize product information is by what it tells consumers about the type of goals the product can help consumers achieve. Consumers with a promotion orientation are concerned about achievements and winning, whereas consumers with a prevention orientation are concerned about security and not losing (Higgins 1997). Product information can be categorized in the same way. Promotion information highlights achieving desirable outcomes (e.g., toothpaste that whitens your teeth) whereas prevention information emphasizes avoiding undesirable outcomes (e.g., toothpaste that prevents cavities; Wang and Lee 2006). Consumers are not only more persuaded by information that is compatible with their orientations, they are also more likely to actively seek out compatible information (Wang and Lee 2006). That is, promotion-(prevention-) focused people are more likely to search for promotion (prevention) information. As people age, they shift their regulatory orientations. Elderly adults are more likely to adopt a prevention orientation whereas younger adults in general take on a promotion orientation. Therefore, we hypothesize that:

H3: Older adults will search for more prevention information than younger adults.
H4: Younger adults will search for more promotion information than older adults.

According to the hypotheses above, we predict that older adults would prefer and search for emotional prevention information and younger adults would prefer and search for factual promotion information. However, there is ambiguity about how each age group will relate to factual prevention information or emotional promotion information. Specifically, although younger adults prefer factual promotion information, they may not respond well to factual *prevention* information. Similarly, whereas elderly adults prefer emotional prevention information, emotional *promotion* information might not engage them. In such situations where information content and information orientation are competing, we hypothesize that consumer expertise will break the tie. In two studies, we seek to understand these effects.

Study 1 had a 2 (age group: younger vs. older) × 2 (regulatory focus: promotion vs. prevention) × 2 (information content: factual vs. emotional) × 2 (information orientation: promotion vs. prevention) × 2 (expertise: experts vs. novices) mixed factorial design. We measured participants' age, regulatory focus and product expertise at the individual level. Participants selected information for different products (toothpaste, a new type of multi-function cell-phone, and a new form of mutual fund). For each product, respondents selected factual or emotional information on three prevention and three promotion dimensions. The dependent variables were the content and orientation of information selected, the time spent reviewing each type of information and participants' attitude toward the innovative products.

We find that older adults are more likely to use information that is compatible with their chronic regulatory focus than younger adults. We also find that older adults more actively seek out and spend more time on factual information than younger people, and that knowledgeable participants prefer and search for more factual information than emotional information.

Study 2 had a similar design, except we manipulated both age and information content between subjects. We manipulated age by priming participants that life is short versus long. Also, participants in this study received either factual or benefit information before they evaluated the products, whereas in study 1 they could search for both type of information before evaluating the product. Preliminary data analysis revealed that older experts and younger novices had more favorable product evaluations when provided with factual (vs. benefit) information. We are in the process for more detailed analyses and we would be able to present a much more complete picture at the conference, if accepted.

This research suggests that age and chronic regulatory focus can affect the type of information that consumers examine when searching for information about new products, which in turn leads to evaluative differences. Advertisers can use this information to better design marketing communications such as advertising, owner manuals, and product designs including feature characteristics.

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Session 6.1

The Effect of Social Capital on Charitable Giving in Nonprofit Marketing
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This study combines and contributes to two literatures: social capital (from psychology) and nonprofit marketing (from marketing). In the nonprofit world, individual donations are considered consumption; donors pay and then consume the warm-glow, altruism, or other psychological benefits they get from contributing to the organization. In particular, we examine how social networks of donors influence their consumption (donation) decisions to nonprofits.

Prior research on social capital has focused on its impacts on civil engagement. The type and size of social networks often (but not always) generate positive outcomes (Paxton, 2002; Putnam, 2000). There is, however, very little evidence exploring what kinds of social networks matter (Coffe and Geys, 2007). Furthermore, explanations for the effects of social networks have been limited to a single mechanism, i.e. trust (Halpern, 2005). We contribute to the literature on social capital by examining what type of social networks influence charitable giving. We furthermore derive and support a social comparison based explanation for the relationship between social networks and prosocial behavior.

Prior research on nonprofit marketing has focused on practical aspects of how nonprofits can encourage donations through marketing campaigns, by increasing the value donors (consumers) receive for their donation. However, very little attention has been paid to the underlying consumer psychology of the donors. We contribute to the literature on nonprofit marketing by bringing an analysis of psychology of donors (consumers) to bear on the question of who gives how much. We make these contributions through a series of field studies in the context of public radio to identify the role that social networks might play in driving giving.

Our first studies investigated which types of social networks influenced donations. Individuals have many social networks. They may have a network of work colleagues, a network of people who attend the same church, and a network of people who support the same football team. As the size of the network grows, its importance in their lives is also likely to grow. With growing importance, individuals become increasingly motivated to gain esteem from being associated with the group. But which, if any, of these networks influence giving?

Our first field experiment involved the on-air fund drive of a public radio station. Our experimenters manned the phones as listeners called in to make donations. Before making their donation, our experimenters asked either nothing (the control condition), how many people they knew in the station catchment area (general social network) or how many people they knew who listened to the station (specific listener network). We found a main effect of the size of social networks on giving. Donors who knew more people (either friends or listeners) gave more (t=2.25, p<.05). However, we also found a significant interaction effect between the size and the type of network (t=2.78, p<.01). Having a large social network is not in itself enough. Only the size of the listener network significantly influenced donations. This study provides the first evidence that not all social networks are created equal, and that some may have more influence than others on particular decisions.

The second study reinforces this notion. We used a mail survey of several hundred public radio donors from four public radio stations around the country. Respondents were asked to estimate the number of family members, friends and acquaintances that they knew who also listened or donated to their local public radio station. Again, both the main effect of network size and the interaction effect of size and network type are significant. The size of the friends and family listener network significantly predicts donation size, but that the size of the colleague or casual acquaintance network does not.

From these two studies, it is not clear whether it is the actual size of the network or the individual's belief that the network is large which influences donations. A third field experiment manipulates the believed size of donors' social networks, while keeping their actual size constant.

In this third study, we used a different on-air fund drive of the same radio station. We again provided experimenters to answer the phones. When donors called into the station, they were asked by whether they have more or fewer than 2 or 150 friends who also listened to the station. This question was designed to manipulate the caller's belief about the size of his own listener network. Those who were asked whether their network was larger or smaller than 2 (the 10th percentile of the distribution of network size) were likely to believe that their networks are relatively large. Those who were asked whether their network was larger or smaller than 150 (the 90th percentile of the distribution of network size) were likely to believe that their networks are relatively small. The results demonstrate that donors who believe their listener networks are large (those randomly assigned to the 2 condition), gave almost twice as much as those who believe their listener networks are small (those randomly assigned to the 150 condition); ($265 versus $139 respectively). This effect is both statistically and economically significant.

This last finding suggests illuminates the underlying process behind the effect demonstrated above. In particular, that the reason why large networks lead to more giving is not because behavior is more influenced by the group norm. Instead, individuals give more because they experience esteem from having a large network and increased donations enhances the welfare of this group.

In summary, this research combines literature from psychology (social capital and social networks) and nonprofit marketing (donation or charitable contributions as consumption). It makes contributions to both fields, first by demonstrating the types of social networks which most influence giving decisions, and second by highlighting the importance of individual beliefs about the size of their network, rather than its actual size. These results have important implications for explaining and predicting charitable contributions, and responses to nonprofit marketing campaigns more generally.

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Taking More Money and Donating More Money: The Influence of Self-threat on Goal Pursuit

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Individuals often take actions to self-affirm following threats to their positive-self view. These actions include engaging in upward or downward social comparisons, affirming important self-values, etc. We propose that: 1) making greater progress towards a salient goal is another self-affirming strategy that individuals adopt in response to self-threat; and 2) this tendency is true even though we manipulated opposing goals in different experimental conditions. Specifically, the results of three studies suggest that when individuals perceived a threat to their positive self-view, they self-affirmed by donating more money when the goal to help was made salient yet took more money when the salient goal was to pursue self-interest.

When a positive self-view is threatened, individuals are highly motivated to take actions that maintain or restore a positive self view (Sedikides and Gregg 2008). These actions are of diverse formats. For example, individuals cope with self-threat by affirming important self values (Steele 1988; Tesser and Cornell 1991). They also engage in upward or downward social comparisons to re-affirm the self (Vohs and Heatherton 2004). Although these coping mechanisms are qualitatively different, they are highly similar in affect and arousal (Tesser 2000). Specifically, threats to a positive self-view generate negative affect or arousal and bolstering one's self-view generates positive affect or decreases arousal. Because making greater progress towards a salient goal can generate positive affect (Carver and Scheier 1990), we propose that individuals may intentionally use this strategy to bolster their threatened self-view. Three studies examined this possibility.

In study 1, we examined the effect of self-threat on donation behavior. We hypothesized that because the goal to help is salient in a donation situation, individuals who perceived self-threat would be more likely to donate than those who did not perceive self-threat. To manipulate self-threat, we first measured participants' reported levels of self brand connection (SBC) to the brand Adidas using the scale designed by Escalas and Bettman (2003). After reading an introduction of Adidas' sponsorship of 2008 Beijing Olympic Games, participants read an alleged Business Week article, which argued that Adidas' sponsorship of Beijing Olympic Games was a waste of money. Prior research has shown that this kind of negative information is self-threatening for participants with high, but not low SBC (e.g., Cheng, White and Chaplin 2009). After this threat manipulation, we presented participants with a donation situation in an allegedly separate study. They read a persuasive communication about making donations to UNICEF. Afterwards, they responded to questions such as: (1) "How likely is it that you would make a monetary donation to UNICEF to help children in Africa to get better education?" and (2) "If you had $100 in your pocket, how much would you like to donate to UNICEF?" The results confirmed our prediction that, after receiving negative information, participants with high (vs. low) SBC reported greater likelihood to donate money, decided to donate more money and time, and were more likely to invite their friends to participate in this event.

In study 1, the goal to help (or the goal to give) was made salient in the context of donation campaigns. In study 2, we hypothesized that when the goal to pursue self-interest (i.e. the goal to take) was made salient, participants who perceived self-threat would have greater motivation to take more money for themselves. This study employed the same manipulation of self-threat used in Study 1. After measuring SBC to Adidas and the self-threat manipulation, we exposed participants to a dictator game (Hoffman et al 1992). Participants were informed that they would take part in a decision making study called the seller-buyer game. On this pretense, they read the instructions that "In this study you will be randomly paired anonymously with another person. One of you will be the seller and the other will be the buyer. Imagine that the two of you are splitting a $10 profit. The seller chooses the selling price, and the buyer must buy at that price. This determines the profits of both the seller and the buyer." In fact, all participants were assigned to be the Seller and they set the deal by deciding the amount of money they wanted to take. The results showed that after receiving negative information about Adidas, participants who were highly connected to the brand kept more money for themselves than did those with relatively low SBC.

In the above two studies, we manipulated self-threat indirectly by manipulating brand threat. In the third study, we manipulated self-threat directly by giving false performance feedback on a Remote Association Task (RAT, Vohs and Heatherton 2004). After having attempted to solve 10 moderately difficult remote association problems, participants were informed that their performance was at either the 40th percentile (self-threatening) or the 90th percentile (not self threatening). We then employed two decision-making tasks that were identical in format but made salient *either* the goal to give or the goal to take. Specifically, respondents participated in either the seller-buyer game used in study 2 or in a study called "Donor-Donee Game." The instructions for this study were nearly identical to those in the buyer-seller game, except the donor was provided an initial endowment of $10 and need to decide how much to donate to the donee; this decision would determine the welfare of both the donor and the donee. After reading the

instructions, all participants were assigned to the role of donor and decided how much money they would like to donate. After making this decision, we administered a scale measuring respondents' affect and state self esteem. If, consistent with Vohs and Heatherton (2004), respondents' levels of self esteem and affect were indeed lower following negative (vs. non-negative) feedback, then this difference should become attenuated following self-affirming behaviors. The results confirmed our predictions. Participants who received a negative performance feedback on the RAT kept more money for themselves in the seller-buyer game, which made salient the goal to take. In the meantime, they also donated more money to others in the doner-donee game, which made salient the goal to give. In addition, consistent with our predictions, participants in self-threat conditions reported similar levels of affect and state self-esteem after goal pursuit as those who did not experience self-threat.

In summary, the three studies reported above provided evidence that participants who perceived threat to a positive self-view were more motivated to self affirm by pursuing a goal that is salient. This tendency is true no matter the goal propels people to give or propels people to take. In future research, we are interested in testing whether self-threat will influence consumers' consumption behavior when either the goal to spend money (i.e. extravagance) or the goal to save money (i.e., frugality) is made salient.

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The Effects of Self-Affirmation on Willingness to Help: The Mediating Role of Positive Other-Directed Feelings

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Despite charitable organizations' enormous social and economic impacts in our society (Bendapud et al. 1996), charitable giving has stagnated in the U.S over the last 30 years, and philanthropic institutions have found it increasingly difficult to raise needed funds from givers (Merchant and Ford 2008). Given today's daunting situations charities are faced with, in this article, we propose that affirming the self can be a predictor for enhanced willingness to help.

This argument follows from self-affirmation theory. Self-affirmation refers to behavioral or cognitive events that bolster the 'perceived integrity of the self" (Steel 1988, p.291). Social psychologists have documented that self-affirmation encourages people to see themselves objectively (Harris and Napper 2005) and decreases biased information processing of a persuasive message (Cohen et al. 2000; Harris and Napper 2005; Reed et al. 1998). It has also been linked with increased open-mindedness (Correll et al. 2004; Sherman and Cohen 2006), but decreased closed-mindedness (Cohen et al. 2007). Social psychologists have demonstrated "the transfer of an activated concept to an unrelated context" since the late 1970 (Wakslak and Trope 2009). We argue that the increased objective self-view and open mindset via self-affirmation can be transferred to a totally unrelated context with affirming the self, helping others, by motivating them to transcend concerns about the self and overcome motivational conflicts between prosocial and selfish impulses, and thus help them to see a big picture of the issue and primary concerns related to the situation, thereby increase individuals' willingness to help. Recently, Wakslak and Trope (2009) demonstrated cognitive consequences of self-affirmation, such that self-affirmation helps individuals focus on the big picture. Thus, taken these together, we argue that self-affirmation will enhance willingness to help.

Recent studies (Koole et al. 1999; Steele and Liu 1983; Tesser 2000) have argued that self-affirmation increases positive feelings. Along the same line with this argument, Crocker et al. (2008) demonstrated that affirming the self induced greater positive other-directed emotions, by enabling people to diminish concern for themselves (Correll et al. 2004) and transcend the self (Crocker et al. 2008). This implies that positive other-directed emotions rather than positive self-directed emotions may underlie the predicted self-affirmation effect on willingness to help. Across three studies, we tested these premises.

In Study 1, participants were asked to rank six values (i.e., business, art-music-theater, social life-relationships, science-pursuit of knowledge, religion-mortality, government-politics) in order of their personal importance (Sherman et al. 2000) and instructed to think about their most (self-affirmation condition) or least (control condition) important value they ranked before and write a short essay about why the value was important and meaningful to them (self-affirmation condition) or why it might be important and meaningful to others (control condition ; Schmeichel and Vohs 2009). Then they were presented with the message from the Red Cross and asked whether they would like to make monthly donation to the Red Cross Champions Program The results showed marginally significant self-affirmation effect on donation intention, such that participants in the self-affirmation conditions were more likely to make monthly donation to the Red Cross than those in the control conditions ($\chi 2$(1)=3.574, $p=.06$).

In Study 2, as done in Study 1, participants were involved in ranking and writing tasks. After the tasks, individuals' perceived positive other-directed feelings (loving, connected, and grateful; Crocker et al. 2008) were measured on five-point scales (1= not at all, 5= extremely). Then participants were presented with the message of the Red Cross Champions Program and asked to indicate their willing to help people in crisis. Study 2 results yielded significant self-affirmation effect on willingness to help, showing that participants in the self-affirmation conditions were more likely to help others in crisis than those in the control conditions (F(1, 90)=3.904, p =.05). The mediation analysis revealed that positive other-directed feelings mediated the self-affirmation effect on willingness to help (Sobel z = -1.97, p < .05).

In Study 3, we also measured positive self-directed feelings (powerful, strong, and admirable) and compared them with positive other-directed feelings regarding mediation. Replicating the results of Studies 1 and 2, the results demonstrated that participants in self-affirmation conditions were more likely to help patients coping with end-stage diseases than those in control conditions (F(1, 86)=5.475, p =.02). Mediation analyses revealed that positive self-directed feelings didn't mediate the effect of self-affirmation on willingness to help, but positive other-directed feelings did.

Across three studies, we demonstrated that affirming the self increased willingness to help and the effect of self-affirmation on willingness to help was mediated by positive other-directed feelings. This research suggests that when people are encouraged to affirm important values, they experience greater positive other-directed feelings, and thereby transcend concerns about the self and overcome motivational conflicts between prosocial and selfish impulses. References are available upon request.

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Cheapened Altruism: Discounting Prosocial Acts of Friends of Victims
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Despite the recent surge of interest in prosocial behavior in consumer psychology, there is limited research on others' perceptions of prosocial actors. Extant research has focused on beliefs about the intentions of favor-givers and willingness to reciprocate (Ames, Flynn, and Weber, 2004; Greenberg and Frisch 1972; Jones, 1964; Schopler and Thompson, 1968). Yet perceptions of charitable behavior when there is no expectation or possibility for reciprocation have yet to be explored.

According to attributional discounting theories (Kelley, 1972; McClure, 1998), when attributing behavior to internal or external forces, people consider the possible causes of that action. When the perceived plausibility of a casual factor increases, people weigh other possible causal factors less. In addition to attributional discounting, sometimes people weigh other possible causes more in the perceived absence of a causal factor, a phenomenon called attributional augmentation (Morris & Larrick, 1995). We explore how attributions for charitable behaviors influence perceptions of donors. It is easy to understand why people discount perceptions of donors who clearly gain from their allegedly prosocial behavior, such as when donors receive tax breaks. These selfish motivations directly conflict with an altruistic personality. However, sometimes donors are viewed as selfishly motivated and thus receive less credit even in the absence of clear benefits. We hypothesize that donating when one knew a victim of a cause is one such situation.

This leads to our primary hypothesis: donors to a cause who have a personal connection to someone who died of that cause receive less charitable "credit" (i.e., are viewed less favorably) than donors who are disconnected because that act is judged as impure or cheapened by self-interest. We explore this by focusing on donors who had a close, non-biological relationship with a victim who died of the misfortune served by the cause. This operationalization of a personal connection is a useful, conservative test because there is no clear selfish gain to the donor. Whereas donors who are biologically related to a victim or are victims themselves could stand to gain by helping the cause, and donors with living friends suffering from a cause may want to help their friend, friends of already deceased victims are only connected through the past experience of their friend's suffering.

This operationalization is also useful because past research finds that friends of victims are more likely to sympathize with and help other victims of misfortunes endured by their friends (Small & Simonsohn, 2008). One might expect, therefore, that friends of victims are viewed especially favorably because expressions of sympathy are taken to be indicative of a kind personality (Small & Norton, 2009). Instead, we predict the opposite: friends of victims receive less credit, not more, for their donations to that cause.

Three studies demonstrated that a donor's relationship to a victim influences people's perceptions of that donor. The diagnosticity of the relationship, however, is mitigated under certain circumstances. In all three studies, participants saw a hypothetical profile of a donor to a leukemia charity. The profile included information on whether the donor knew someone who died of leukemia. Participants then rated the donor on several measures of charitable traits as well as likelihood of future charitable behavior in different domains. (For simplicity, we use the term *charitable credit* to refer to perceptions of charitable traits and likelihood of future charitable behavior.)

Study 1 showed that donors who were friends of deceased leukemia victims received significantly less credit than donors who did not know any leukemia victims. Presumably, participants saw friendship with a victim as diagnostic of the donor's charitable qualities, and that information led them to give less credit to friends of victims than to donors who did not know any victims.

Our next studies explored circumstances that can make a donor's relationship to a victim more or less diagnostic of their charitable qualities. We hypothesized that, when friends of victims only donate to a charity serving that cause, the relationship is treated as diagnostic of the behavior. When donors give to multiple charities, however, a relationship to a victim of the target charitable cause loses its diagnosticity because perceivers do not expect a causal relationship to exist between friendship with a victim of one cause and donating to unrelated causes. In Study 2, the donor profiles included information on whether the donor also gave to other charities. Unsurprisingly, donors who gave to multiple charities received more credit than those who gave to only one charity. There was also a significant interaction between knowing a victim and giving to other charities. When donors also gave to other charitable causes, knowing a victim did not affect charitable credit. When donors only gave to one cause, however, friends of victims received less credit than donors who did not know any victims.

In summary, when judging a donor's charitable qualities, people treat a close relationship to a victim of that cause as a diagnostic signal about their motivation for behaving prosocially. Friends of victims' prosocial acts are viewed as cheapened by self-interest compared to donations by those who do not know any victims. Future research will further examine the attributional processes at work. In addition, we plan to extend this research to examine perceptions of companies who engage in prosocial actions and the attributions made by consumers.

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Session 6.2

Seeking, Giving, and Responding to Negative Feedback

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Research on the Dynamics of Self-Regulation attests that in the course of pursuing multiple goals (e.g., the desire to enjoy one's food and be a healthy person), whether a consumer experiences commitment to or progress towards a goal influences the consumer's course of self-regulation over time. While an experience of commitment encourages goal-congruent actions due to an increased sense that one can perform the goal, the experience of not making progress towards the goal encourages goal-congruent actions when it signals that one is not doing as much as one should.

The present research applies this framework to understanding feedback seeking, feedback giving, and response to feedback with respect to goals that involve a sequence of choices that unfold over time. We propose that the emphasis on assessing commitment or monitoring progress changes as consumers become more experienced with a task. Specifically, as consumers become more experienced at pursuing a goal, they are more sensitive to negative feedback about their lack of accomplishments as this feedback allows them to monitor their progress towards a goal. Thus, experienced consumers are more likely to seek negative feedback about their lack of accomplishments, give negative feedback to experienced others, and will be more likely to subsequently perform goal-congruent actions when they consider negative feedback about their "misses."

We report five studies that tested these hypotheses. In study 1, students in a dancing class were made to feel that they are either novices or experienced, before they sought feedback about their mistakes and how they can improve. We found that compared with students who felt they have been dancing a short while ("inexperienced"), students who felt that they have been dancing a long time, sought more negative feedback about their dancing.

Study 2 extends these results to a foreign language class, where we measured how the level of experience influences students' preference for an instructor who gives them positive feedback about their performance versus an instructor who gives them negative feedback about their mistakes. Inexperienced students who were enrolled in a beginner's class preferred the instructor who provides positive feedback more than students enrolled in the advanced class. Conversely, advanced students preferred the instructor who provides negative feedback about how they could improve compared to inexperienced students enrolled in the beginner class.

Next, in study 3, we tested the hypothesis that as one becomes more experienced with a task, one moves from seeking positive feedback to seeking negative feedback. We had participants engage in an unfamiliar task where they had a chance to get feedback on their performance. Participants were told they could only get one piece of feedback and were asked to choose whether they would like to receive positive feedback about what they do well or if they would like to receive negative feedback on how they could improve. We find that as people become more experienced with the task, they seek more negative feedback about how they can improve and less positive feedback on what they do well.

In study 4, we tested for feedback giving. We hypothesized that people who infer they have been pursuing a shared friendship goal with someone for a long time will give their experienced friend negative feedback about their weaknesses. To test this hypothesis, we had participants write a toast to a friend and we analyzed the amount of positive versus negative feedback they incorporated in their toast. We found that those who thought they knew the other person for a long time gave more negative feedback to their friend than those who thought they knew their friend a short while (inexperienced) but there was no difference in positive feedback giving depending on perceived experience in the relationship

Finally, in study 5 we explored the hypothesis that after gaining some experience in a domain of goal pursuit, individuals respond more to negative feedback by increasing their efforts in that domain and making subsequent goal-congruent choices. To test this prediction, we manipulated perceived experience in the friendship using social comparison information so that friends were made to feel as if they had known each other a short while or a long time. After this experience manipulation, we asked participants to consider a time they received positive feedback about their "hits" or negative feedback about their "misses." We found that participants who were made to feel as if they had known their friend a long time and who considered negative feedback were more likely to make goal-congruent choices (e.g., indicate they wanted to spend time with their friend or contact their friend) than participants who were made to feel experienced but considered positive feedback.

These findings have important implications for how marketers can increase the motivation to adhere to different consumer goals, in particular those that involve a sequence of actions that evolves over time. For example, we suggest that a persuasive appeal for inexperienced gym users should emphasize their successes in maintaining good health in the past, whereas a message that is directed toward experienced gym users should emphasize their lack of actions toward successfully maintaining good health.

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Motivational Consequences of Perceived Velocity in Goal Pursuit

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When a store launches a loyalty program to motivate repeated purchases, should the store let customers feel that they are gaining points relatively fast, or relatively slow? Can the same rule be applied to the customers who just join the program as well as the ones that are getting close to reward redemption? In order to address these questions, we build on the research on the dynamics of self-regulation (Fishbach and Dhar 2005; Zhang et al. 2007), which distinguishes between two representations that influence one's pattern of self-regulation: commitment toward desirable states and the reduction of discrepancy between current states and ideal states.

Recent research proposes that to-date information signals one's commitment and to-go information signals the discrepancy that still needs to be closed (Koo and Fishbach 2008). Accordingly, we posit that people are concerned about different questions as they move from earlier stages to later stages of goal pursuit, and the velocity in goal pursuit allows them to make different inferences. Specifically, when people start pursuing a goal and progress level is low, the perceived attainability of the goal is relatively low and people's commitment to goal is thus ambiguous as people are unsure about their capabilities to execute required actions. As people are less likely to commit to goals beyond their reach, in this case, an individuals' motivation is determined by whether the goal is perceived to be attainable (Bandura 1997; Lewin 1951). High (vs. low) perceived velocity suggests that one is moving toward the ideal state at a faster rate, and signals higher attainability of the goal, thus motivating the person to persist in the pursuit.

On the other hand, when progress level towards the goal is relatively high, people feel relatively confident about achieving the goal (Wood and Bandura 1989). As a result, people instead focus on reducing the discrepancy between the current state and the desired end state. Perceived velocity in goal pursuit, in turn, provides information on one's effectiveness in reducing the discrepancy and signals how much effort will be needed to finally attain the goal. Thus, low (vs. high) velocity of goal pursuit suggests that more effort is needed and increases one's motivation.

Four studies tested present predictions. The first study used hypothetical scenarios of finishing a book and completing a puzzle, and asked participants to indicate how many hours they planned to spend on the task today as well as tomorrow as indicators for motivation. Consistent with the hypothesis, when the progress level on finishing a book or completing a puzzle was low, high (vs. low) velocity led to more hours planned to be spent on these task; in contrast, when the progress level on the goal was high, low (vs. high) velocity of attainment elicited higher motivation for further pursuit.

In Study 2 and Study 3, participants performed actual tasks and were offered the chance to accumulate 700 points to win cash rewards. In study 2, we gave participants a number-related task and offered a reward for high performance. We manipulated participants' progress and perceived velocity by offering them feedback on their performances. We then gave them three extremely difficult questions and measured the amount of time participants spent on these questions as the indicator of their motivation for the reward. We found that when the progress level was low, participants who thought they were gaining points fast (vs. slow) persisted longer in the task; conversely, when the progress level on the goal was high, participants who thought they were moving at a slow (vs. fast) rate showed higher persistence.

In study 3, we asked participants about their perceived attainability of the goal and their concern about reducing the discrepancy, in addition to their persistence in trying to reach the goal. We found that low (vs. high) speed led to lower perceived attainability of the goal when progress was low, but not when progress was high. Also, we found that low (vs. high) speed led to higher concern about reducing discrepancy when progress was high, but not when progress was low. In addition, we found that when progress on the goal was low, perceived attainability of the goal (and not the concern for reducing discrepancy) significantly predicted one's persistence, but when progress was high, the concern for reducing discrepancy (but not the perceived attainability) predicted their motivation for the pursuit.

Study 4 extended the hypothesis to the context of public goal pursuit through conducting a field study. We launched a campus campaign with the Relief Nursery of Central Texas, a social-profit organization dedicated to the cause of preventing child abuse, and created different flyers to solicit volunteer hours for the organization. As predicted, when progress on volunteer recruitment was low, information of high (vs. low) velocity was more motivating and led to higher percentage of people willing to volunteer as well as more hours people were willing to volunteer for; in contrast, information of low (vs. high) velocity was more motivating when the progress on recruitment was high.

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The Dynamics of Goal Revision: Updating the Discrepancy-Reducing Model of Self-Regulation

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Existing research in goal-directed behaviors has focused on the process in which people continuously adjust strategies to strive for a static goal (Austin and Vancouver 1996; Locke and Latham 1990). However, much less attention has been directed toward the dynamic process of goal setting. Goals are not always static (Fishbach & Dhar, 2005). Rather, people frequently revise their goals upward or downward based on the discrepancy between their current performance and the desired goal. This research examines the dynamic process of goal revision by revisiting and revising the discrepancy-reducing model of self-regulation (Carver and Scheier 1981, 1998).

Carver and Scheier's classic model of self-regulation suggests that people continuously monitor the discrepancy between their current state and a desired standard and direct their behaviors at reducing the discrepancy between the two. One limitation of this model is that it treats the goal as a static standard. In this research, we propose instead that the goal is a dynamic function, specifically, an S-shaped function of the goal-performance discrepancy. Based on this proposition, we suggest an additional element – "Goal Calibrator" – to be incorporated into Carver and Scheier's self-regulatory model. In the revised model, the goal-performance discrepancy serves not only as the input of the system, which is suggested by the original model, but also as the input of the goal calibrator. The goal calibrator is directed by an S-shaped function, generating the updated goal for further monitoring. Moreover, the S-shaped function of goal-performance discrepancy has specified properties. In particular, functions for self-set goals and assigned goals share the common characteristics of *proportionality* and *diminishing sensitivity*. However, the self-set goal function has its unique property of *failure aversion*, whereas the assigned goal function has a contrasting property of *satisficing.*

Four experiments provide empirical support for our theorizing. Study 1 provides initial evidence for our hypothesized goal revision for self-set goals. We used a one-factor between-subjects design (discrepancy valence: positive vs. negative). Participants were asked to imagine setting a financial goal of saving as much money as possible for five consecutive months and to write down their desired saving amount for the first month. Participants were then given hypothetical performance feedback (e.g., you saved 15% more than your goal, you saved 15% less than your goal), and asked to set up their financial goal for the next time period. Participants were then given another round of hypothetical feedback, a process that was repeated for five iterations. We find that positive discrepancy results in continuous upward goal revision – savings targets for each month were higher than in the previous month. In contrast, negative discrepancy leads to the maintenance of the original goal – savings target stayed flat from month to month. This effect demonstrated (a) the existence of goal revision for self-set goals, and (b) the property of *failure aversion*.

Study 2 replicated the effects in another context, working out, and further investigated the effort exertion under different discrepancy valence. Participants were given the goal of burning as many calories as possible on the treadmill for five consecutive days. We then assessed effort exertion. We find that those with positive discrepancy indicated the same amount of effort in each trial, whereas those with negative discrepancy indicated increasingly more effort to strive for the goal.

Study 3 further tested the characteristics of the S-shaped goal-discrepancy function by examining the interaction between the valence of the discrepancy and its magnitude. Specifically, as to self-set goals, we expected *proportionality* and *diminishing sensitivity* for discrepancies with the same valence but differential magnitudes, and *failure aversion* for discrepancies with the same magnitude but opposite valences. We used a 2 (discrepancy valence: positive vs. negative) × 2 (discrepancy magnitude: small vs. large) factorial design. Participants were presented a scenario in which they held a goal of burning 200 calories on the treadmill. The goal-performance discrepancy was manipulated by giving hypothetical outcomes (i.e., burning 10 calories more, burning 110 calories more, burning 10 calories less, burning 110 calories less). Participants were then asked to establish the calorie goal for the next day based on their current performance. Consistent with our hypothesized *proportionality*, large discrepancies gave rise to greater goal revision than small discrepancies of the same valence. Further, discrepancies have a smaller marginal impact when they are more distant from the origin point, which refers to *diminishing sensitivity*. Moreover, aligned with the predicted *failure aversion*, positive discrepancies led to larger goal revision than negative discrepancies of the same magnitude.

Study 4 tested the unique property of *satisficing* for assigned goals. In this study, we utilized a computerized anagram task to establish assigned goals. Participants were first asked to freely set a goal for the first anagram (i.e., "to find __% of the possible solutions"). We then gave participants feedback based on the condition (i.e., you solved 5% more vs. less than your goal). Since the anagram tasks were cognitively intensive, only three iterations were implemented in this study. As predicted, those with positive valence maintained the original goal based on the first feedback, but revised the goal upward as they kept receiving positive feedback in the next round. By contrast, those with negative valence shifted the goal downwards based on the negative feedback. These effects demonstrated the property of *satisficing* for assigned goals.

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Session 6.3

On Profits and Halos: The Role of Firm Profitability in Consumer Inference
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Consumers must infer the quality of products, such as experience products and really new products, before they purchase them. This is because the efficacy of experience products such as drugs may depend on the patient, and the quality of really new products is simply unknown before it enters the market. Our research focuses on inferences of product efficacy, and we specifically examine the potential of the salience of the profitability of the manufacturing firm in the advertising context to serve as a basis for consumers' product inferences. We argue that the need to draw inferences when quality is uncertain would intersect with the tendency for consumers' product-related judgments to be colored by their thoughts about the advertiser of the product. Specifically, we expect that knowledge about the profitability of a firm would serve as a halo that would affect a host of judgments that consumers would subsequently render regarding the advertised product.

When consumers make a deductive inference, the entity of the inferential basis serves to color consumers' perception of the target object. Inferences about product quality require an accessible implicit theory that links an inferential cue to an appropriate inferential conclusion (Schwarz 2004). In the case of firm profitability, consumers are likely to possess an implicit theory that suggests that firms that produce many high quality products are likely to enjoy high levels of profitability (if X, then Y). Due to confusion of the inverse, consumers are likely to infer that the opposite is also true (Wyer and Srull 1989), i.e., profitable firms produce many high quality products (if Y, then X). Such an inference may have a variety of downstream consequences, for example enhancing the favorability with which consumers receive marketing communications, and the expected efficacy of an advertised product.

Manufacturers of drugs and technological breakthroughs rely on advertising to create awareness and persuade consumers to purchase their products even in the face of some uncertainty. We hypothesize that making the profitability of the advertiser salient at the time of ad receipt would serve to increase ad effectiveness because consumers may perceive the ad to be more credible to the extent that they believe that high profitability is the result of the firm producing high quality products. In turn, because what individuals consider when forming judgments affects judgment strength (Priester et al. 2004), when profitability is salient individuals may have more positive product attitudes, and be more likely to engage in behaviors that would lead to acquisition. We support our claims in two experiments using experience and really new products. To establish causality in our results, we analyzed them using Structural Equation Modeling (SEM). Under the umbrella of SEM are two main approaches – covariance-based and partial-least squares. We chose the latter due to our sample size.

In experiment 1 we tested our predictions using an advertisement for a new sleeping pill (the efficacy of such pills largely depends on the patient.) Mall patrons were the participants in this experiment and were randomly assigned to one of two conditions: high profits vs. no profit information. We mentioned that the pharmaceutical company that manufactures these pills is well known and we masked its name to avoid eliciting biases. All participants then saw the same ad. We hypothesized that because this is a new pill consumers will have to make inferences regarding its real efficacy from the information they have – the manufacturer's claims in the ad and the information we provided regarding the manufacturer itself. Results indicate that when the manufacturer's profitability was salient, a) the ad was considered more credible, b) consumer inferences regarding the efficacy of the drug were more favorable, and most importantly, c) behavioral intentions (measured as likelihood to visit a doctor and request the drug) were stronger. The analysis further established the mediating role of advertisement credibility on (a) profitability on inference, and (b) profitability on behavior. In sum, experiment 1 shows that consumes infer positive product information on the basis of the manufacturer's profitability.

One caveat of experiment 1 is that profit information has no levels (it is either high or not mentioned.) In experiment 2 we test the effects of three levels of profit information: high profits, low profits, and no profit information. Additionally, we wished to compare our findings from experiment 1 where profitability information is presented alone, with a situation where profitability information is presented along with other information, such as the well researched cue, product warranty. Therefore, we employed the following between subject design: 3(profits: high, low, none) × 3(warranty: strong, weak, none). The product participants evaluated in this experiment was a really new one, 3D HDTV (a new technology that does not require special glasses.) As expected as profitability increases, a) the ad was considered more credible, b) consumer inferences regarding the 3D HDTV were more favorable, and most importantly, c) behavioral intentions (measured as intent to purchase and intent to use) were stronger. Central to this experiment, we found that profitability information is taken into account and being used even when it is embedded in the context of other information. When information about product warranty was available increased profitability still had a strong positive effect on ad credibility, product evaluation, and behavioral intentions.

In sum, our research establishes a new inferential cue—firm profitability. In two experiments we showed that in the absence of detailed information about a product, manufacturer's profits enhance ad credibility, which in turns improves perceptions regarding product quality. Most importantly, these inferences lead to strong behavioral intentions for high involvement products. The effect of firm profitability as a cue for product quality remains strong even when other cues (product warranty) are made salient. The managerial implications from this research are clear – manufacturers of experiential and really new products should remind consumers of their financial strength in their communication.

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How Consumers' Inferences & Product Choices Are Affected by Alphanumeric Brand Names

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Alpha-numeric brand names include a mix of letters and numbers (Pavia and Costa 1993). There are millions of registered and unregistered alpha-numeric trademarks in use (USPTO 2006). Despite their widespread use in numerous industries, we know very little about how consumer alpha-numeric names affect consumers' inferences and choices of products. While past studies have provided us with important insights about the perception of alpha-numeric brands, the effects of these brands on consumers' product related inferences and final choice outcomes have not been explored.

The purpose of our research is to identify the systematic effects of alpha-numeric brand names on consumers' preferences under different circumstances. Our investigation primarily focuses on the inferences made about products based on different alpha-numeric models of parent brands. We examine situations in which there is complete and incomplete attribute information and explore the decision processes of consumers who have different levels of need for cognition. We also consider some inter-brand effects such as the influence of Dell's alpha-numeric brands on choices among competitor HP brands.

Since products are almost never described in complete detail, consumers must often make inferences using whatever information about the product options is available (Kardes et al., 2004). Note that brand name will almost always be among the available information consumers can use in their decisions. When consumers are faced with choice uncertainty, they tend to make inferences favoring the options that are superior on the alignable features or common attributes for all options (Kivetz and Simonson 2000). Note that, in almost all choice contexts, there is at least one shared piece of information that is available for all options even if all other information is missing: the brand name. An important question is how consumers will make use of alpha-numeric brands during their purchase decisions and what individual characteristics of consumers may affect their use of brand names. We contend that the types of the brands, the availability of attribute information, and the cognition level of the decision makers play moderating roles.

Boyd (1985) has classified alpha-numeric brands based on their main functions as: abbreviations (e.g., DL for deluxe); extensions of models (e.g., Audi A3-A8); direct physical attributes (e.g., v-shaped V8 engine); technical symbolism (e.g., BMW 3.25 with 3.25 liter engine); and inventory codes or design numbers. Pavia and Costa (1993) found that the numeric portions of brand names play a vital role in the perception of the product generation, whereas the letters usually help consumers identify the product type. Ang (1997) further showed that the use of lucky numbers and favorable letters in brand names affect consumers' opinions about products. Integrating these findings with our observation of consumers' reactions to brands, we build a taxonomy of alpha-numeric brands. Our first focal dimension is alignability which refers to comparability of differences. Alignable attributes tend to be more quantitative and monotonic, and they are weighted more heavily in judgments (Mark and Medin 1995). Most brand names do not fall into this category due to their qualitative nature (e.g., Ford Mustang vs. Focus). However, some alpha-numeric brands are relatively alignable and comparable (e.g., BMW 3.25 vs. 3.28) because they follow numeric or alphabetic sequences (ascending or descending). Conversely, other alpha-numeric brands are non-alignable (e.g., 3M, 7Eleven). Our second focal dimension is the potential relation of alpha-numeric brands with specific attributes or the overall product. Some alpha-numeric brands make it fairly easy to draw inferences about the product by cueing general quality or advancement (e.g., Intel Pentium III vs. II processors) or cueing specific product attributes (e.g., AMD32 vs. 64 chips refer to 32 vs. 64 bit processing). However, it is not always easy to understand alpha-numeric brands because consumers' expectations about the link between brands and product attributes or overall product quality may not be congruent with marketers' brand naming strategies. For the average consumer it is often very difficult to determine what some brand names actually refer to (e.g., What does Canon SD500 refer to?).

To investigate consumers' use of alpha-numeric brands in their decisions, we conduct five empirical studies involving different product categories and brand types. Study 1 shows that, given an identical choice set, labeling a product option with a higher level alpha-numeric brand (a name that contains a higher numeric portion) increases its choice share. In study 2, we test the robustness of this "the higher the brand name the better the product" inference made by consumers. We replicate our findings using directly observable attributes and product choices involving real life consequences. In studies 3 and 4, we examine the moderating roles of consumers' need for cognition and the availability of attribute information on consumers' inferences and choices of alpha-numeric brands. The results reveal that low need for cognition consumers (LNCs) use a "the higher the better" brand name heuristic at earlier stages of the decision making and regardless of attribute values. As long as brands are alignable, they simply infer that higher-level brand names correspond to better products. On the other hand, those with high need for cognition (HNCs) process brands more deeply trying to understand and infer actual brand-attribute correlations. When there is missing attribute information, LNCs especially tend to choose higher level brands even if better products are labeled with lower level brands or if attributes are completely unknown and products are really unfamiliar. Priming consumers to make inferences about missing attribute values seems to boost this effect. On the other hand, the inferences made by HNCs are highly related to the alpha-numeric brands suggesting that brand names play a major role in their more complex decisions, too. Finally, study 5 combines verbal protocols and analysis inferences to deepen our investigation of the underlying choice process and replicates our findings in more complex choice environments.

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Consumer Inferences and Heuristic Flexibility

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Consumers often have to go beyond the information provided about a product in order to make judgments and decisions. Cues like price, brand name, or country of origin are used to draw general conclusions about benefits that are not immediately available like quality (Kardes et al. 2004). Yet, the same information can lead to different inferences. Cho and Schwarz (2008) showed that heuristics can be malleable if different applicable implicit theories ("good-art-takes-effort" vs. "good-art-takes-talent") exist. Participants only inferred high quality from high effort when an "effort" theory was rendered accessible, but not when a "talent" theory was rendered accessible. In two experiments, we illustrate the flexibility of consumer inference rules. In the first experiment, we demonstrate that high price can either be interpreted as a sign of high quality or as a sign of low value depending on the implicit theory accessible. In the second experiment, we show how a scarcity (vs. social proof) appeal is more efficient if exclusivity (vs. popularity) is primed.

In Experiment 1, participants were randomly assigned to one of the conditions of a 2 (theory primed: quality vs. value) x 2 (price information: high vs. low) between subjects design . Following the procedure used by Cho and Schwarz (2008), participants were asked to participate in multiple unrelated studies that had been grouped together for time efficiency. The alleged first study was presented as a task about memory and comprehension and included the priming manipulation. Participants read a short article and were told they would later receive a comprehension test. The article about house flooring was presented as coming from HGTV.com and the last paragraph emphasized either the higher quality of expensive materials (quality theory primed) or the importance of obtaining a good value for the price (value theory primed). Next participants completed a short filler task that was presented as study 2. The third study was introduced as a consumer evaluation study in which participants were presented with an ad for a bottle of wine. Half the participants were told that the price of the bottle was $9.99 (low price condition) and half were told that the price was $39.99 (high price condition). Then, they provided their evaluation of the wine thanks to three items (overall evaluation, overall impression, and overall assessment) rated on 7-point likert scale ranging from 1 (Extremely bad/Extremely unfavorable) to 7 (Extremely good/Extremely favorable). Finally, participants were asked to summarize in their own words the main idea of the article presented in the alleged study 1 and answered questions about the credibility, the difficulty, and the persuasiveness of the article. Multiple ANOVAs revealed that experimental treatment had no effect on the perceived difficulty, credibility or persuasiveness of the article. We conducted a 2 (theory primed) X 2 (price information) ANOVA on evaluation that revealed the expected interaction between the theory primed and the price information provided. Planned contrast analysis revealed that the evaluation of the wine was more favorable when the primed theory was matching the price information of the stimulus. When quality was primed, the evaluation of the high price wine was more favorable than the evaluation of the low price wine. Conversely, when value was primed more favorable evaluations were observed for the low price wine.

In Experiment 2, participants were randomly assigned to the conditions of a 2 (theory primed: popularity vs. exclusivity) x 2 (Social influence appeal: Scarcity vs. Social Proof) between subjects factorial design. Following the same procedure than in experiment 1, participants were asked to participate in several unrelated studies including the priming manipulation presented as a study about memory and comprehension, a filler task introduced as study 2, an evaluation study including the main dependent variables as study 3, and finally the second part of the alleged study 1 in order to collect manipulation checks. The article presented was the book review of a fictitious essay about watches. It was introduced as an extract from Parade magazine. Similar to experiment 1, the last paragraph that mentioned Omega watches included the priming manipulation by emphasizing either the rarity and uniqueness of Omega watches (exclusivity primed) or the number of watches sold all around the world (popularity primed). In the third study, participants were asked to evaluate a bottle of wine. Participants were presented with an ad using either a social proof appeal (more than 200,000 cases sold) or a scarcity appeal (less than 2000 cases available). Multiple ANOVAs showed no difference across conditions in terms of the difficulty, the credibility, or the persuasiveness of the presented article. The evaluation score was submitted to a 2 (theory primed) X 2 (Social influence appeal) ANOVA that revealed the anticipated interaction between the theory primed and the appeal used in the wine ad. Replicating the results of experiment 1, a planned contrast analysis showed that the evaluation of the wine was more favorable when the primed theory was matching the social influence appeal used in the ad. A scarcity appeal was more effective when exclusivity was primed. Conversely, a social proof appeal led to more favorable evaluations when popularity was primed.

In sum, both experiments provide support for the hypothesis that certain heuristics are malleable and that inferences depend on more than the actual information used. A direct implication is that we cannot predict consumers' inferences when we only know which information they draw on.

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Session 6.4

Should You Trust or Not Trust Your Feelings When Predicting the Future?
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From the mundane to the phenomenal, the ability to predict what will likely happen in the future is among the most prized of human faculties, as many of our decisions in life depend on our predictions. Prediction making is generally thought to be a largely cognitive and computational process of scenario building and testing. Contradicting the conventional view that feelings provide an inferior basis for judgments and decisions compared to cognitive processes, we report seven studies that demonstrate that people who trusted their feelings consistently predicted the various future events more accurately than people who did *not*.

In most of our studies, participants' trust in their feelings was subtly manipulated using a procedure—the trust-in-feelings manipulation (TFM)—that was originally devised by Pham and Avnet (2007) and has been used to study the reliance on feelings in various decision contexts. In the TFM, after receiving a brief explanation of the distinction between using feelings versus logical reasons to make judgment and decisions, participants are asked to describe a number of "situations in which you trusted your feelings to make a judgment or a decision and it was the right thing to do." Participants in the high-trust-in-feelings (HTF) condition are asked to describe two such situations, whereas participants in the low-trust-in-feelings (LTF) condition are asked to describe ten. As shown in previous studies, HTF participants tend to find it easy to identify two such situations and therefore infer that their feelings are trustworthy. LTF participants, however, tend to find it difficult to identify ten similar situations, thus inferring that their feelings are untrustworthy. Recent studies further suggest that the TFM does not induce different moods, levels of task involvement, or levels of task-performance confidence across conditions.

In **Study 1** (*N*=68), we found that HTF participants were more accurate in predicting the first-weekend box-office success of five wide-release movies in the coming weekend. These results were replicated two months later in **Study 2** (*N*=41) with a different set of movies and different participants.

Whereas Studies 1 and 2 involved predictions about commonplace events that were to occur several days later, **Study 3** involved predictions about a more significant event that was to occur several months later—the Democratic Primary nomination for the 2008 US Presidential election. Six months before the Democratic presidential nominee was officially announced (at the Democratic National Convention in August 2008), a nationally-representative sample of 229 registered voters was recruited through an online panel. After completing the TFM, they were asked to predict who between Clinton and Obama would win the nomination. The study was administered during a time (February 15-17, 2008) when both candidates were virtually tied in the race. Although participants made their predictions six months before the outcome of this highly-uncertain race was determined, again HTF participants were more likely (72% vs. 64%) to correctly predict that Obama would win the nomination. This result held for both registered Democrats and registered Republicans.

Studies 1-3 relied on an experimental manipulation of participants' momentary trust in their feelings. One could argue that the findings may be driven by some peculiarity of the manipulation itself rather than by people's genuine trust in their feelings. To address this issue, in **Study 4** we simply measured (instead of manipulated) how much participants trusted their feelings in general when making predictions. Participants (104 regular American Idol viewers) were asked to predict the winner of American Idol 2009, a popular singing competition. Regression analyses showed that the more participants trusted their feelings when making predictions in general, the more likely they were to accurately predict the actual American Idol winner (Kris Allen). Conversely, how much participants trusted their logic and reason when making predictions in general was not related to their prediction accuracy. The parallelism between this study's results and those of the previous studies suggests that the effects are genuinely due to people's trust in their feelings rather than to some peculiarity of the TFM.

In Studies 1-4, the events to be predicted could all be construed as related to popularity. This raises the question of whether the effect is limited to events driven by popularity. For example, it could be that people who trust their feelings can better empathize with the pulse of the broader population of moviegoers, election voters, and singing-competition fans than people who do not trust their feelings. **Study 5** thus examined whether the phenomenon also holds for a prediction context less easily interpretable in terms of popularity: future stock market movements. Specifically, 133 business-school students who had completed the TFM were asked to predict the closing level of the Dow-Jones Index (DJI) one week later. The person with the most accurate prediction would receive a reward. Again, HTF participants made predictions that were closer to the actual closing level of the DJI. This result suggests that the phenomenon generalizes to predictions not necessarily related to popularity, and is not attenuated when participants are incentivized for prediction accuracy.

Thus far, the events to be predicted were all aggregate consequences of human behavior. The final two studies investigate whether the phenomenon extends to predictions about events purely controlled by nature. In **Study 6** (*N*=52), after completing the TFM, participants (who had not checked weather forecasts recently) were asked to predict what the weather condition would be in their own zip code two days later by choosing from six different options (e.g., "sunny," "windy"). While 47.1% of HTF participants predicted the correct weather condition, only 27.8% of LTF participants predicted correctly.

This result was replicated in **Study 7** (*N*=116) in which participants' general trust in feelings was measured rather than manipulated. Logistic regression analyses revealed that the more participants trusted their feelings in general when making predictions, the more likely they were to predict the weather condition accurately.

Overall, besides suggesting a plausibly more effective strategy for individuals when predicting the future, these results join a recent stream of research that highlights the positive role of emotions in judgment and decision making.

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When the Thinking Gets "Tough," The Gut Gets Going…

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We naturally assume that a complicated decision or choice requires the analytical rigor of the rational brain. When trying to decipher a complicated situation, we believe that we need to consciously reflect on all the options, carefully think through the different pros and cons or compare all possible outcomes. Simple situations, on the other hand, are generally deemed for emotions. You might trust your gut to choose a main course for dinner, but you would not dream of letting it select your next car. We often make decisions on issues that are exceedingly complicated, from choosing a life long partner to deciding on our next career move. We hypothesize that in complex problems situations, reflecting consciously on the situation will not necessarily provide people with the best solution for their problem. More than that, we believe that in these situations it is unlikely that the conscious mind would be able to take into account all the important pros and cons as well as the emotional feelings that would affect the success of the outcome.

Therefore we propose that an increase in a decision complexity can result in an increase in the reliance on gut feelings (choosing the option that feels like the "right thing to do") in addition to the reliance on pure affective reactions or on pure cognitive reasoning.

In order to test this hypothesis we ran two separate studies. We predicted that one of the main factors that will contribute to the complexity of a decision is its importance. Therefore the purpose of the first study was to look at how important people rate different decision domains (dwelling, professional, personal, health, financial, and religion). Then we asked participants to rate how useful they find their gut reactions to be for each of these decision domains, as they get more complicated. Finally we asked participants to provide what kind of information they will be searching for within each decision domain, as the decision becomes more complicated. The results of this study provided support for the basic hypothesis: the more important a decision was the more useful the gut feel was, and the more useful the gut feel was the less useful other types of information were. In addition to the effect of importance on gut feel, another factor we examined was the type of decision. The first type involved decisions that given the facts and situations the "right" outcome is more objectively obvious (such as deciding on a job or an apartment), while the second type involved decisions that their outcome is more subjective and can go either way (such as deciding on a life partner or religion; domains in which it is not clear what the "right" answer is). The results of this study supported the hypothesis that gut will be used more within the more "subjective" type of decisions as compared to the "objective" decisions, but within each type of decision, level of importance still has a positive effect.

Based on the results of this study, we decided to examine our hypothesis further by looking at three levels of decision complexity within two specific decision domains: personal (finding a partner/marriage) and professional (finding a job/joining a firm). Based on the first study, these two domains were considered equal on importance but different on subjectivity. The design of the study, then, was as follows: within each decision domain (personal or professional) participants were asked to look at three levels of decision commitment (how long-term the effects of the decision will be. For example: getting married as compared to going out for dinner). The following dependent variables were measured: the reliance on gut feel (intuition), the reliance on reflective thinking (reason-based), and the reliance on affective reactions (emotion-based). The first set of questions asked about participants' actual usage of these inputs within each decision; and the second set of questions asked about participants' belief which input would be the most appropriate one to use. Results from this study show that participants' reliance on gut feel, reflective thinking, and affective reactions depend on the level of decision commitment and on the decision context (personal vs. professional). Overall it seems that within a personal decision context, all three inputs were relied upon to the same extent, regardless of level of complexity. While within the professional decision context, reflective thinking and affective reactions were positively correlated with level of complexity increasing monotonically as level of commitment increased. , The reliance on gut feel on the other hand was again independent of level of complexity. Finally, we examined the difference between people's beliefs about the appropriate usage of these inputs as compared to their actual usage of these inputs. In both decision domains the "appropriate" reliance on affective reactions and on gut feel were significantly lower than the actual reliance on these inputs. In addition the actual reliance on affective reactions imitated the reliance on reflective thinking, suggesting that affective reactions and gut feel are two different types of input, one that is more informative (how this decision/task make me feel) and one that is more judgmental (is this the "right" decision?) .

We believe this research contributes to the understanding of decision making by demonstrating that when decisions get more complex and emotionally risky people tend to rely on their inner intuition and affective reactions to make a decision in addition to relying on their reasoning, contrary to the common belief that relying on gut feel and affective reactions only occurs within simple, low risk decision situations.

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Mood Influences on Self-Control: A Matter of (Mis)attribution

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Self-control entails people's persistence in the pursuit of activities that offer long-term benefits, even though these activities are immediately unpleasant (Metcalfe and Mischel 1999). We explore how people's ongoing mood might influence their self-control. For example, how do people's moods influence the likelihood that they will persist on a difficult academic task, complete a boring assignment at work, or remain patient during an unpleasant social interaction? Although there is a general consensus that affective reactions provide feedback for goal pursuit (Carver and Scheier 1998) and influence the exercise of self-control (Fishbach and Labroo 2007), the nature of the relationship between affect and motivation remains an unsolved problem in psychological research.

We explore this problem from the perspective of research on the dynamics of self-regulation (Fishbach, Dhar, and Zhang 2006). According to this perspective, people consider one of two questions when deciding to invest effort in pursuing a goal: Is the goal valuable? And, if the goal is valuable, is the pace of the goal pursuit adequate? People invest effort in pursuing their goals if they infer higher commitment to the goal or inadequate progress toward achieving the goal. Building on this perspective, we propose that a person's mood can serve as a signal regarding whether the goal is valuable and should be adopted or whether an adequate level of goal progress has been made. Furthermore, the effort a person invests in goal pursuit depends on the attribution a person makes for the source of the mood. If people pursuing an important goal attribute their mood to a source unrelated to goal performance, the mood signals whether to adopt a goal (e.g., Fishbach and Labroo 2007). As a result, people work harder on a goal when they are in positive (vs. negative) mood. However, if people attribute their mood to their level of goal performance, they work harder on their goal when they are in a negative (vs. positive) mood, because a negative mood signals inadequate goal progress (Carver and Scheier 1998). Notably, most often people are unaware of the true source of their moods, and therefore the attributions they make regarding their moods are flexible and sensitive to situational cues (Schwarz and Clore 1983). Regardless of the true source of people's moods, the impact of mood on self-control depends on the attributions they make for their moods.

Three studies tested these predictions. In Study 1, we misattributed performance-unrelated mood to goal performance. Participants first completed a word association task known to induce a positive or a negative mood. Next, through a feedback manipulation, participants were primed (or not) with a belief that feelings, in general, arise as feedback for performance. Thus, although mood resulted from task characteristics and not from performance, some participants were led to misattribute their feelings to performance. Next, all participants completed a second (difficult) cognitive ability task (to form as many words of three or more letters from each of two strings, *NLIKSS* and *VELGRB*). As expected, among participants not attributing mood to performance in the first task, positive (vs. negative) feelings improved performance in the second task (M = 16.11 vs. 12.77). The reverse was true for participants misattributing mood to performance in the first task; positive vs. negative feelings reduced performance in the second task (M = 13.21 vs. 17.61). A follow-up study confirmed that participants who did not attribute their mood to performance inferred more goal commitment in a positive vs. negative mood (*M* = 5.94 vs. 4.97), but participants who attributed their mood to performance inferred more goal progress in a positive vs. negative mood (*M* = 3.35 vs. 2.33).

Whereas participants in Study 1 misattributed performance-unrelated mood to performance, in Studies 2-3, we did the opposite by leading participants to misattribute their performance-related mood to an unrelated source. Participants in Study 2 received high- or low-success feedback on their performance on a task, which induced corresponding positive or negative feelings. We then informed participants in the misattribution condition that background music, which was played during the task, might influence their mood. All participants then completed a second task (typing speed in a boring task). As predicted, in the no-misattribution condition, receiving high-success (vs. low-success) feedback negatively affected performance on the second task and slowed participants down (M = 88.43 vs. 74.62 sec) because positive goal-related feelings signaled sufficient goal progress. However, in the misattribution condition, receiving high-success (vs. low-success) feedback improved performance and improved speed on the second task (M = 94.35 vs. 118.81 sec) because positive feelings signaled people to adopt the goal. Error rates were similar across conditions. Thus, participants did not compromise accuracy to obtain faster typing times.

Study 3 assessed participants' patience in an unpleasant social interaction by assessing the time they were willing to wait on the telephone before hanging up. Participants started a telephone survey and received positive feedback for being helpful so far (vs. no feedback), which improved their mood. Half of the participants were then led to misattribute their (positive vs. neutral) mood to the approaching weekend, and then asked to stay on the line while the experimenter prepared follow-up questions. As predicted we found that participants who attributed their mood to being helpful were impatient and waited for a shorter time when they were in a positive (vs. neutral) mood (M = 4.81 vs. 8.50 min). In contrast, participants who misattributed their mood to the approaching weekend were patient and waited longer when they were in a positive (vs. neutral) mood (10.23 vs. 5.98 min).

Thus, the same feeling can either promote or impede successful self-control depending on a person's attribution. These findings have implications for social agents, such as educators or managers, who may increase people's motivation to pursue goals that require self-control by offering attributions that motivate actions and avoiding attributions that undermine this motivation. For example, educators can encourage students to attribute negative moods to the lack of goal progress (e.g., incomplete coursework) and positive moods to a source that is unrelated to goal performance (e.g., the weather).

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Session 6.5

On the Impact of Product Aesthetics on Choice: A Dual-Processing Perspective
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While there is a general awareness in the business and academic communities that the way a product looks significantly influences its overall success, not a great deal is know about how or why this occurs. An implicit assumption in consumer research is that product aesthetics influences choice similarly to other attributes of the options. The three studies presented here suggest that this is not the case. The present research has two objectives: both to demonstrate some of the novel ways in which the design – in terms of the aesthetics of a product – affects choice, and also to suggest a rationale to help explain the anomalous impact of aesthetics on choice. Studies 1 and 2 address the first objective revealing the lack of price response for design relative to function and how respondents use functional attributes to justify their choice of more aesthetically pleasing options. Study 3 addresses the second objective suggesting that respondents may not be entirely aware of the impact of attractiveness on choice and that this lack of awareness is due the faster and more automatic processing of design relative to more functional attributes.

In terms of the first objective, Study 1 illustrates that consumer choices reveal a surprisingly flat price response to aesthetics relative to functional attributes. Respondents were asked to choose between options that varied either on price and function or on price and aesthetics. For price variations between 15 and 210 percent, the choice share of the higher priced higher functioning option decreased consistently, while the choice share of the higher price more aesthetic option did not. These results are consistent across all three product categories tested. Additionally, we the address a quality-cue-based alternative explanation for this difference in price response by presenting quality ratings; even when the choice options force a choice between higher aesthetics and higher overall quality, respondents still show the same flat price response to design.

Study 2 examines whether consumers are aware of the impact of aesthetics on their choice behavior. We find that after choosing the more aesthetically pleasing option, decision-makers justify their choice by reporting higher importance weights for the functional attributes associated with the selected option rather than for aesthetics itself. These results were consistent across all five categories tested and across 19 of 20 functional attributes tested. The results of Study 2 build on those in Study 1 by revealing another difference in the way decision-makers treat aesthetics versus more functional attributes. Although aesthetics may play a decisive role in respondents' choice decision, decision-makers do not seem to have access to it as such.

In Study 3 we examine the impact of cognitive load on choice. We find that, while respondents become more price sensitive under cognitive load in choices not involving aesthetic variation, with aesthetic variation respondents actually become less price sensitive, with aesthetics more likely to drive choice. The results indicate that design plays a greater role in the choice decision – even greater than price – when cognitive resources are depleted. Using a dual processing perspective, these results suggest that while functional attributes are processed in a more systematic and effortful way using system 2, aesthetics are processed effortlessly and automatically in a system 1-like manner. This finding helps explain the results of the previous studies suggesting that because aesthetics are processed so quickly relative to other features, the impact of this attribute on choice is not fully recognized by consumers.

Thus, with this research we demonstrate some of the unique qualities and effects of aesthetics, which both adds to the dearth of academic research on the topic of design and also provides further incentive for more research to be done in this area; it is now evident that aesthetics cannot be considered entirely comparable to other more functional attributes and may even require new methodological approaches for its study. This research also offers implications as to when aesthetics may matter more or less in choice and how design may be different from other hedonic attributes. In particular, the dual process explanation offered in study 3 suggests that in more cognitively loaded situations aesthetics plays an even greater role. Also that for other attributes that are likely processed using system 1 this disconnect likely exists between perceived and actual importance. But aesthetics may be distinct in that its evaluation, not only occurs in a fast and effortless manner, but also entails a preference that is, at least partially, innate and not dependent on learning.

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The Good, the Bad, and the Ugly: Aesthetic Effects in Product Feature Judgments

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Prior research examining the influence of product design on evaluation has demonstrated a powerful effect of aesthetics on overall liking and judgments in the absence of other information, but the question of whether aesthetics can influence judgments of objective feature information is unresolved. We address whether and how aesthetics might alter performance evaluations of specific product features. Specifically, we examine how consumers make functionality judgments when aesthetic information conflicts with feature performance information. In taking this approach, we also address what appears to be an implicit assumption in research and practice: that being attractive is always better than being unattractive. If consumers generally expect more attractive designs to perform better, when faced with conflicting functional and aesthetic cues, how does this violation of expectation impact judgment? We examine how consumers judge relative feature performance of two competing brands when both options possess conflicting cues (i.e., one is superior to the other on a performance attribute but inferior in attractiveness).

Three outcomes are possible. Given that the task is evaluation of relative functionality of a feature, the normative outcome would be no effect of aesthetics. A second possibility is that feature judgments will be biased in the direction of the inferior but more attractive product due to a positive halo (Nisbett & Wilson, 1977). A final possibility is that feature judgments will be biased in the direction of the less attractive product, reflecting a negative aesthetic effect. Assuming consumers recognize the inconsistency between their expectations and the observed pattern, they will attempt to resolve it, and in so doing may elaborate on the conflicting feature (Sengupta & Johar, 2002), which can lead to a polarized assessment (Tesser & Leone, 1977). We test these possibilities in four studies.

Study 1. Participants were presented with fictitious *Consumer Reports* reviews for two brands, which were written so that the *target feature* of one brand was clearly superior to the other. We then manipulated whether these reviews were accompanied by pictures of the product designs. Half the participants saw only the two reviews; the other half saw the reviews accompanied by pictures of the product designs (presented side-by-side above the respective reviews).One design was more attractive than the other. The more attractive design was paired with the review of the inferior feature, and the less attractive design was paired with the review of the superior feature. In addition we manipulated cognitive load by having participants memorize either a 2-digit or 11-digit number. The study conformed to a 2 (visual information: present vs. absent) x 2 (cognitive load: high vs. low) x 2 (product replicate: cookware vs. speakers) design. The key dependent measure was participants' judgment of which brand's target feature was superior. A rating of zero would indicate they thought the two brands were equal on the target feature. A positive rating would indicate they perceived the brand with the objectively superior feature (but less attractive design) to indeed be superior on the target feature. A negative rating would indicate they perceived the brand with the objectively inferior feature (but more attractive design) to be superior.

Analysis of relative judgments of the superiority of the target feature revealed a significant visual information x cognitive load interaction. Consistent with a negative aesthetic effect, we found that in the absence of cognitive constraints, participants seeing the pictures perceived the unattractive brand as *even better* on the target feature than did participants not exposed to pictures. This effect occurred only when participants had the cognitive capacity to consider the information. For participants who saw reviews and pictures, the addition of cognitive constraints moved the relative feature judgments in the direction of the more attractive design (inferior feature).

Study 2. In study 2 we manipulated the pairing of the visual and written information so that half the participants were presented with incongruent visual and written information as in the previous study, and half were presented with congruent visual and written information (i.e., attractive design paired with superior target feature, and less attractive design paired with inferior target feature). We also manipulated cognitive load. If consumers believe that attractive products perform better, evaluating a product where design and functionality conform to expectations (i.e., are congruent) should make processing easier, so people in the congruent conditions should not be affected by cognitive load. The procedure followed that of study 1.

Results indicated that when the picture and target feature were congruent, participants strongly favored the superior feature, regardless of cognitive load. However, when the picture and target feature were incongruent, participants favored the functionally superior (but aesthetically inferior) brand only when under low cognitive load. Moreover, when under low load, participants took more time to make their judgments when faced with incongruent rather than congruent information, supporting the inconsistency reconciliation explanation.

Study 3. In study 3 we investigated order as a potential boundary condition. Using the same incongruent pairings of design and reviews, we manipulated whether participants saw the visual and verbal information simultaneously or saw the pictures prior to reading the reviews. We found that when participants saw the designs of the competing brands prior to reading the reviews about them, the advantage for the unattractive product disappeared.

Study 4. In the final study, we investigated the role of brand knowledge. We found that although brand name trumps aesthetics for overall quality judgments, it does not dominate aesthetics for individual feature performance ratings.

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The A.I.R. Construct: The Processing Mechanism Underlying Aesthetics-Induced Consumer Behaviors

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It has long been recognized that beauty can exert a strong motivational influence on people. In a consumption context, aesthetically appealing products have been linked to favorable attitudes, higher purchase intentions, and a willingness to pay significant price premiums (e.g., Bloch, Brunel, & Arnold, 2003). Yet after becoming the proud owner of a beautiful product – which often gets conspicuously displayed to the world (Bloch, 1995) – consumers sometimes become reluctant to actually use it for fear they might damage its pleasing appearance (Cardew, 1969). What exactly could be driving these behaviors? Why do beautiful products motivate such responses in consumers?

Perhaps the most intuitive explanation resides in the pleasure elicited by beautiful objects. The association between aesthetics and positive mood seems to be rather prevalent in the consumer psychology and industrial design literature (see, e.g. Coates, 2003; Hoegg & Alba, 2008), and given that a good mood is related to positive attitudes and behavioral intentions, affect could potentially explain the impact of aesthetics on consumer evaluations and choices (e.g., Norman, 2002).

Yet mood alone may not be enough to explain why consumers place such a high value on aesthetics, why visual appeal sometimes has a downright anomalous impact on choice, and why our culture seems obsessed with beauty in everything from cars to iPhones. Currently there is an emerging view that there is something about aesthetics which differentiates them from other (low-level) affective experiences (Townsend, 1997) such as mood, but the exact nature of that special something has not been elucidated yet (Chartres, 2006). We propose that a unique mechanism, which we call A.I.R. (Aesthetics-Induced Responses), may represent that powerful driving force behind attractive products. According to the A.I.R. mechanism – which is more complex than mood and potentially a better mediator of aesthetics-induced behaviors – visually appealing products engage us on three dimensions: affective, cognitive, and conative.

On an affective dimension, appealing products touch our hearts. One look at a beautiful object, and, similarly to looking at an attractive person, we can experience something akin to love-at-first-sight. We call this hot, emotion-laden response "spontaneous affect". On a cognitive dimension, beautiful products hold the promise of making us more attractive and socially desirable through possession. This effect – which is comparable to the social premium bestowed on us by having a good-looking partner – will be called "self-enhancement". Finally, on a conative (motivational) level, beautiful products elicit an immediate and powerful approach desire that manifests itself in a craving for sensory proximity. Not surprisingly, museums try to address this issue by asking viewers not to touch the displayed art. We call this motivational response "instantaneous approach". Together, these three dimensions of A.I.R. are believed to explain the effects of aesthetics on consumers' behaviors better than mood can.
We tested this assumption in an experiment in which we presented participants with the image and description of a highly attractive desktop computer. Subsequently we asked them to provide ratings for their mood, the A.I.R. construct, their behavioral intentions towards the product, and their aesthetic impressions of the product. For the A.I.R. measure we developed a 10-item scale that assessed spontaneous affect (e.g., "I fell in love with this product the moment I knew what it was"), instantaneous approach (e.g., "I want to be near to this product"), and self-enhancement (e.g., "This product can help me become more attractive to others"). We measured two types of behavioral intentions: those pertaining to simple behaviors (such as buying a product) and those pertaining to more complex and difficult-to-enact behaviors (such as delaying a purchase until the desired product becomes available).

An SEM analysis indicated that the proposed model – with aesthetic impressions as independent variable, behavioral intentions as dependent variable, and the three-dimensional A.I.R. concept as mediator – provided a very good fit to the data, for both simple and complex behaviors. In both cases, the direct path from aesthetics to behavioral intentions was not significant, indicating full mediation through A.I.R. However, when mood was used as mediator instead of A.I.R., this path remained significant in each case, suggesting only a partial mediation through mood. This indicates that A.I.R. can explain the relationship between aesthetics and several types of consumer behaviors better than mood can, and thus represents a superior mediator. Aesthetics create decidedly more than just a mood effect, and go well beyond the simple pleasure response typically associated with "hedonic" product attributes.

To test the hypothesis that the A.I.R. mechanism is a unique consequence of product aesthetics, we also assessed participants' perceptions of the functionality and status-related qualities (e.g., luxury image) of the attractive product. Our results showed that, when these two measures were entered into a model simultaneously with aesthetics and A.I.R., the path from aesthetics to A.I.R. remained significant, but the paths from either of the two other variables to A.I.R. were not significant. This confirms that the A.I.R. construct is driven specifically by product aesthetics and is not a consequence of the perceived functionality or status-signaling attributes of the attractive product.

Taken together, the present findings shed light on the powerful motivational force behind product aesthetics and allow us to better understand the unique processing mechanism through which aesthetics impact various consumer behaviors.

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Session 6.6

Focused on a Feeling or the Cause? The Regulation of Anxiety
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Imagine that you are in the process of planning your annual vacation when your doctor calls. The results of a recent cholesterol test show deterioration and you feel anxious. How might you regulate your anxiety? Might simply browsing a brochure that makes you consider why your vacation will be calming help? Would simply completing an arm flexion exercise help? Given that neither the brochure nor the exercise addresses the problem that caused your anxiety, why should they have any effect on your current state? Would it matter whether your focus was on your anxious feelings or what caused the feelings: the test results?

Negative feelings typically result because of a problem and foster efforts to resolve the problem (Schwarz and Clore 1983). By activating specific thoughts about what caused the problem, negative emotions signal that all is not well and whatever is causing a problem must be addressed. Thus, anxiety arising from a problematic test result could only be addressed by resolving the cause of those feelings. Merely considering a calming vacation or arm flexion should not make one feel better. However, recent evidence suggests that anxiety is associated with a general avoidance orientation (Raghunathan and Pham 1999). For instance, thinking that a loved one might be unwell causes anxiety and results in people seeking safe bets in an unrelated gambling task. This perspective suggests that people feeling anxious have a general avoidance orientation, and therefore any outcome that fits with avoidance is preferred, even though the outcome may not directly address what caused the anxiety. According to this perspective, merely considering a calming vacation—an outcome associated with an avoidance orientation—or engaging in arm flexion exercises, which also simulate avoidance (vs. approach), should be beneficial. How might these two views be reconciled?

We propose that once negative feelings become activated, people can focus either on the problem that caused the feelings or on the negative feelings themselves. Focusing on the feelings, rather than their cause, activates a motivation to avoid threat or to approach reward, because all feelings are intrinsically tied to motivation. As a result, any positive outcome that fits with the general motivational state can provide symbolic benefit and facilitate the regulation of the negative emotion. Only when individuals focus on the cause of their emotion, actions that address the particular problem reduce their negative emotion. In the case of anxiety, consumers who focus on the general feelings of anxiety will experience motivation to avoid bad outcomes. In such situations, any positive outcome associated with avoidance, such as an arm flexion exercise that simulates avoiding bad outcomes (vs. approaching good outcomes) or merely reading a calming (vs. happy) ad that increases security, can signal that avoidance is being attained. This consequently will reduce the anxiety, result in emotional benefit, and improve evaluation of the outcome. When consumers focus on the cause of their anxiety, similar benefit will not occur and only addressing the cause of the anxiety will provide emotional benefit.

Across five experiments, we first establish that when participants focus on *feelings*, both anxiety and calmness, considered by us in this research, correspond with an avoid threat orientation whereas happiness, also considered by us, corresponds with an approach reward orientation (Exp. 1). We then demonstrate that avoidance motivation intensifies over time when participants experiencing unresolved anxiety focused on *feelings*, but decays when they focused on the cognitive appraisals of the causal event, replaced by specific thoughts regarding the problem that evoked anxiety (Exp. 2). We next show that among anxious participants who focus on their general anxious feelings, avoidance motivation is reduced when they complete a short exercise in the interim that employs a motivational orientation that fits with that of the negative emotion (i.e., flex arm outward as if pushing a bad thing away vs. flex arm inward as if pulling a good thing; Exp. 3). Similar emotional benefit is not observed if participants focused on the causal event. Experiment 4 then shows that participants who focused on feelings of anxiety rather than causal events, get emotional benefit from merely evaluating an outcome that fits with avoidance (calming vs. happy vacation ad), and perform better on a subsequent task known to benefit from positive feelings (e.g., the Remote Associates Test). A final experiment (Exp. 5) provides a dynamic measure of affect regulation. Anxious or non-anxious participants report their mood, they then read a happy or calming ad, and again report their mood. The data again suggest that a fit in avoidance orientation between the preexisting anxiety and the positive (calming) outcome is a basis for affect regulation, but only when people are focused on their feelings.

In summary, our results demonstrate that the emotional benefit consumers experiencing anxiety derive from considering a positive outcome and their liking of an outcome depends on whether they are focused on their feelings or the cause of their feelings. When consumers focus on their feelings (vs. causes), higher order motivational   states are activated and merely considering any positive outcome compatible with the general motivational state can provide symbolic emotional benefit.

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Relaxation Increases Monetary Valuations

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Whether buying a house, negotiating the price of a car, or considering whether to invest in the stock market, common wisdom holds that people should be relaxed and at ease. Relaxation is among the most important environmental states marketers try to create, whether in spas, hotel rooms, or restaurants. Yet, there is little consumer research on relaxation. Our research documents an intriguing phenomenon: states of relaxation increase consumers' monetary valuations of products, as compared to equally pleasant but less relaxed states. In other words, the more relaxed a consumer is, the more likely it is that they will perceive the service(s) as having monetary value.

While the effects of affective states on consumer behavior have received a considerable amount of attention, previous research has mostly focused on the effects of positive versus negative overall moods (Pham, 1998; Yeung & Wyer, 2004), and to a lesser extent the effects of emotional arousal (Pham, 1996), and more recently the effects of specific negative emotions like anger, anxiety, sadness, and disgust (Raghunathan, Pham, & Corfman 2006). Only a few studies have directly focused on the effects of relaxation. Gorn and colleagues (1997) found that the use of relaxing, "whitish," pastel-like background colors in print ads resulted in more favorable evaluations of advertised products than the use of non-relaxing colors with a "blackish" quality in them (e.g., a dark brown; see also Gorn, Chattopadhyay, Sengupta & Tripathi, 2004). While Gorn and colleagues (1997, 2004) examined the effects of relaxation compared to non-relaxation, more recent research has examined the effects of relaxation compared to other positive affective states such as cheerfulness and excitement (Bosmans & Baumgartner, 2005).

The present research investigates a very different phenomenon: the effects of relaxation on consumers' monetary valuations of products. Our research suggests that relaxation may actually increase consumers' monetary valuations of products for the following reason: states of relaxation seem to encourage a broader and more contemplative form of thinking (Fredrickson & Branigan, 2005). Applied to the context of our research question, we propose that relaxed consumers have more global and abstract representations when assessing the monetary value of products than non-relaxed consumers. Research (Liberman & Trope, 1998) shows that individuals who have more abstract representations (higher-level construals) of goal-directed activities (e.g., going on a vacation in Mexico) tend to focus more on the overall desirability of these activities (e.g., how appealing Mexico is), whereas individuals who have more concrete representations (lower-level construals) tend to focus more on the feasibility of these activities (e.g., the cost, the amount of travel involved). Linking these two streams of research together, it would be reasonable to infer that relaxation would encourage a more abstract representation (or higher-level construal) of the value of products, which would shift a consumers' focus towards the general desirability of these products and away from their more concrete characteristics. Because most consumer products (e.g., vacations, cameras) are inherently desirable, such a shift in representation would result in the products being valued more by relaxed consumers than by less-relaxed consumers. For example, in assessing the monetary value of a digital camera, a relaxed consumer would focus more on the overall desirability of owning the camera (e.g., the pictures it will enable them to take and the memories they will be able to collect) and less on the concrete features of the camera itself (e.g., the number of megapixels, weight, shutter speed). This shift in representation should result in relaxed consumers perceiving the camera to be more valuable than less-relaxed consumers.

Across four studies, more than 450 participants were induced into either a state of relaxation, or into an equally pleasant (but less relaxed) affective state. This was done with the use of appropriate, pre-tested videos. Next, as part of a supposedly unrelated study, they were asked to assess the monetary value of products. Different measures of monetary valuation were used across different studies. The results consistently show that participants who were more relaxed assigned greater monetary value to the products than participants who were less relaxed. This phenomenon is likely not due to the pleasantness of relaxation itself because the conditions were matched in terms of pleasantness (which was verified by confounding checks).

The first study demonstrated the basic phenomenon across various product categories. On average, participants in the more relaxed condition assigned higher monetary valuations than participants in the less relaxed condition to products supposedly from a product catalogue. Using a scenario where participants were asked to imagine that they were interested in a digital camera available on eBay, the rest of the studies replicated this effect using more refined measures of monetary valuation: (1) the maximum amount of money that participants were willing to bid for the camera; and (2) participants' estimates of how much the camera was really worth. Study 2 found that while relaxation influenced overall measures of monetary valuation, it did not affect more specific ratings of product perception. This was presumably because specific ratings of product perceptions trigger a more concrete level of representation of the product's value. Our reasoning was confirmed in Studies 3 and 4, with Study 4 providing direct support for this explanation by directly manipulating participants' levels of representation through a priming procedure. If the effect of relaxation on monetary valuation is due to higher levels of representation, then the priming of an abstract level of thinking should amplify this effect by reinforcing relaxed individuals' tendency to represent the value of products at a higher level. Conversely, the priming of a lower level of construal should attenuate this effect by inhibiting relaxed individuals' tendency to represent products at a higher level. The results were consistent with this reasoning.

Overall, the evidence suggested that relaxed individuals inflate the monetary value of products. The bids of less-relaxed participants in the bidding experiments were generally close to the market value of the product. Relaxed participants' estimates were however, substantially higher than the market value of the product, unless high-level construals were discouraged by the manipulations. Even though it is typically not in people's material

interest to have inflated perceptions of the monetary value of products they might buy, our evidence suggests that, nonetheless, relaxed consumers do have inflated perceptions.

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Arousal and Subjective Probabilities: An Alternative Interpretation of Wishful Thinking
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A wealth of psychological research indicates that people are unrealistically optimistic about future outcomes. Overoptimism about future outcomes is called desirability bias (i.e., the tendency to judge desirable outcomes as more likely than undesirable outcomes, Krizan and Windschitl 2007). For example, in the classic study by Crandall, Solomon, and Kellaway (1955), participants were asked to predict random independent draws from decks of ten cards. Even though they knew that each deck contained 7 winning cards, they predicted drawing a winning card 89% of the time. While such findings are typically interpreted as people suffering from a desirability bias, they actually don't show desirability bias at all. Knowing that the objective probability of a winning card is 70%, a rational decision maker would predict a winning card in 100% of the draws (thereby maximizing accuracy of prediction). So, compared to a rational decision maker, participants in the above experiment appear to be pessimistic or at least not accuracy-maximizing. Whatever is the case, they are certainly not overoptimistic.

A better measure for optimism and pessimism than outcome predictions is likelihood judgments (cf., Bar-Hillel, Budescu, and Amar 2008). I propose that the likelihood of an event may be judged by how aroused the stake-holder is. Misattribution of arousal has been demonstrated for a broad range of emotional states and judgments such as fear, anger, sexual excitation, attractiveness, funniness of cartoons (Reisenzein, 1983), and judgments of heights (Stefanucci & Storbeck, 2009). I hypothesize that the greater the stake in the outcome (e.g. winning $5 or losing $5 if event occurs vs. neutral outcome), the more aroused will the stake-holder be, and the higher s/he will judge the likelihood of the outcome occurring or not occurring. In study 1, I tested whether likelihood judgments can be misattributed to arousal. The study employed a 2 (arousal vs. no arousal) x 2 (probability of occurrence vs. non-occurrence) between-subjects design. Half of the participants were asked questions such as "How likely do you think the Yankees will win the World Series?"; the other half was asked for the complementary probabilities. Arousal was manipulated by printing questionnaires on either pink or grey paper. As hypothesized, participants judged both outcomes (the Yankees winning and the Yankees not winning) as more likely in the arousal condition (pink paper).

Study 2 tested misattribution of arousal by manipulating the order in which arousal was rated and likelihood judgments were made. Half of the participants were first asked to rate their arousal level, and subsequently to judge the likelihood of outcome occurrence or non-occurrence (outcome: participants won $5 when they got at least one 3 within four die-rolls, p = 51.77%). The other half was first asked to judge the likelihood of outcome occurrence/non-occurrence, and then to rate their arousal level. As hypothesized, participants reported higher arousal before than after the likelihood measures, and rated the likelihood of the outcome occurring/non-occurring as higher before than after the arousal measures.

In study 3 I tested whether arousal is higher for both, negative and positive stakes in the outcome than neutral outcomes. Accordingly, probability of occurrence and non-occurrence should be judged as more likely when participants have a stake in the outcome (winning or losing a shot-glass) than when they have no stake in the outcome. The study employed a 2 (probability of outcome occurrence vs. non-occurrence) x 3 (stake in outcome: win a shot-glass vs. neutral vs. lose a shot-glass) between-subjects design. Half of the participants was asked how likely a computer, when rolling a die four times, would roll a 6 twice. The other half was asked how likely the computer would not roll a 6 twice. Participants earned $1 if their probability estimate was within the 10% range of the objective probability (p = 11.57%). In the win condition, participants won a shot-glass when the computer rolled a 6 twice, in the neutral condition no gain or loss was associated with outcome occurrence, and in the lose condition participants were first endowed with the shot-glass and lost it when the computer rolled a 6 twice. As hypothesized, participants judged the probability of getting a 6 twice higher in the win (M = 19.77%) and the lose condition (M = 38.91%) than the neutral condition (M = 13.44%), and judged the probability of not getting a 6 twice also higher in the win (M = 72.32%) and the lose condition (M = 61.79%) than the neutral condition (M = 55.83%).

Finally, in study 4 German soccer fans were asked to imagine watching an upcoming match either live (more aroused) or taped (less aroused; having the prospect of watching a match live is more arousing than having the prospect of watching it taped; Vosgerau et al. 2006, *JCR*). Fans were also asked to indicate how likely their team (Stuttgart) was to win. When having the prospect of watching the match taped, Stuttgart was judged as equally likely to win/tie (M = 52.40%) as to lose (M = 51.36%). In contrast, for the live broadcast conditions, Stuttgart was rated as more likely to win/draw (M = 58.48%) and also as more likely to lose (M = 67.92%). Taken together, the four studies demonstrate that arousal (from having a stake in the outcome) can make consumers more optimistic and more pessimistic. Such optimism and pessimism call into question the ubiquity of wishful thinking and general over-optimism.

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Session 6.7

Gaming with Mr. Slot or Gaming the Slot Machine? Power, Anthropomorphism, and Risk perception
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A recent IKEA advertisement made sport of people's inclinations to anthropomorphize objects. In the advertisement, a woman discards a red lamp in her trash. The lamp's shade is pointed toward the house almost as if it were looking inside. As night falls and it begins to rain, the audience finds itself sympathizing with the discarded lamp and disliking the woman as she reads comfortably in her house under her spiffy new IKEA lamp. At just this moment, a man catches the audience out, "Many of you feel bad for this lamp" he says, "That is because you are crazy. It has no feelings. And the new one is much better." The surprise is terrific but the wonder of the ad is its demonstration of just how readily people anthropomorphize. The ad works because the audience sees the old lamp as a servant harshly dumped by a master. The lamp didn't even have a human-like face. The angle of the shade was enough to convey longing and loss. That is how fragile people's perceptions may be and how malleable their evaluations. Anthropomorphism is thus a pervasive and powerful tendency with important implications for consumer behavior.

Recent research has begun to investigate factors that influence people's tendency to anthropomorphize non-human entities such as objects or animals (Epley et al., 2007; Epley et al., 2008 (a); Epley et al., 2008 (b)). Consumer behavior researchers have been interested in how anthropomorphism in turn affects judgments and behavior, although this research has concentrated largely on the effects of anthropomorphized brands. For example, researchers have studied brand personality (Aaker, 1997) and consumer-brand relationships (Fournier, 1998; Aggarwal, 2004). Research on the effects of anthropomorphizing the product itself as in the IKEA ad described above is relatively rare. An exception is recent work by Aggarwal and McGill (2007) who found that people increase liking of the target product when there is congruency between characteristics of the product and an activated human schema, providing the schema is generally positive. This work shows that marketers' efforts to depict a product as human may backfire leading to a lower degree of liking if the level of congruity is too low.

In this research, we extend the study of anthropomorphism by considering how it may affect other judgments beyond just liking, specifically, how anthropomorphism affects risk perceptions and behavior. In our studies, we examine people's assessments of the risks associated with a gambling machine and a disease and how these risk perceptions may vary depending on whether these risk bearing entities are anthropomorphized or not. We further propose and find support for the hypothesis that the effect of anthropomorphism is moderated by the consumers' feelings of power.

In most social psychology studies, power is defined as an individual's relative controllability to change the states of others in accordance with his or her own will (Fiske, 1993; Thibaut & Kelley, 1959). People feel power over others when they have control over outcomes and resources (Thibaut & Kelley, 1959; Depret & Fiske, 1993). We propose that anthropomorphism increases application of power perception. People who feel very powerful will transfer this feeling of mastery to the anthropomorphized entity, believe they can control it, and so feel less risk. In contrast, people who are low in power will feel at the mercy of the entity, and so feel greater risk.

In the first experiment, anthropomorphism was manipulated by modifying a slot machine so it appeared to have a face or not. Power was manipulated by asking participants to recall an incident in which they felt powerful or powerless. In this study, participants who felt powerful were more willing to play the slot machine when they saw it as a human than when they saw it as an object. By contrast, those who felt less powerful showed the opposite pattern, being less willing to play the game when it appeared to be human. Willingness-to-play judgments were mediated by risk perceptions. Consistent with the hypothesis that feelings of power would manifest themselves in a greater sense of control over anthropomorphized entities, high power participants rated the risk lower when the machine was anthropomorphized while low power participants believed the risk was higher.

In the second experiment, we used skin cancer as a risk generating entity, an extension of our investigation to a less pleasurable domain than gambling. Again we replicated the interactive effect between anthropomorphism and power on risk perception. In this study, anthropomorphism was manipulated by the message about the disease being presented in first person (the disease described itself) or in more standard language. Power was manipulated as in the first study. Participants with high power perceived skin cancer as a less risky disease when it was highly anthropomorphized, whereas those with low power showed the opposite pattern. Moreover, this risk perception mediated liking of a sunscreen which can prevent skin cancer. High power participants liked the sunscreen less when the disease was anthropomorphized, presumably because it seemed to be of little value in the face of a low risk disease, whereas low power participants liked it more.

While our first two studies examined the effect of anthropomorphism on risk perceptions, in the third experiment, we investigated the reveres, that is, whether risk perceptions would affect people's tendency to anthropomorphize depending on their feelings of power. High (vs. low) perceived risk increased anthropomorphism for people with low power, while low risk (vs. high) perceived risk increased anthropomorphism for those with high power. Specifically, participants with low power were more likely to anthropomorphize the slot machine after losing the game, whereas those with high power were more likely to anthropomorphize the slot after winning the game. Theoretical implications pertaining to the power and anthropomorphism in judgments and preference construction and managerial implications regarding what managers might be able to do to change risk perception involving with products will be discussed.

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Brand Trait Transference: Acquiring the Characteristics of Products

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If you describe someone as lazy, does this description cause others to view *you* as lazy? Research on spontaneous trait transference (STT) has shown that this is the case. STT occurs when perceivers attribute traits to informants based on behaviors they describe (Skowronski et al., 1998; Carlston & Skowronski, 2005). That is, if Sally describes someone as anxious, Sally will also tend to be perceived as anxious.

Past research on STT has found that STT results from an associative process. When perceivers are exposed to a behavioral description, they spontaneously infer the implied trait (Uleman, Newman, & Moskowitz, 1996). For instance, upon hearing that "John did not contribute to the team project", people spontaneously think of the trait "lazy" and attribute it to the actor (e.g., John). However, the inferred trait may also become associated with the informant. As a result, the informant may be misremembered as possessing the very trait s/he informed about.

Drawing on STT research, the current research examines whether traits associated with certain products can be transferred to the people associated with those products (e.g., endorsers or salespeople). Brands are often associated with a myriad of traits and have been found to possess a "brand personality," which refers to a set of human characteristics or traits (Aaker, 1997). The fact that traits can be associated with brands points toward the possibility of brand trait transference (BTT). Similar to STT, BTT refers to the transference of traits via associative processing. However, unlike STT which involves a person's behavior, BTT refers to a situation where traits that are connected with a brand transfer to someone associated with the brand. For example, if a perceiver associates camping equipment with the trait "adventurous," they might also view a celebrity that endorses camping equipment as more adventurous than that celebrity would normally be viewed.

Two studies were conducted to test whether traits from a product or a company can be transferred to people who associate themselves with the product or company. In the first study, participants read a story about Steven who worked either for a well-respected pharmaceutical company, Pfizer, or for a pharmaceutical company that was caught distributing false information, XTM. Steven was described as being late for an appointment and excused his tardiness as being the result of witnessing a car accident. Participants were asked to rate Steven on various traits, including trustworthiness. Participants who were told Steven worked for Pfizer rated him as significantly more trustworthy than participants who were told he worked for XTM. This supports the BTT hypothesis, as participants also rated Pfizer as more trustworthy than XTM. In other words, the degree of trustworthiness associated with the company appears to have at least partly transferred to the company's representative.

The second study examined whether BTT can occur in the context of celebrity endorsements. Research on celebrity endorsers has found that celebrities are imbued with certain cultural meanings which are then passed to the product (McCracken, 1989). BTT suggests that the opposite might also be true, and thus that traits associated with the product can be passed to the endorser. Participants viewed an advertisement that featured a celebrity endorser and a particular product. Three products were selected based on specific trait associations and three different endorsers were used for each product. Camping equipment was chosen due to its association with the trait "adventurous," organizers were selected due to their association with the trait "organized," and a children's charity was selected due its association with the trait "generous." A pretest revealed that the above products were significantly associated with the specified traits. After viewing the advertisement, participants were asked to rate the endorser on a variety of traits that included the target traits (e.g., adventurous) in addition to several filler traits (e.g., picky). The results showed that the celebrity endorser was perceived as significantly more adventurous when featured with camping equipment, more organized when featured with organizers, and more generous when featured in the children's charity advertisements. The celebrity endorsers did not have any strong preexisting traits on the variables of interest. The filler attributes did not differ between advertisements. These results illustrate BTT from the product to the celebrity endorser.

The present studies expand on previous research examining STT by showing that brand traits may also transfer to people who are associated with the brand. Study 1 showed that a salesperson's perceived trustworthiness is affected by the company he works for; implying the trait from the company is transferred to the salesperson. Study 2 revealed that a celebrity endorser's perceived attributes are influenced by the products they endorse. In addition to demonstrating the relevance of trait transference to marketing contexts, the present research provides the first demonstration that objects (e.g., products and companies) can serve as a source for trait transference; previous research has always used a person's behavior as the source of the transferred trait.

Future studies will examine other conditions where BTT occurs as well as identify conditions that undermine BTT effects. For example, although STT occurs even when the communicator is familiar (Mae, Carlston, & Skowronski, 1999), in the case of BTT a strong pre-existing trait associated with the communicator could conflict with a trait that might otherwise be transferred from a product, thus overriding BTT. For example, if the trait "selfish" is strongly associated with an endorser, that might interfere with the transfer of the trait "generosity" from a charity ad. To the extent that consumers' impressions of a celebrity are affected by the celebrity's prior endorsements, this could limit the celebrity's usefulness as an endorser for brands with opposing brand personalities. Further, consumer knowledge may affect the degree of BTT. Obviously, consumers who are ignorant of a brand's personality should show no BTT. At the other end of the spectrum, consumers who are very knowledgeable about a certain brand's personality might simultaneously transfer several traits to an endorser or salesperson.

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Once Bitten, Twice Shy: Differences in Social Efficacy Affect the Perceived Efficacy of Anthropomorphizable Products

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Anthropomorphism as a practitioners' technique of imbuing brands with human-like qualities such as faces, names, and intentions, has longtime been used, and has proven to be efficient in the development of brand personality (Aaker, 1997) and brand relationships (Fournier, 1998). Recent work by Aggarwal and McGill (2007) signals a shift in attention from brands towards anthropomorphic products.

Additionally, anthropomorphization recently has been studied from a more phenomenological stance. This shift comprises interest in dispositional and situational drivers of anthropomorphization. Epley and colleagues (2007) conceived a model of anthropomorphization, with sociality motivations as one of the driving factors. When people are lonely, they seek human company, and this increases their susceptibility to anthropomorphization of entities like alarm clocks and pets (Epley, Akalis, Waytz, & Cacioppo, 2008). Although these authors do not make this claim, the latter results might lead to the inference that lonely people are more prone to anthropomorphization in consumer settings, and to preferring and seeking out products that are easy to anthropomorphize.

Loneliness can indeed be a motivator to reconnect to other people and by extension potentially also to anthropomorphs. In this respect, loneliness can be seen as the result of a limited <u>quantity</u> of social interaction. However, loneliness is often considered as the result of poor <u>quality</u> social interactions. More specifically, loneliness can be the result of social exclusion (Gardner, Pickett, Jefferis, & Knowles, 2005; Leary 1990), rejection (Boivin, Hymel, & Bukowski 1995) and ostracism (Cacioppo & Hawkley 2005; Zadro, Williams, & Richardson 2004). This loneliness – contrary to the one discussed before – is caused by negative social experiences, not lack of experiences altogether. Although people may want to reconnect to others, self consciousness, social anxiety and fear of negative outcome might influence their attitude towards new social contacts (Maner, DeWall, Baumeister, & Schaller, 2007).

Can these attitudes towards humans spill over to anthropomorphs? We expect that lowered social efficacy will translate into lower a priori expectations towards anthropomorphs, not other products. Nevertheless, interaction with an anthropomorph of which the results exceeded a priori expectations might bring relief to people's feelings of low social efficacy. Therefore, we expect a posteriori evaluations of interactions with the product to be higher for people low in social efficacy, but only for anthropomorphs. We tested these inferences in three studies.

In the first study we built on Leary et al.'s Sociometer Theory (Leary, Tambor, Terdal, & Downs, 1995), in assessing people's chronic efficacy in social interactions. We used trait self esteem as a gauge for people's own perceived social efficacy (see also Wilkowski, Robinson, & Friesen, 2009). We had participants evaluate the expected number of times (out of twenty) that they would indicate the same number (one to five) as a random number generator that was depicted as an ordinary personal computer. In the control condition, we explained that this was in fact a computer that drew random numbers. In the experimental condition, the depicted computer was adorned with three buttons, of which the configuration resembled that of a human face (one broad button at the bottom resembling a mouth, two at the top left and right corner of the screen to resemble eyes). Also, the description of the computer was altered to a more anthropomorphic one, by giving it a name – "Puck the pc" – and stating that it "has a number in mind". Afterwards, a trait measure of self-esteem (Rosenberg 1965) was administered. Results demonstrate an interaction effect, showing that – in the experimental condition – trait self-esteem is positively related to people's estimation of future outcomes the product will deliver, more than in the control condition.

In the second study, we manipulated social efficacy between subjects, using a task that evokes ostracism (Williams, Cheung, & Choi, 2000). The product that had to be evaluated was an automatic vacuum cleaner, and we asked participants about their expectations about the efficacy of the product. We manipulated anthropomorphism by describing the product either in terms of its technical characteristics and product code "Samsung VC-RS60H" in the control condition, or in terms of more human traits ("a helping hand in the household") and the friendlier name "Roomba" in the experimental condition. A pretest had ruled out differences in liking for the two descriptions. Consistent with study 1, results show that people's estimates of the product's efficacy are lower when they have been ostracized – but only in the experimental condition. A manipulation check confirmed that the anthropomorphization manipulation was indeed successful in eliciting human qualities in the product and was unaffected by the ostracism manipulation.

The third study used the same design as study two, but this time used a digital picture frame as stimulus. Participants in the control condition were told that this prototype contained sensors that adjusted the picture on display according to the atmosphere in its surroundings – light, noise, temperature etc. Participants in the experimental condition were told the same, but in more anthropomorphic terms of "detecting and interpreting" the atmosphere. The results replicated those of the previous studies. After the main task, the frame indicated a random picture out of the original six as chosen by the algorithm. A satisfaction measure about this result showed an interaction effect between the social efficacy and anthropomorphism manipulations, yielding higher satisfaction with the result for subjects that were previously ostracized, but only in the anthropomorphism condition.

In these three studies, we used different operationalizations of anthropomorphism and different anthromorphised products. We show that differences in social efficacy affect a priori evaluations of the efficacy of products, but more when these products are more readily susceptible to anthropomorphization. We showed this using chronic gauges as well as momentary manipulations of people's social efficacy. We also show that, once subjects used the product, they were more satisfied with the anthropomorph than with the nonanthropomorphic product. Our theoretical contribution is in demonstrating that attitudes in people towards other people can bridge the gap towards non-human entities when

these entities are subject to anthropomorphization. Additionally, we add to the recent more phenomenologically oriented stream of research about anthropomorphization.

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Seeing Smiles: Consumers' Adoption of Anthropomorphized New Products
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It has become a common practice for marketers to design an anthropomorphized representation of a product or a brand, for example, the Michelin Man and the Pillsbury Dough Boy. This strategy has also been widely used in the verbal descriptions of a product, i.e. using the personal pronouns "he" or "she" instead of "it". Existing research in anthropomorphism has shown that consumers often think and talk about products having a personality (Aaker 1997) and relationships (Fournier 1998). Wetmore (1998) studied the phenomena of people befriending their cars and suggested that anthropomorphism helps individuals counteract the feelings of fear, threat or confusion with technology. Epley, Waytz and Caciopp (2007) further examined the motives underlying peoples' tendency to imbue nonhuman agents with humanlike characteristics, and one of these motives is the need to understand the world.

In this research, we seek to investigate whether consumers would be more likely to adopt humanlike new products. Launching new products is a risky task for marketers, since consumers are faced with high levels of uncertainty in understanding and applying new products in their lives. If the need for better comprehension indeed drives an individual's tendency to desire anthropomorphized products, we should expect the strategy of anthropomorphizing products to be more effective for new products that entail high uncertainty. Therefore, we propose that anthropomophized products would be more likely to be accepted by consumers. Our rationale is that anthropomorphism provides an intuitive and readily accessible method for increasing comprehension of new and unfamiliar products. As the uncertainty level of the new products increases, there is a higher need to use this method to resolve uncertainty and seek comprehension.

Three lab experiments have been conducted to test the hypotheses. In the first study, we pre-tested four products, two rated more uncertain than the others, and introduced them to the participants in either human or object terms. The two high-uncertainty products were a green printer and a concept phone, and the two low-uncertainty products were a nightlight and a scuba mask. The human version of the verbal descriptions included the phrases like "this little guy", "eats your coffee dregs" and the words "he" or "she", while in the object condition these words were replaced by "this little machine", "takes your coffee dregs" and "it". The study adopted a 2 (product presentation: human vs. object) x 2 (product uncertainty: high vs. low) mixed design, with the first factor between-subject and the latter within-subject. The dependent measures included the overall ratings for the products and the behavioral intentions.

Analysis of the general linear model revealed an interaction effect of uncertainty and anthropomorphism. Participants rated the high-uncertainty products more favorably when they were presented in human versus object terms, but for low-uncertainty products there was no differences between two presentation formats (F (1, 115) = 13.11, p < .001). Participants also indicated a higher intention to purchase and recommend the high-uncertainty products when introduced in human rather than object terms, but no differences for low-unceratinty products (F (1, 115) = 7.75, p < .01).

Study 2 followed up the same design and further tested the hypothesis. We kept the green printer and the nightlight, but for the ease of visual manipulation we replaced the concept phone with a bluetooth headset as another uncertain product and used a pair of speakers to replace the scuba mask. Pre-tests confirmed our categorization. A major difference of this study was that we manipulated the anthropomorphism visually instead of verbally (Study 1), so in the anthropomorphism condition the images were professionally-morphed to possess more human features, such as smily eyes or mouth.

Results from Study 2 further supported our hypothesis that anthropomorphism exerts stronger influences when people evaluate or plan to adopt new products that are high in uncertainty (for attitude: F (1, 154) = 4.98, p < .05; for behavioral intention: F (1, 154) = 3.22, p < .10). Participants formed more favorable attitudes towards the green printer and the bluetooth when they were morphed to be humanlike, and indicated a higher intention to adopt. However, for low-unceratinty products like the nightlight and the speakers, the ratings were equally favorable, regardless whether the images were original or morphed.

The main purpose of Study 3 was to test whether it is the feeling of familarity generated by anthropomorphism that helps to alleviate the uncertainty and faciliate the comprehension, thus increaseing the liking and adoption of the highly uncertain new products. We selected the green printer as our focal product in all conditions and varied the uncertainty by either labeling it as "product #124 - green printer" or "product #124". Visual morphing was used to manipulate the anthropomorphism.

Consistent with the previous studies, a main effect of anthropomorphism emerged, where participants reported more favorably attitudes and behavioral intentions towards the green printer when the image featured a smiling face. More interestingly, we found an interaction between anthropomorphism and uncertainty (F (1, 106) = 4.13, p = .05). Participants indicated a preference for the anthropomorphized green printer (F (1, 106) = 5.90, p < .05), and this preference was stronger when the printer was labelled without a name. We further examined the familarity measure, a composite of "feels familiar to me", and "makes me feel comfortable", and the results followed the same pattern. Sobel test (Sobel 1982) confirmed the mediating role of familiarity in driving the effects of anthromophism and uncertainty on the attitudes and intentions.

In sum, we examined the effects of anthropomorphism, using both verbal and visual manipulations, on people's attitudes and adoption intentions towards the products and how uncertainty moderates the effects. The findings are consistent with our premise that people have a motive to avoid uncertainty and seek comprehension, and in consumption contexts anthropomorphism provides a solution when consumers are presented with new

uncertain products. The human terms used to describe the products or the humanlike appearances increase the familarity, and thus facilitate people's liking and adoption of them.

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Session 7.1

Going Green to Be Seen: Status, Reputation, and Conspicuous Conservation
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The Toyota Prius costs several thousand dollars more than comparable vehicles with nearly similar fuel efficiency. Yet the Prius is one of the most sought after cars in the U.S. by people across demographic and socioeconomic categories. Why? Given that the Prius is a hybrid car, one possibility is that environmentally conscious consumers are willing to spend more for a car that sacrifices on performance, features, and comfort to help the environment. Yet when the New York Times *reported a survey of why Prius owners bought their car, environmental conservation wasn't even among the top four reasons. Instead, the top reason to purchase the Prius was because the car "makes a statement about me" (Maynard, 2007). What is the statement? "It shows the world that its owner cares."*

At first blush it may seem puzzling that individuals would pay a hefty premium to forego luxury, comfort, and performance in order to conspicuously signal that they care. The current research, however, suggests that there may be important links between pro-environmental behaviors, displays of caring, and status. In particular, we examined whether pro-environmental consumption can be elicited by a motive for status. Our framework draws on costly signaling theory (Miller, 2000; Zahavi & Zahavi, 1997) and the notion of competitive altruism (Van Vugt et al., 2007), which posit that conspicuous displays of altruism can serve important status-enhancing functions.

Consider what a person communicates about himself by going green. By purchasing a hybrid car rather than a gas-guzzler, for example, a person can signal to others that he is a relatively pro-social, rather than a pro-self, individual. That is, instead of purchasing a luxurious and environmentally wasteful product that will benefit only him, he chooses a product that will benefit others by helping the environment, even though choosing the green product often means foregoing the luxury of having a more powerful engine, features, and ample trunk space.

Engaging in pro-environmental behaviors such as green consumption can earn people a pro-social reputation. Individuals with such reputations are seen as more trustworthy and are more desirable as friends, allies, mates, and leaders (Griskevicius et al., 2007). Indeed, self-sacrifice for the benefit of the group has been shown to increase a person's status in the group (Barclay & Willer, 2007; Van Vugt et al., 2007). An altruistic reputation can be so valuable that individuals across modern and traditional societies (and even across species) are known to compete for status by trying to be seen as more altruistic (Van Vugt et al., 2007). Because altruism is costly to the giver, costly signaling theory suggests that individuals should use altruistic displays to attain for status.

The current research examined how activating status motives influenced product choice. The first study examined how status motives influenced product choices between green products (e.g., Toyota Camry HYBRID) and more luxurious non-green counterpart products (e.g., Toyota Camry XL V-6). Findings showed that although the more luxurious products were more preferred (in the control condition), activating status motives significantly increased people's tendency to choose the green product. That is, status motives actually led people to forgo luxury when they were given a green product option.

According to costly signaling theory, a key factor in how status motives should influence product choices is whether the act of purchasing can publicly signal the buyer's pro-social versus pro-self nature. The second experiment thus examined how status motives influenced choice when purchases were made in public versus in private (e.g., shopping at a busy story vs. shopping on the Internet alone at home). Consistent with traditional perspectives, when shopping in private, status motives led people to prefer the more luxurious (non-green) products. However, when shopping in public, status motives led people to choose the green (non-luxurious) products. The third experiment showed that status motives led green products to be particularly desirable when such products cost more than their non-green counterparts.

In summary, although status has been traditionally associated with luxurious goods, this research shows that activating status motives can actually lead people to forego such products. Instead, consistent with costly signaling theory, status motives can lead people to choose non-luxurious and poorer-performing green products because such products can signal prosocial rather than selfish person characteristics.

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Getting Gold by Going Green: The Importance of Fitting the Message to the Mindset

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Firms today are ever-increasing the number of "green" products they offer. These products are typically positioned in terms of an associated pro-social benefit. For example, purveyors of shade grown coffee may stress how their coffee is farmed with minimal damage to the environment. Thus far, the goal of offering green products has been to cater to consumers who value these pro-social benefits; however, industry leaders have recently noted that many consumers still weigh their own personal needs above those of society when making purchase decisions. Such critics have questioned how to position green products such that mainstream consumer interest can be cultivated and product success will not remain limited to the "green ghetto" or the minority of socially conscious consumers (Bishop 2008).

As no academic research to date has explored how consumer decision processes may influence purchase considerations of green products, the current research proposes and tests how consumer mindsets and the positioning of product benefits affect interest in green goods. When positioning a green product (energy efficient light bulbs), benefits along at least two distinct dimensions can be emphasized: the product can be described in terms of the benefits to the *self* ("reduce your home energy costs") or benefits to the *greater good* ("reduce global warming"). Benefits to the self can be seen as more concrete, as they are more psychologically proximal and are associated with lower level goal attainment. Conversely, benefits to the greater good are more abstract, as they are associated with higher order, more general goals. Recent research has demonstrated that consumers' mindsets (abstract vs. concrete) can systematically influence the importance of product benefits. Consumers in a concrete mindset have been shown to prefer products offering more tangible, personal benefits (Meyvis, Goldsmith and Dhar 2009); whereas consumers in an abstract mindset prefer products whose benefits meet higher order goals (Fishbach, Dhar and Zhang 2006). As such, we argue that consumers in a concrete mindset will be persuaded by appeals for green goods promising more concrete benefits, such as benefits to the *self*. Conversely, an abstract mindset, which focuses attention on higher order goals, will cause consumers to be more persuaded by appeals for products promising benefits to the *greater good*. Thus we predict that a consumer's mindset (abstract vs. concrete) and how the product is positioned (offering benefits to the self vs. the greater good) will have an interactive effect on consumer preferences for green goods.

This proposition is tested in three studies. In Study 1, participants' read a vignette about a green product (solar panels) that they may purchase in the near future (two weeks) or distant future (six months). Temporal distance has been shown to systematically affect the level of abstraction at which consumers' process information: more distal time frames correspond to more abstract representations (Trope and Liberman 2003), thus the time frame manipulation was used as a manipulation of mindset. The green product was positioned either as offering benefits to the self ("reduce heating costs") or benefits to the greater good ("reduce global warming").   Finally, all participants indicated their willingness to pay for the product. In support of our hypothesis, the results demonstrated that consumers in an abstract mindset showed a greater willingness to pay when the product benefited the *greater good*; whereas consumers in a concrete mindset showed a greater willingness to pay for a product associated with personal benefit (interaction: $p = 0.028$).

Study 2 was designed to extend the ecological validity of Study 1, by using a different manipulation of mindset and a different green product. The first study may have obtained the effect of mindset on willingness to pay only for a product where consumers were relatively unfamiliar with standard prices (Coupey, Irwin and Payne 1998). To address this concern, in Study 2 we used a product whose standard price was well known (a gallon of gasoline) and measured not only willingness to pay but also purchase intent. Participants first underwent a mindset manipulation then read a vignette about a green product (ethanol gasoline) that was positioned either as offering benefits to the self ("preserve the life of your engine") or benefits to the greater good ("preserve our environment").   Finally, all participants indicated the likelihood that they would consider purchasing the product on 1 – 9 scale (1 = definitely yes, 9 = definitely no), and their willingness to pay per gallon. In support of our findings from Study 1, the results demonstrated that consumers in an *abstract* mindset were more interested in purchasing the product when it offered a pro-social benefit as opposed to a personal benefit ($M_{self} = 4.36$; $M_{pro\text{-}social} = 3.07$); whereas the opposite was true for consumers in a *concrete* mindset ($M_{self} = 2.80$; $M_{pro\text{-}social} = 3.36$). This interaction replicated and was significant for willingness to pay (p's < 0.04).

Finally to extend the findings of Studies 1 and 2 into the domain of choice, Study 3 tested for the moderating effect of mindsets and product positioning on choices with actual financial consequences. Participants underwent a mindset manipulation then were told that to thank them for their participation they would be entered into a lottery for a reward of their choosing. Their choices were a cash reward, described as "Ten dollars in cash that you can spend any way that you choose," or a green battery charger described as "one way for anyone to help reduce global warming and preserve the environment." In support of our hypothesis, we find that participants in an abstract mindset were significantly more likely to choose the green product over cash ($P_{abstract} = 53.8\%$; $P_{concrete} = 25\%$; $p = 0.038$).

At present, this research achieves several goals: we demonstrate that consumer mindsets and the positioning of a green product can have an interactive effect on consumer purchases. Further we demonstrate that this effect carries over to actual choice decisions. As many firms today feel compelled to offer green products and wish to do so successfully, we believe this research addresses an important practical question and makes a meaningful theoretical contribution.

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The Green-Self Paradox: An Examination of Licensing Effects In Green Behavior

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Conventional wisdom would suggest that if we can get consumers to turn off the lights when they leave a room or turn off the water as they brush their teeth, they will eventually be willing to engage in more effortful green behaviors as they begin to develop a more "green" self image.   Thus, many public service programs advocate for small steps that consumers can take to help protect the environment and build sustainability into their everyday life. For example, ConEdison, a utility provider in New York City is currently running an advertising campaign urging consumers to help protect the environment by engaging in any number of simple behaviors (Con Edison, 2009). In this work, we begin to examine the effectiveness of this approach and find that these small steps might engender a counterintuitive licensing effect in which consumers are more likely to engage in self-indulgent behaviors believing that they have already done their part to help the environment. In addition to being more self-indulgent, this licensing effect may also lead to lower participation rates in more subsequent, more substantial pro-environmental behaviors.

Previous research informs us that consumers' past behaviors are often correlated to future behavior and used to help shape future decisions (Dhar and Simonson 1999). Additionally, these behaviors help to define and shape a given specific self image (LaBoeuf and Shafir, 2004). Thus, certain behaviors can prime specific self-concepts motivating consumers to see themselves as healthier, less racial, or more environmentally friendly. In an environmental context, we would expect that as consumers develop a greener self-image, they are more likely to engage in a wider range of green behaviors. However, it is also plausible that the creation a specific self will help to establish credentials that allow an individual to make a choice that is in contrast to the expressed self (Monin and Miller 2001; Khan and Dhar 2006). One might engage daily in recycling and turning off lights, thus building a green self-image; yet when choosing a car the same individual might not choose a car that is fuel efficient. In this case the daily green behaviors help to establish the green self identity, yet during the subsequent decision to choose a car, the individual might feel liberated by his previous green behavior and thus choose a car that is roomier or more stylish without regard for the environmental criteria.

This study examines the impact of everyday green behaviors on self image and subsequent choices. As part of the study, all participants self-rated themselves on how environmentally friendly they were. Then half of the participants were asked to engage in some daily environmental behavior(s) and write that behavior(s) down. After three weeks of engaging in these behaviors, we again asked the participants how environmentally friendly they were. A week later the participants were asked to help with an environmental clean-up project and how likely they were to use reusable grocery bags on their next grocery trip. The other half of the participants did not engage in the daily behaviors, but were asked to help with the environmental project and use the reusable grocery bags. Similar to our proposition, we find that the daily green behavior did engender a greener self image over the test period, but did not lead to greater participation rates in the environmental project or the reusable grocery bags. In fact, we find significantly lower participation rates in both programs with the individuals with the greener self image.

These findings suggest that we may need to alter how we help consumers create a greener self image and/or mitigate the negative effects of licensing if we want them to exhibit an increasingly wider range of environmentally friendly behaviors. Studies that will be run in the coming months will extend these findings through the examination of group norms, level of conformity with the given behavior, and motivations for engaging in the behaviors. It is plausible that if a consumer self identifies as a green consumer, they are more likely to develop green behaviors that are habitual and lead to other green behaviors while consumers who are forced via social norms to develop green behavior, will exhibit the licensing effect. Thus, a greater understanding of the messages and programs we use are important if we want to change long-term behavior in an effort to save the planet. Combined with the findings of the existing study, it is anticipated that the results of the planned studies will further our understanding of the paradox that can occur when promoting green behaviors leads to an increased green self-image but reduced participation in green behaviors.

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Session 7.2

Suppressing Secrecy Through Metacognitive Ease: Cognitive Fluency Encourages Self-Disclosure
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Research suggests that people do not have stable disclosure strategies, and decide whether or not to disclose depending on transient environmental cues. While the literature focuses on situation-specific cues, little work has explored the domain-general cognitive factors that lead people to divulge information.

One candidate is fluency—the metacognitive experience of ease or difficulty associated with processing information. Evidence suggests that cognitive difficulty signals the need for greater scrutiny and deliberation before acting. Since disclosure is inherently risky, disfluency should inhibit self-disclosure relative to fluency. Importantly, fluency is a ubiquitous metacognitive cue: all cognitive tasks vary by how easy they are to process, and people therefore have access to fluency cues when making decisions across a broad range of situations.

In Studies 1a and 1b, participants completed a social-desirability scale (SDS) either printed in a clear font (the fluent condition) or an unclear font (the disfluent condition). SDSs measure whether people admit to harboring thoughts or behaving in ways that might be embarrassing if shared with other people (e.g., I gossip at times). Participants were more willing to disclose such thoughts in the fluent condition, providing preliminary evidence that fluency promotes self-disclosure. This effect emerged with two distinct forms of the most popular SDS, the 33-item Crowne-Marlowe scale, and the scale's 10-item short form.

Study 2 was designed to identify one mechanism behind the relationship between fluency and self-disclosure. Participants completed a series of word-stems that were again printed in either a clear font or an unclear font. Participants provided the missing letter from a series of word-stems "in order to create the first English word that popped into [their heads.]" The stems could either be completed to form words associated with risk (e.g., RIS_: *risk* or rise), or to form words associated with self-presentational concerns (e.g., _IKED: *liked* or hiked). Whereas disfluency increased the proportion of risk-related stems that participants completed to form words associated with risk, fluency had no effect on participants' tendency to form words associated with self-presentational concerns. The absence of a relationship between fluency and self-presentational concerns suggested that the effects of fluency on social desirability responses in Study 1 did not merely reflect a narrow concern with self-presentation. Study 2 therefore suggests that disfluency heightens thoughts of risk and concern.

In Study 3, we tested directly the relationship between disfluency, thoughts of risk, and willingness to disclose. Participants indicated how comfortable they would be to discuss 30 self-relevant topics (e.g., music and food preferences) with a stranger. As in the earlier studies, the questionnaire was printed in an easy to read or difficult to read font. We also asked participants to rate how strongly they felt 14 risk- and concern-related emotions. As expected, participants were less willing to disclose their views when the questionnaire was printed in a disfluent font, and this effect was fully mediated by the relationship between disfluency and heightened risk- and concern-related affect.

Finally, in Study 4 we replicated these effects in a realworld, ecologically valid domain. We took advantage of a change in the format of an online confessions website, *Grouphug,* which elicits anonymous confessions from its users. The site was originally quite difficult to read, as the font was grey against a slightly darker black background. In August, 2008, the webmaster decided to make the confessions easier to read, so he changed the format so the text was black against a white background. Using a scale from *not at all disclosing* to *very disclosing,* anonymous coders who were blind to the purpose of the study and the fluency condition under which the confession was made, rated 225 confessions that were made before and 225 that were made after the format change. Replicating our earlier findings, the confessions were rated as more disclosing after the site adopted its new, fluent format.

In sum, disfluency hampers disclosure by elevating people's thoughts of risk and concern. This effect emerged in tightly controlled lab studies and in a more naturalistic web study. These effects have important implications for market research practice, and suggest that respondents will be more willing to disclose and share information when they experience cognitive fluency.

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Is What You Feel What They See? The Relationship between Fluency and Identity Signaling

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The desire to control the perception of the self, that is, impression management, is a fundamental motive in social behavior (Chaiken, Giner-Sorolla and Chen 1996). People frequently use products to express their identity (Belk 1989) and infer identities of others (Shavitt and Nelson 1999).

What determines the signaling quality of a product? Recent research suggests that products that are used by smaller groups of people, which are less common and more unique, are perceived to be more effective signals of identity (Berger and Heath 2007). In this paper, building on the work on processing fluency (Schwarz 2004, 2008), we propose that people will use feelings of ease or difficulty of information processing when choosing products to signal their identity as well as to infer identity signaling motives in others. Recent research findings show that products that are less fluent are seen as less common and more unique, and are preferred in the consumption domains where uniqueness adds to perceived value; for example, in the domain of special-occasion goods (Pocheptsova, Labroo, Dhar 2009). Applying these findings to the context of identity signaling, we propose that consumers who are motivated to signal their identity will prefer products that are less fluent because they perceive them as more unique and thereby more effective signals of their identity. Furthermore, when making judgments about others' choices, people will be more likely to perceive identity signaling motives in less fluent choices of others.

We examine these propositions in a series of studies. First, we show that perceptions of others are affected by the fluency of their choices. In one study, female participants imagined they were going on a date and were given a sample menu by their date. The menu was presented in either low or high fluency font. Consistent with our predictions, the results indicate that the date was more likely to be seen as using the restaurant to impress others in the low fluency condition than in the high fluency condition.

In the next set of studies, we extend our findings to look at the relationship between group identity signaling and fluency. People often engage in symbolic product usage to indicate membership in their in-groups. In-groups are perceived as more heterogeneous and unique compared to outgroups (Simon and Mummendy 1990), and thus their signals should be perceived as less fluent. Consistent with this prediction, the results of study 2 show that a less fluent product used by an in-group is more likely to be perceived as a signal compared to a more fluent product. However, this effect is attenuated after participants' need to associate with their in-group has been satisfied through a priming task. This suggests that the interpretation of fluency in signaling contexts is driven by the need to clearly communicate about the self through signals. In the third study, we demonstrate that products that serve as signals of an in-group identity are perceived as less fluent compared to out-group signals and non-signaling products, suggesting that people are motivated to defend the signals of their own identity.

Taken together these results suggest that fluency can serve as a signal of identity, where low fluency choices are viewed as more effective signals of one's identity, compared to high fluency choices. Further, people may defend signals of their own identity by rating them as more difficult to understand.

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Does Effort make your Heart Fonder or Mind Wonder? An "Attainability-Efficacy" Framework of Preference Construction

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It is not surprising that consumers put maximum effort into obtaining products or doing things they like, however, do they also prefer products or things associated with effort? For example, imagine it is the holiday season, you are going to the grocery store, and have been thinking about donating money to charity. In one scenario, imagine that as you enter the store, you notice a volunteer from the Salvation Army right next to the entrance asking for a donation. In a second scenario, imagine that as you enter the store, you see a volunteer from the Salvation Army a few steps away from you at the opposite entrance asking for a donation. When are you more likely to make a donation, and why? In the first scenario, the volunteer is close to you and it is easy to make a donation. In the second case, you will have to exert some token effort to make the donation. It appears normative that if you have been thinking about making a donation, and if you consider the Salvation Army a good cause to support, you should be more willing to make a donation when it is easy rather than effortful to do so. But are there situations when you might prefer to engage in the token effort? In the current article, we examine when and why do feelings of effort versus ease motivate people to work harder or make them value products more?

Whether it is deciding to make a donation or to buy a product, most existing research will argue that people like to do activities or get products that are easy to do or get. A recent set of intriguing findings have additionally suggested that even when feelings of ease arise from subjective characteristics of the target and are independent of its descriptive features (Schwarz 2004), they increase value of the outcome and motivation to act. Ease is associated with positive feelings that are usually attributed to the outcome being considered and increase preference towards the outcome. In this paper, however, we discuss when feelings of effort, rather than ease, can motivate people to work harder and can make people value products more.

We argue that when evaluating products, consumers focus either on how attainable the outcome is or if it is the best one available. When people experience illusory high control, their focus turns to product efficacy rather than product attainability. As people usually infer value from their actions, and as they put the most effort into pursuing the best outcomes, they mistakenly reverse this correlation when assessing efficacy of the outcome. Thus, feelings of effort also make them value the outcome more (Labroo and Kim 2009; Pochepsova et al. 2009). However, when perceived control is low, their focus is on successful outcome attainability. In such situations, effort signals infeasibility of attaining the outcome and they prefer outcomes associated with ease, not effort.

Across three experiments, we provide evidence for our premise. We show that people with high control (illusory or real) prefer products that are psychologically or physically effortful rather than easy to attain and they donate more to a charity when donation is effortful rather than easy. In contrast, people with illusory low control prefer products and are more likely to act if things feel easy rather than effortful. Process measures show that illusory low control results in concerns about product attainability, and ease increases perceived attainability of a successful outcome. Illusory high control increases the desire to get the best option (attainability is no longer a concern), but things that are effortful are better than things that are easy. Of additional interest are the subtle manipulations of illusory control. For example, simply writing ones own lucky number on a raffle ticket rather than being assigned one, for a box of cookies, creates illusory control, and can make us evaluate the cookies more favorably, but only when they are physically (or psychologically) distant rather than close. Or, being the first (rather than last) to make a difference to the lives of poor children, also creates illusory control, resulting in people making larger donations, but only when they have to reach out a couple of feet to the donation box (vs. it is next to them). We additionally rule out mood, construal level, attention, and overall goal engagement as possible alternative explanations.

In the end, all control might just be an illusion; therefore, it is particularly powerful that such subtle manipulations of controllability can alter preferences to this degree. The surprising inference is that people with high control like complicated lives, and when people feel control they complicate rather than simplify their lives.

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Experiences of Fluency with Memories of Charities
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Metacognitive research shows that people attend to the dynamics of their own thought processes as a source of information in judgment and decision making (Schwarz 2004). We investigate how memory for the details of a charitable cause affects consumers' decision to donate. People generally assume that information they care about is better remembered than information they find irrelevant. Accordingly, they may infer from good memory for the details of a charitable cause that they must have found the cause important. This metacognitive inference, in turn, may influence consumers' decision to donate to the cause. The findings of Experiment 1 demonstrate that when the purpose of the charity is to help a population in need, good memory for details of the cause increases willingness to donate. However, not all charities attempt to alleviate suffering. Some charities primarily want to raise people's awareness of some social issue. In this case, good memory may backfire. Consumers may infer from their own good memory that familiarity with the issue is already quite high and may see little need for further awareness raising efforts. Experiment 2 finds that when it is the purpose of the charity to raise awareness, good memory for details of the cause decreases willingness to donate.

In our first experiment, participants read a one-page description of a charity called Children of Uganda, which described the challenges facing this population and some measures the charity was taking to help. Participants then took a memory quiz about the charity that was either easy or difficult. Compared to participants assigned to the difficult quiz (which suggested that their memory for the cause is poor), those assigned to the easy quiz (which suggested that their memory for the cause is good) reported a higher willingness to donate to the charity, greater intentions to get involved with the charity, and greater intentions to tell a friend about it. These results provide first evidence that metacognitive inferences from one's own memory for the details of a charitable cause can affect consumers' willingness to make a contribution. However, it is possible that the ease or difficulty of the memory test affected participants' mood, a variable known to affect prosocial behavior (Cialdini, Kenrick, and Baumann 1982).

Whereas the charity in our first experiment helped children in Uganda, for the second experiment the target charity attempted to raise awareness about the destruction of the rain forest. An awareness-raising goal invites different inferences from good memory: given that familiar information is usually easier to remember than novel information, good memory suggests relatively high awareness of the cause. If so, participants may see little reason to donate to further awareness-raising efforts, resulting in lower willingness to donate after an easy rather than difficult memory test. This prediction is opposite of what would be expected from the assumption that an easy test induces a better mood. Participants read a one-page description of a charity dedicated to raising awareness of rain forest destruction and completed an easy or difficult quiz about details of the cause or an unrelated quiz about human anatomy. Participants assigned to the easy quiz reported a *lower* willingness to donate money and time, and were less likely to provide their contact information to the charity, than participants assigned to the difficult quiz; participants assigned to the control quiz fell in between. Note that the lower willingness to donate after an easy quiz is incompatible with a mood account of the observed effects.

In sum, metacognitive inferences from the perceived quality of their own memory for a charitable cause can affect consumers' willingness to donate time and money and to get involved. However, the direction of the influence depends on the nature of the cause. When the goal of the charity is to help an at-risk population, high perceived memory quality indicates that the cause is important and worthy of donations. When the goal of the charity is to raise awareness about an issue, high perceived memory indicates that awareness is already high and further efforts are hence not needed.

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Session 7.3

Self-Regulation through Adaptive Information Processing

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How can some people resist a decadent desert while others cannot? Several self-regulation researchers have studied this question focusing on three dimensions thought to be necessary for successful self-regulation; goals, monitoring and resources (Baumeister &Heatherton 1996; Baumeister, Vohs, &Tice 2007; Heatherton & Baumeister 1991; Polivy &Herman 1976; Polivy et al. 1986;).   This research studies the same question from an information processing perspective. More specifically, this research answers the question - does the information that consumers process prior to consumption predict how successful they will be at self-regulation?

A series of four studies demonstrates the role of information processing in resisting a hedonic food (chocolate). Specifically, we show that individuals with a self-regulatory goal to resist the hedonic food, strategically process more utilitarian (versus hedonic) attribute information whereas individuals without a self-regulatory goal process more hedonic (versus utilitarian) attribute information. Importantly, the results show that the type of attribute information processed predicts how much the individual consumes and how information processing plays a key role in self-regulatory success or failure.

Methodology Employed

All of the studies used randomized block designs and MouselabWEB (Willemsen & Johnson, E. 2009), to capture the key dependent measures (study 3 used written protocols to provide processing measures). MouselabWEB is a process tracing tool that allows researchers to monitor the information acquisition process of decision makers, such as what information is sought, the sequence of acquisition, how much information is sought, and for what duration the information sought. The purpose of each study was to investigate how the presence (vs. absence) of a self-regulatory goal influences information processing (how much time spent processing hedonic vs. utilitarian attribute information) and subsequently consumption (how many chocolates are consumed). Moderating factors of physical proximity, attribute magnitude, and information specificity are also investigated. The dependent variables of interest for all of the studies are (1) the ratio of utilitarian/ hedonic attribute information processed [calculated as (Time processing utilitarian information – time processing hedonic information)/total processing time], and (2) consumption of chocolates.

Results Summary

The pilot study and study 1 investigate the moderating effect of physical proximity (how close the hedonic food is) on goals and information processing. Study 1 used a 2(self-regulatory goal: present/absent) x 2 (physical proximity: high/low) between subjects design. The results revealed stark differences in information processing depending on the presence of a self-regulatory goal and how close the hedonic food was. As the hedonic food was moved closer, those without a self-regulatory goal processed more hedonic information (taste attributes), whereas, those with a self-regulatory goal processed more utilitarian information (nutritional information). Study 1 provides initial support for the role of information processing in self-regulation as the ratio of hedonic/utilitarian information processed predicted how much chocolate participants consumed.

Study 2 investigates the moderating effect of attribute magnitude, whether the information was for a small or large serving size, on goals and information processing. Study 2 used a 2(self-regulatory goal: present/absent) x 2 (attribute magnitude: large/small) between subjects design. The results demonstrated that when the information provided was for a large serving size, the increase in utilitarian attribute values (nutritional information) caused those without a self-regulatory goal to focus even more on hedonic (versus utilitarian) attribute information. The decrease in the ratio of utilitarian/hedonic information led those participants to consume more of the hedonic food. Support for the mediating role of information acquisition on choice was once again found as the ratio of utilitarian/hedonic information acquired predicted how much chocolate participants consumed.

Consumers are often faced with consumption decisions where specific utilitarian information is not available. Study 3 investigated the moderating effect of information specificity on goals and information processing to determine if self-regulating consumers will proportionately process more utilitarian, versus hedonic, information when specific attribute values are not provided. Study 3 used a 2(self-regulatory goal: present/absent) x 2 (information specificity: present/absent) between subjects design and collected written protocols to provide process tests. The results showed that when provided with specific utilitarian information, those with a specific self-regulatory goal were able to generate more utilitarian thoughts and consume less chocolate. However, without specific utilitarian information, they were not able to generate more utilitarian than hedonic thoughts and consumed more chocolate. Thus, when provided with the opportunity to process specific utilitarian information, self-regulating consumers generated more utilitarian than hedonic thoughts and were able to more effectively self-regulate. Without the specific attribute information however, there were no differences in the generation of hedonic versus utilitarian thoughts or in self-regulatory success between consumers with or without a self-regulatory goal.

Conclusion

This research introduces an information processing model of self-regulation that integrates Hoch and Loewenstein's (1991) desire-willpower model of self-control with propositions from the adaptive information processing literature (Bettman 1979; Payne et al. 1993). A critical contribution that we make is the consideration and investigation of the processing of attribute information in self-regulation – something that has not been examined in the past. In the end, a process based account of self-regulation is introduced demonstrating how information processing can mediate the relationship between goals and consumption.

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Complicating Choice: The Effort Compatibility Principal

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"No questions is so difficult to answer as that to which the answer is obvious"
~ George Bernard Shaw

It has been well documented that, in the pre-decisional stage, consumers often simplify their decisions by bolstering one of the alternatives and/or denigrating others (e.g., Brownstein, 2003; Janis and Mann, 1977; Mills, 1968; Montgomery, 1983; Russo Medvec and Melloy, 1996; Tyszka, 1985). Such reduction of choice conflict enables consumers to make easier, more confident choices. In this research, we provide a theoretical analysis of, and empirical evidence for, the opposite behavior. We discuss conditions under which consumers complicate choices in order to feel that they invested enough effort to make the right choice. Specifically, we postulate that when faced with important decisions, such as choices between primary physicians or between career paths, consumers are motivated to engage in a diligent decision process. When an important choice feels too easy, consumers artificially increase the choice conflict and effort by reconstruing the choice context. Consumers are shown to bolster unimportant attributes and reverse the ordinal valence of attributes (e.g., more is better becomes less is better) in a direction that counteracts the virtually-dominant alternative, which they initially prefer and eventually "choose."

We propose a unifying "effort-compatibility" principle that accounts for both simplifying and complicating decision processes. The effort compatibility principle asserts that consumers value and strive for compatibility between the degree of effort they anticipate, or think is adequate to reach a certain decision, and the level of effort they actually exert. Accordingly, when a certain decision seems harder than initially anticipated, a simplifying process ensues. However, when the decision feels easier to resolve than anticipated (e.g., important, yet easy choices), consumers increase the effort they invest in making the decision by artificially intensifying the conflict in choice. Such effort enhancement behavior, through bolstering unimportant attributes, or reversing the valence of ordinal attributes, enables consumers to attain effort-compatibility and perceive themselves as engaging in a diligent decision process. In a series of six studies we examine consumers' choice complicating processes and the effort-compatibility principle.

In Study 1 respondents faced a choice between two alternatives of physician services. The choice was to be made from either a low difficulty choice set or high difficulty choice set (manipulated between subjects and pre-tested to be easier or harder than anticipated decision). Across all conditions respondents were asked to allocate 100 points between the attributes that characterized the alternatives in the set. Respondents were instructed to allocate the points in a manner that reflected the relative importance they attach to each attribute. The allocations were done prior to seeing any choice set (control), after observing the choice set but before making the decision (pre-decisional), after making the decision (post-decisional), or after observing the choice set but without being asked to choose (no-choice). Thus a 2 (choice difficulty: low vs. high) x 4 (time of measuring attribute importances) between-subject design was employed.

Consistent with previous findings, in the high difficulty conditions respondents distorted their attribute importances (relative to the control) in a manner that decreased the level of conflict in choice. Thus, respondents simplified their decision by bolstering one alternative in the pre- as well as in the post-decisional phases. In contrast, in the low difficulty condition (easier than anticipated decision) respondents complicated their choice by distorting the relative importance of the attributes in a manner that increased the conflict in choice. Moreover, consistent with the proposed effort compatibility principle, and ruling out several rival accounts (e.g., market-efficiency inferences and conversational norms) such complicating behavior attenuated when effort regulation became irrelevant, that is, after the choice was finalized or when no choice was required (post-decisional and no-choice conditions, respectively).

Further validating the effort compatibility principle and consumer motivation to engage in adequate due diligence regarding an impending choice, we demonstrate in Study 2 that respondents artificially enhanced their pre-choice conflict only when the decision was perceived as important (framed as binding for a year) but not when it was perceived unimportant (framed as unbinding).

In Studies 3 and 4, we directly investigate the inherent role of effort in the proposed complicating behavior. Specifically, the effort compatibility principle predicts that (i) introducing an external source for difficulty should attenuate consumers' need to artificially create conflict in choice, and (ii) greater anticipated effort should accentuate complicating behavior. Accordingly, in Study 3 we show that introducing external source for effort by manipulating perceptual fluency (using difficult vs. easy to read fonts), decreases complicating behavior. Further, in Study 4 we directly manipulate consumers' expectations and show that high or low anticipated effort leads to either complicating or simplifying behavior, respectively. Specifically, in Study 4 we manipulate the level of anticipated effort by cueing subjects how long the task typically lasts. Although they faced identical tasks, respondents that anticipated low effort employed simplifying processes, while those anticipating high effort increased their conflict in choice. In Study 5 we explore additional manner by which consumers artificially create conflict in choice and complicate their decisions. Specifically, we demonstrate that in the context of choosing between job opportunities, participants enhanced their pre-decisional effort not only by distorting attribute importances but also by reversing their preference ordering. That is, respondents were found to construct positive preferences towards attributes that opposed their initially preferred and ultimately chosen alternative. Finally, in Study 6 we demonstrate that in sequential decision settings, once a complicating process is triggered, it can alter the ultimate outcome of the decision.

In summary, we hypothesize and empirically demonstrate that consumers complicate their choices. Such behavior may first appear contradictory to well-documented simplifying processes, such as pre-decisional distortion of information and post-choice cognitive dissonance. However, we test and support an effort-compatibility principle that accounts for both simplifying and complicating processes, sometimes observed in the context of the

same decision. Thus, consumers not only simplify and bolster the difficult choices they make, but also make harder and less appealing the obvious (or illusionary) choices they fake. We discuss the theoretical and practical importance of our findings.

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The Link between Usability and Consumer Decision Making
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Whether it's browsing thousands of digital cameras on eBay or making sense of a myriad number of coffee makers on Amazon.com, it is clear that today's consumers face large amounts of information. Online retailers have tried many approaches to help consumers deal with increasing amounts of information; including electronic agents that recommend particular products based on consumer preferences or the similarity of their shopping histories to other consumers (Diehl 2005; Häubl and Murray 2003); presenting information in matrix format that allows alternatives and attributes to easily be compared (Häubl and Trifts 2000); and providing tools for sorting, selecting, and filtering alternatives (Lurie, Wen, and Song 2009; Todd and Benbasat 1991; 1992; 1999).

Prior research suggests that the navigability of a retail website is a key determinant of the likelihood that browsers turn into buyers, the extent to which they learn to efficiently use the website, and the likelihood they return to the website for future purchases (Johnson, Bellman, and Lohse 2003; Nielsen 1993; Palmer 2002). One widely used approach to improve navigability is to use visual design elements such as visual separators between rows or between columns of data in a product matrix. For example, both Travelocity and Intel display alternatives in columns and attributes in rows on their websites but Travelocity uses vertical lines to separate alternatives while Intel uses horizontal lines to separate attributes. Although each approach may increase consumer understanding of the environment by making navigation easier (Huizingh 2000; Nielsen 1993), it is unclear which is better from a decision-making perspective.

Most assessments of website design involve usability testing, with a focus on user understanding, the extent to which users get lost, and the speed of information retrieval (Huizingh 2000; Nielsen 1993; Palmer 2002). In contrast, research on decision making tends to examine how task aspects of a decision problem, such as the amount of information in a choice set; or context aspects, such as the correlation among product attributes, affect decision processes and outcomes (Bettman, Johnson, Luce, and Payne 1993; Payne, Bettman, and Johnson 1993; Lurie 2004). In general there has been little examination of how design elements, that make no changes to task or context variables, affect decision making.

In this article, we propose that design elements, such as visual separators, can act as cognitive constraints that systematically affect the acquisition and processing of information with implications for decision processes and choices. To the extent that consumers adapt their decision processes to the task and context variables in the decision environment (Bettman et al. 1993; Payne, Bettman, and Johnson 1988; Payne, Bettman, and Johnson 1993), visual separators may discourage these adaptive responses. However, by encouraging the uniform use of particular information acquisition strategies, visual separators should also serve to enhance decision efficiency. To the extent that decision processes have a larger impact on choice quality in environments where consumers need to make tradeoffs among attributes (Bettman et al. 1993; Payne et al. 1988), we expect that visual separators will have the greatest effect on choice quality in such environments.

In a series of studies we examine how design elements such as visual separators affect decision processes and outcomes in different choice contexts. Although a pretest suggests that there is no clear agreement, even among computer science students, on whether it is better to visually separate alternatives or attributes, experimental results show these design elements affect choice quality. These effects, however, depend on the characteristics of the decision context; in particular, the intercorrelation among product attributes.

Study 1 shows that when product attributes are negatively correlated, visual separators between alternatives improve decision quality whereas those between attributes hurt decision quality. However, when product attributes are positively correlated, visual separators do not affect choice quality. A second process-tracing study shows that visual separators reduce the extent to which consumers adapt their choice processes to the choice context but enhance decision efficiency (i.e., lead to faster decisions). A third study process-tracing study manipulates time pressure. Results show that, under time pressure, visual separators between attributes as well as between alternatives improve decision quality when product attributes are negatively correlated. Process tracing measures show that under time pressure, visual separators lead to more systematic information acquisition, faster processing of information, and consideration of more information. Under time pressure, this more systematic and comprehensive processing of information appears to compensate for reductions in decision quality due to by-attribute versus by-alternative information acquisition.

By examining how visual aspects of electronic environments affect decision processes and outcomes, this article provides a link between research on design and usability of information environments (Huizingh 2000; Nielsen 1993) and research on decision making (Bettman et al. 1993; Payne et al. 1988; Payne et al. 1993). More generally, this research adds to understanding about the links between perception and cognition (Fiske 1993; Johnson et al. 2003), with implications for decision making. From a managerial perspective, this research provides insights into how seemingly innocuous design changes may affect consumer decision making and those conditions in which visual separators are likely to be helpful or harmful to consumers.

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Inferring Preferences of Undecided Consumers

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This paper introduces a simple and unobtrusive method for assessing the preferences of undecided consumers. The method builds on a recent finding that consumers with weak preferences prefer information about the weakly preferred product, irrespective of whether the information is expected to reflect positively or *negatively* on the weakly preferred product (Carlson and Guha 2009). This means that, in a choice between two negative reviews to read (one about one option, the other about a rival option), consumers will read the negative review for the option they prefer more. Therefore, by examining information choices of consumers faced with reading one of two negative reviews, it should be possible to use information choice to infer product preferences. There are three noteworthy features of this method. First, the linkage between weak preferences and information search differs fundamentally from the literature on selective exposure (e.g., Zillman and Bryant 1985), which suggests that consumers with strong preferences only prefer information that reflects positively on their preferred product. Second, when Carlson and Guha (2009) asked participants what information should be selected (given a weak preference), responses were evenly split between believing that people should select negative information about the more preferred and negative information about the less preferred. Thus, there is no evidence that the linkage between weak preferences and information search is based on a naïve theory of what information should be selected. Third, the method of using information search to infer weak product preferences is simple to implement and can be used in a variety of online and real world settings.

Study 1

Participants read enough information about two backpacks to form a weak preference, but they were encouraged to not make a choice yet. After reading the information, participants were asked to report which backpack they currently preferred, or if they were still indifferent between the backpacks. Participants were then told to imagine that there were two negative product reviews they could read, one about each backpack. Participants were asked to indicate which review they would read if they could only read one review. Participants did not receive (and so did not read) the requested review. Instead, after indicating which review they would read, participants were instructed to contemplate (from memory) the information they had seen earlier, and to indicate which backpack they would select if there was no more information about the backpacks. Those who previously indicated having a backpack preference simply restated this preference. However, those who indicated they were indifferent between the backpacks had to make a selection.

A majority of participants who indicated they had a preference for one of the backpacks (75.0%) said they would read the negative review about the backpack they preferred. This result replicates Carlson and Guha's (2009) findings. More interesting is that, using the information search responses for those who reported being indifferent, we were able to accurately predict how 66.7% of these participants would make a selection. That is, for each indifferent participant, we predicted they would pick the backpack for which they wanted to read the negative review. This is both greater than chance, and it is a better prediction than we would have made if we'd used the baseline preferences of those with weak preferences to predict how the indifferent participants would break their ties. In short, it would seem that even those who reported being indifferent had a weak preference for one or the other backpack, a preference that was evidenced in their information search, but which they themselves were either unwilling (or unable to) share.

Study 2

As a follow-up, this study examined whether the linkage between preferences and information search differed (as predicted) for weak and strong preferences. To examine strong preferences as well as weak preferences, the current study used pairs of objects for which participants had prior knowledge. First, participants considered several pairs of options (e.g., Kobe Bryant versus LeBron James; Hanes versus Fruit of the Loom) and (if they could only read one story) indicated about which option they would prefer to read a negative story about. Participants then reported their relative preference across several pairs of objects, including the pairs listed earlier. For example, considering Hanes versus Fruit of the Loom, participants self-identified into one of five categories: Strongly favor Hanes, Weakly favor Hanes, Undecided, Weakly favor Fruit of the Loom, Strongly favor Fruit of the Loom. We found, on average, a majority of participants with weak preferences (71.4%) wanted to read the negative story about the option they preferred. In contrast, only a minority of those with strong preferences (22.2%) wanted to read the negative story about their preferred option, choosing instead to read the negative story about the other option.

Study 3

We applied these principles to predict how undecided voters would vote in the 2008 Presidential election. We asked a national sample of registered voters what stories they would like to read about the candidates. Later we asked participants to indicate if they had a candidate preference, or if they were undecided. Using information search data from voters who indicated they had no candidate preference, we developed an estimate for how "undecided voters" would vote. Using exit polling data as the baseline for comparison, our estimate was near-identical to the polling data (within 0.5%), and it was magnitudes more accurate than the best other estimates that were published before the election occurred.

Conclusion

Often the best way to increase sales is to persuade undecided consumers. Though some undecided consumers know too little about the products to have a preference, most know enough to have at least a weak preference for one of the products. The most valuable undecided consumers are those who have a weak preference for the marketer's product. This is because, all else equal, these consumers are easier to convert to buyers than other undecided consumers. Hence, marketers have a keen interest on identifying consumers who have a weak preference for their product. We believe the current work reveals an unobtrusive and simple means for identifying such consumers.

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Session 7.4

Clouds on a Sunny Day: The Downside of Positive Mood for Self-Control

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A consistent finding in literature is that positive mood is beneficial for goal pursuit and self-control. Happy mood signals a person to adopt an accessible goal and, consequently, one performs better on self-control tasks (Fishbach and Labroo 2007). In a similar fashion, goals that are implicitly associated with positive affect are more likely to be pursued (Cursters and Aarts 2005). Previous research on the beneficial effects of positive mood primarily focuses on pursuit of a single focal goal. Yet, consumers frequently pursue multiple goals simultaneously. For example, an individual may wish to simultaneously enjoy nice restaurants, lose ten pounds, spend time with family and exercise regularly. What effect does positive mood exert on the pursuit of multiple goals? Multiple goal-pursuit often creates a self-control dilemma when pursuing one goal is perceived to be in conflict with pursuing another goal (Fishbach and Dhar 2005). In these situations, individuals must exert self-control and distribute their efforts to pursue many goals that are important to them. In contrast to previous research suggesting that positive mood increases adherence to a goal when one has to overcome competing motives, we propose that positive mood will have a detrimental impact on self-control when multiple goals compete for individuals' resources.

Specifically, we predict that positive mood will influence how individuals construe the relationships among their goals, increasing perceived inter-goal conflict. Previous research has found that positive affect results in recognition of more, and more different, aspects or features of items (Isen et al. 1985; Isen, Daubman, and Nowicki 1987). When in a positive mood, individuals are open to a larger diversity of information, giving rise to greater recognition of differences and increasing the complexity and richness of a set (Kahn and Isen 1993). Applying these findings to the context of multiple-goal pursuit, we propose that positive mood will increase perception of the differences between goals and hence result in greater perceived inter-goal conflict. Increased goal conflict leads people to be less likely to engage in goal-consistent behaviors (Emmons and King 1988; Gebhardt and Maes 1998; McKeeman and Karoly 1991; Riediger and Freund 2004). Therefore, we propose that being in a positive mood while pursuing multiple goals will lead people to perceive greater differences among their goals, and the resulting perceived inter-goal conflict will have detrimental effect for self-control and goal pursuit.

Across several studies, we find support for this proposition. In our first study, after a mood manipulation using a sad versus a happy video, participants were asked to list the three most important goals they were currently pursuing. We found that participants in a positive mood indicated lower intentions to devote all of their energy, work intensely and commit to pursuing their three most important goals than participants in a negative mood. Further, participants in a positive mood perceived their goals as more conflicting than participants in a negative mood, and the effect of mood on self-control was mediated by perceived inter-goal conflict. Interestingly, in a pilot study we found that people in a positive mood wish to pursue more goals relative to people in a negative mood. However, our results on perceived conflict suggest that people in a positive mood may be less able to exert self-control and focus on their most important goals when pursuing multiple goals.

Since positive mood has harmful effect for self-control via inter-goal conflict, we should replicate the above results when multiple goals are activated, but not when only one important goal is activated. In our second study, we asked participants questions relative to either their five most important goals or to their single most important goal. We found that participants in a positive mood are less willing to devote all of their energy to their most important goals than participants in a negative mood when they are pursuing multiple important goals, but not when they are pursuing one single goal. Relative to participants in a negative mood, participants in positive mood also perceived their goals as more conflicting and more different from other goals that they were currently pursuing in the five-goal condition, but not in the single goal condition.

Goal conflict can be reduced by choice of multifinal means, which allows consumers to jointly pursuit their conflicting goals (Chun and Kruglanski 2005; Kopetz, Fishbach and Kruglanski 2007). However, if being in a positive mood highlights the differences between goals, we predict that happy consumers should be less likely to perceive any one means as serving to achieve more than one goal simultaneously, thus making the means appear less multifinal (Zhang, Fishbach, and Kruglanski 2007). We tested this prediction is our third study. Participants were asked to list means to achieve their important goals and rate the extent to which the listed means served multiple goals. Consistent with our theorizing, participants in a positive mood perceived the means they listed as less multifinal than participants in a negative mood, who perceived their listed means as more likely to help them achieve more than one goal.

Taken together, our findings support the idea that positive mood will lead to greater perceptions of inter-goal conflict, which, in turn, will decrease consumers' self-control when pursuing multiple important goals. Though previous research suggests that positive mood improves self-control performance, we find that positive mood, relative to negative mood, may have a detrimental impact on self-control when individuals pursue multiple goals by causing individuals to devote less effort and commitment to goal pursuit. Our findings contribute to the literatures on affect and self-regulation by expanding our understanding of the interplay between emotions and self-control in the context of multiple goals.

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Self-control Perceptions in the Presence of Others

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Consumers frequently face self-control dilemmas when making food consumption choices: Should I order a fruit salad or a chocolate cake for dessert? Should I cook a healthy meal at home or go out for dinner? Oftentimes a resolution of such self-control conflicts towards temptations results in experienced feelings of guilt, which affect subsequent consumption choices. Though previous research has identified a number of factors that affect consumers' resolution of self-conflict dilemmas and consequent experienced emotions, in this paper we propose a novel factor affecting such decisions: presence of others during food consumption. While the presence of others has been shown to directly contribute to consumption volume due to an increase in meal duration (de Castro & Brewer 1992, de Castro 1994, 2000) and variety-seeking (Levav & Ariely 2000), we propose that it can have an indirect effect by influencing one's perceived self-control due to increased levels of experienced guilt.

We argue that the presence of others during food consumption prompts increased feelings of guilt due to lay belief that associates eating in groups with unhealthier food choices. This in turn leads to higher calorie consumption reports as compared to situations where individuals are dining alone. We further propose that people would rely on their lay beliefs and believe that they consumed more calories (did not exercise self-control) in a group setting than in individual setting even when they objectively consumed the *same* meal. In support of this hypothesis, across four studies we find that individuals eating alone give significantly lower calorie estimates than those eating in a group for the same meal. In Study 1, we asked participants to imagine one of three conditions: that they were eating ice cream alone, that they were eating ice cream with their family, or that they were eating ice cream with their friends. Participants were then presented with a description of an ice cream. Consistent with our proposition, participants in the group conditions reported higher consumption amounts than those in the alone condition.

We test the generalizability of our findings in Study 2, by showing that similar effects exist when people are making estimates about others' rather their own consumption. Participants were presented with either an image of a woman eating alone or an image of a woman eating in a group. Participants were then asked to estimate the calories in this individual's entrée. Consistent with our earlier findings, participants in the group condition gave significantly higher calorie estimates than those in the alone condition. We next tested our hypothesis in a real food consumption setting (Study 3), asking participants to estimate the number of calories in the bowl of M&Ms that they consumed either alone or in the presence of others. Participants in the group condition estimated more calories in their bowl of M&Ms than those in the alone condition.

In our final study we investigate the implications of such perceived lapse in self-control in a group setting on subsequent choices. Since consumer choices are rarely made in isolation, but are frequently made in sequence (Khan and Dhar 2008) systematic errors in caloric estimation of one meal could have large consequences not only for immediate consumption but for future consumer choices. To test this proposition we first asked participants to imagine one of the two scenarios: that they consumed an ice cream cone alone or that they consumed the same ice cream cone with their friends. Participants were later asked to imagine that they would be dining alone and were asked to choose either pizza or salad as their entrée. Consistent with our predictions, participants in the group condition were far less likely to choose pizza following the ice cream scenario (25.0%) than those in the alone condition (57.9%). Further the results of this study support our argument that individuals dining in groups experience increased guilt and imply that such guilt affects subsequent consumption choices. Due to increased feelings of guilt, participants dining in groups attempt to compensate for their perceived self-control failure by subsequently selecting a more healthy option.

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What Movie Would You Watch with Your Salad? The Implicit Emotional Consequences of Exerting Self Control

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A great deal of research on consumer self-control shows that yielding to temptation can lead to aversive emotions, such as feelings of guilt and regret (e.g., Baumeister 2002; Giner-Sorolla 2001; Hoch and Loewenstein 1991). Conversely, research highlights that exerting self-control by resisting temptation results in positive psychological consequences, such as an improved sense of self-worth and a heightened self-concept (Dhar and Wertenbroch 2007; Khan and Dhar 2006).

In the present research, we argue that resisting temptation may also lead to aversive emotions. In particular, we argue that when individuals' freedom to fulfill their desires is thwarted by their need to act responsibly, the natural emotional response is anger. Along with happiness, sadness, fear, and disgust , anger is identified as one of the basic emotions (Ekman et al. 1972). In general, anger can be defined as the emotion that ensues due to a "conspicuous slight or frustration" of the individual by another (Zajonc 1998). Previous research shows that when the individual feels that his/her freedom is being restricted, reactance and hostility ensues (Brehm 1966; Wicklund 1974). Building on this conceptual framework of anger, in this research we propose that although anger manifest as psychological reactance is typically assumed to arise from the restriction of an individual's freedom by others, it can also arise from the restriction of an individual's desires by their own sense of responsibility. In other words, we argue that the affective state of anger can be produced, as long as the person's desire is deterred, even when the imposer of the condition is one's own cognitions of responsibility. However, unlike when freedom of desire is restricted by another person, in the case of yielding to one's own sense of responsibility, people may not readily identify the situation as anger-inducing. Consequently, a person may not be able to articulate one's emotional state as feeling angry; nonetheless, the affect of anger will manifest itself in the person's subsequent actions. Further, to the extent the next contexts are more readily recognized as anger-inducing, people may be able to report their displaced feelings of anger and irritation.

Based on prior research showing that individuals tend to have mood-congruent preferences, our first experiment examined whether anger-themed movies would be evaluated more favorably by individuals that resisted temptation. Indeed, we found that participants that resisted temptation (chose an apple over a candy bar) before rather than after choosing movies, were more likely to choose anger-themed movies. A similar effect was not observed for individuals yielding to temptation, suggesting that the act of resisting temptation led to the increased choice share of anger-themed movies.

Our second experiment examined how resisting temptation affected participants irritation (a mild form of anger) at a persuasive appeal that used controlling language and examined whether implicit anger mediated the effect of resisting temptation on participants' irritation with the appeal. Consistent with the findings of the first experiment, we found that participants that resisted temptation (chose an apple over a candy bar) expressed greater irritation with the appeal when they evaluated the appeal after having resisted temptation than before resisting temptation. Conversely, there was no effect of yielding to temptation on participants' irritation with the appeal. Moreover, we found that an implicit measure of anger mediated the effect of resisting temptation on participants' irritation with the appeal providing support for our process account.

In our third experiment, based on prior research showing that angry individuals tend to evaluate anger-framed appeals particularly favorably, we examined whether anger-framed appeals would be evaluated more favorably by individuals that resisted temptation. Moreover, we examined whether this effect would apply to sadness-framed appeals and whether the effect would be more pronounced among restrained eaters. Restrained eaters are defined by their heightened sense of responsibility to delay the immediate gratification of food in order to maintain or lose weight. That is, restrained eaters have a particularly heightened sense of responsibility to constrain their desires.

We found that restrained eaters became more favorably disposed towards anger-framed messages after resisting temptation, consistent with an anger emotional state. In contrast, unrestrained eaters, for whom eating does not involve a conflict between one's desires versus sense of responsibility, did not become angry when resisting temptation. This result provided insight into the process by which anger is produced— specifically, the effect only occurs when the tempting option is construed as a "vice," and not being able to have it is construed as a restriction on one's free desire. Moreover, we did not observe similar effects for sadness-framed appeals, suggesting that the effect was specific to anger, rather than to a generalized negative mood state.

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<div style="text-align:center">**Session 7.5**</div>

Are Satisfied Customers More Loyal? Examining the Moderating Influences of Consideration Set Size and Price-Consciousness
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A key finding in the satisfaction literature is that improvements in satisfaction lead to increased customer loyalty, which has significant implications for marketing scholars and practitioners alike (Reichheld 1996). Research shows that retention of current customers is extremely critical and leads to enhanced profits for firms (Reichheld 1996) because loyal customers pay price premiums and provide new referrals through positive word of mouth. However, recent research studies show that customers who switch often have high satisfaction ratings towards their previous brand (e.g., Ganesh et.al. 2000), which suggests that the relationship between satisfaction and loyalty may be contingent upon a variety of factors (see Seiders et.al. 2005). In this paper, we propose that the satisfaction-loyalty relationship is moderated by both consideration set size and price consciousness and test our hypotheses in a series of four studies.

The decision to remain loyal to a brand partly hinges on the prior experiences or satisfaction with the brand. However, repurchase decisions cannot be made independently without considering the alternatives available in the consideration set. Behavioral literature recognizes that the consideration set formation is the outcome of the "search" stage in the decision making process (e.g., Srinivasan and Ratchford 1991), and that this step represents the availability and attractiveness of the alternative brands (Howard and Sheth 1969). Consumers compare between the currently consumed brand and the alternative brands in the consideration set before justifying their decision to repurchase the focal brand. We argue that consideration set size moderates the satisfaction–loyalty relationship because it influences brand comparisons and therefore the justifiability of loyalty decisions. Specifically, large consideration set may weaken the satisfaction–loyalty relationship because of many alternatives available in the consideration set, consumers are exposed to more and varied benefits of different brands (Sambandam and Lord 1995). Therefore, while making the repurchase decision, these additional benefits of different brands make it more difficult to justify the repurchase decision on prior satisfaction alone.

Further, we investigate whether the moderating role of consideration set size is likely to vary under different levels of price consciousness. Price consciousness refers to the degree to which consumers focus exclusively on paying low prices (Lichtenstein et.al. 1993). Price consciousness is the focus of our attention because it directly influences the brand-comparison process and decision justifiability within the consideration set. Specifically, it affects the extent, the type, and the ease of comparisons made between the focal brand and competitors in the consideration set. Thus, we expect that price consciousness will further moderate the effects of consideration set size on the satisfaction–loyalty relationship. Because price consciousness facilitates brand comparisons in consideration sets through increasing the extent of brand comparisons, and reducing the difficulty of the comparison process, we expect the moderating role of consideration set size would be especially salient under conditions of high price consciousness but not under low price-consciousness.

The theorizing in this paper has been based on the argument that people will intend to be loyal to a brand only when they have strong reasons to justify it and it is consistent with past research in decision making (Inman and Zeelenberg 2002). We argue that decision justification will drive the moderating roles of consideration set size and price consciousness. We formally test this underlying theoretical mechanism through mediation analyses.

To test our theoretical hypotheses, we conducted four separate studies. In the first study, hypotheses were tested on proprietary data obtained from a market research company. The data consists of multiple brands in the retail gasoline category across several geographic markets (N = 5,365). We used mixed effect models to analyze the data. The correlation between all the independent variables was very low. The results from study 1 showed significant three-way interaction of satisfaction, consideration set size, and price-consciousness on brand loyalty as hypothesized ($b = -.04$; $t = -1.98$, $p < .05$). Specifically, consideration set size moderates the satisfaction–loyalty relationship only under conditions of high price consciousness.

Next we conducted a series of laboratory experiments to strengthen the internal validity and to test the underlying theoretical mechanism of decision justifiability. In Study 2, we replicated the results from the secondary data using the same product category but in a controlled experimental setting. In Study 3, we tested the robustness of our theory using a different product category (hotel) as well as an alternative operationalization of brand loyalty. In addition, we examined the mediating role of decision justifiability. While price consciousness was measured in the first three studies, we experimentally manipulated this variable in Study 4 to rule out alternative explanation through enhanced experimental control. All three experiments were based on a 2 (satisfaction) × 2 (consideration set size) × 2 (price consciousness) between-subjects design. We subjected brand loyalty to a 2 × 2 × 2 ANCOVA, with variety seeking, product familiarity, scenario credibility, and effort included as covariates. We successfully replicated complex three-way interaction of satisfaction, consideration set size, and price consciousness in these experiments. The predicted 3-way interaction among satisfaction, consideration set size, and price consciousness was significant in Study 2 ($F (1, 241) = 4.91$, $p < .05$), Study 3 ($F (1, 229) = 4.72$, $p < .05$), and Study 4 ($F (1, 200) = 4.27$, $p < .05$), supporting the moderating role of consideration set size and price-consciousness in the satisfaction–loyalty relationship. Further, following the procedures suggested by Baron and Kenny (1986), decision justifiability was shown to fully mediate the above 3-way interaction (Study 3; Sobel test: $z = 2.21$, $p < .05$).

In summary, this research extends the extant satisfaction literature and suggests a new contingent model based on brand comparison and decision justification. Across four studies, we find consistent support for the moderating roles of consideration set size and price consciousness in the satisfaction-loyalty relationship, as well as the mediating role of decision justification.

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Organizing Products with Complements versus Substitutes: Effects on Effort, Assortment Perceptions and Store Preference

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Retailers increasingly display complementary products from different product categories together rather than grouping items by product type. For example, "Rooms to Go", a furniture retailer, displays its entire assortment in complete room settings. Retailers believe these complement-based organizations better reflect how consumers think about products (Schiesel 2007).

However, little is known about how organizing products with complements as opposed to substitutes *actually* affects purchase experiences or store preferences. Most prior research has focused on the organization of products in a *single* product category (e.g., Morales et al. 2005; Poynor and Diehl 2009; Simonson, Nowlis, and Lemon 1993). Moreover, conventional wisdom suggests that presenting complementary products together can increase sales of these additional products (Russell et al. 1999), which has been the focus in prior research as well (Drèze, Hoch, and Purk 1994; Goldsmith and Dhar 2008). Extending this, we examine how complement-based organizations affect effort and assortment perceptions, the search process itself, and future store preferences. Holding the underlying assortment constant, we compare substitute-based organizations (i.e., grouping products from the same product category) with complement-based organizations (i.e., grouping complementary products). We focus on situations where consumers are interested in purchasing a single product from a given product category.

Consumers' effort perceptions may be higher in complement-based than substitute-based organizations, for three reasons. First, complement-based sets increase the physical distance between target products from the same category, and thus the effort needed for comparing products. Second, consumers may actively browse complementary products (Moe 2003). Third, the mere presence of complements may be distracting and occupy processing resources (Janiszewski 1998).

Yet, complement-based organizations may also generate positive assortment perceptions. These organizations expose consumers, even just incidentally, to a greater number of product categories. Consumers may value this perceived wider selection (Iyengar and Lepper, 2000). Furthermore, complement-based organizations may convey meaningful cues as to when a given product can be used (Englis and Solomon 1996), which can be attractive.

Heightened effort and improved assortment perceptions might draw consumers away from or toward complement-based stores. We argue that enhanced assortment perceptions should outweigh increased effort. After all, consumers chronically discount the pain of future effort (Zauberman and Lynch 2005) and may not weigh effort heavily in future store choices. Additionally, when consumers think about future choices, desirability aspects tend to have bigger effects than feasibility aspects (Liberman and Trope 1998). This suggests that assortment perceptions (desirability aspects of store choice) outweigh effort perceptions (feasibility aspects). Thus, we predict that when choosing a store for future purchases, consumers prefer complement-based stores over substitute-based stores.

We test our hypotheses in four studies. In study 1a, participants choose a shirt from a paper catalogue featuring female clothing, either presented in substitute-based sets (i.e., shirts together) or in complement-based sets (i.e., as outfits). Each catalogue contains product from seven other categories in addition to shirts (pants, skirts, bags, etc.). Results show that the complement-based organization indeed leads to both higher effort and higher assortment perceptions, than the substitute-based organization.

This is followed by study 1b, which teases apart the effect of physical distance. Participants choose a pair of pants from a computerized store featuring either 8 pants on a single page, 8 pants on separate pages, or 8 pants on separate pages and surrounded by complementary products. Results show that physical distance alone does not significantly increase effort perceptions, whereas adding complementary products does. Effects on assortment perceptions are replicated.

Next, study 2 generalizes and extends our results, using a different product category (digital cameras), which is gender neutral and more suitable to examine attribute information acquisition. Participants choose a digital camera from a computerized store carrying five cameras and products from four other categories in a substitute-based or a complement-based organization. Information on product attributes and price could be acquired separately for each camera. Replicating prior findings, participants spend more time making a decision in a complement-based as opposed to a substitute-based organization, and find that decision to be more effortful. Yet, they examine a smaller number of unique cameras, and also acquire less product and price information. Heightened effort perceptions in the complement-based organization are explained by longer decision-making times, which in turn appear to be due to the distracting presence of complements. Finally, assortment perceptions are marginally higher in the complement-based condition.

In study 3, participants go on two computerized shopping trips, buying pants at both a substitute-based and a complement-based clothing store in counterbalanced order. Participants answer questions about both retailers and decide which store to return to for buying additional products. We replicate our prior findings with respect to time in store, number of unique products examined, search of product information, effort perceptions, and assortment perceptions. Additionally, participants report extracting more information from surrounding complementary products in the complement-based store than from surrounding substitutes in the substitute-based store. This suggests that although participants acquire less information about fewer target products, they extract different information. Complementary sets may provide information about context of usage and co-consumption of the product (Englis and Solomon 1996), which may be important in determining consumption utility. Furthermore, participants overwhelmingly (67%) prefer to return to the complement-based store, due to more positive assortment perceptions. This runs counter to the intuitive idea that retailers should avoid more effortful and demanding organizations, but appears potentially more in line with research showing consumer may experience an increase in control or confidence after spending effort (Kottemann et al., 1994).

Summarizing, our research shows that consumers find complement-based organizations more effortful, not because they actively examine a larger amount of information, but because they become distracted by the sheer presence of complementary products and spend more time in the store. Our study focused on situations when consumers are interested in buying from one product category only, and the question whether effort perceptions also increase when consumers want to buy from multiple categories remains open for future research. Yet, interestingly, we see that even after experiencing heightened effort in our purchase context, consumers do not avoid, but rather, prefer complement-based to substitute-based organizations.

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The Out-of-Region Bias: Distance Estimations Based on Geographic Category Membership

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Consumers often need to make distance estimations. For example, before going shopping, a consumer might estimate the distance of different stores from his/her home and pick the one that he/she thinks is closest. Similarly, long distance traveling (e.g., from one region of a country to another) often requires estimation of travel distance and time in order to better plan the trip and to make decisions about how much one is willing to pay for that travel. Making distance estimations accurately helps consumers minimize both travel time and travel cost, two key goals in a society that is both increasingly pressed for time and concerned about rising energy costs. More efficient travel decisions also help consumers and businesses use energy resources more efficiently, an issue important to many individual consumers and companies, as well as to public policy makers.

Despite their importance across a variety of consumer decisions, distance estimations are prone to biases that may lead consumers to make suboptimal decisions (Krishna, 2007). For example, Raghubir and Krishna (1996) identified the direct-distance bias, demonstrating that consumers employ direct distance estimations rather than path distance estimations when deciding which route to take between two points. As a result, they tend to prefer a route that is shorter in terms of the direct distance between the two end-points to an alternative route that is shorter in terms of the path distance, thereby increasing the total distance traveled. Consumers have also been shown to rely on travel time rather than travel distance when deciding which route to take, mainly because travel duration is more accessible in memory (Kang, Herr, and Page, 2003). Finally, consumers estimate longer travel time for locations that are north of the originating point compared to locations that are south of the starting point due to a "north is up, south is down" intuition (Nelson and Simmons, 2009).

In the present research, we add to the body of research on distance estimations by exploring the impact of spatial categorization on consumers' estimations of the distance between two geographic locations. In doing so, we demonstrate another bias that influences consumers' distance estimations, a bias we term the "out-of-region bias." The out-of-region bias refers to the fact that people tend to estimate two locations (e.g., retail stores) within one geographic region (e.g., a city) to be closer to one another than two locations in separate regions (i.e., two different cities). Our central hypothesis is therefore that locations in separate geographic categories (i.e., geographic regions) will be estimated to be farther away from each other than locations within the same geographic category even in the absence of visual cues. This prediction is based on the fact that geographic categories are stored in long-term memory and usually do not have visible boundaries. Our research therefore extends previous research on spatial categories (Allen, 1981; Burris and Branscombe, 2005) that has shown similar biases based on visible boundaries (e.g., borders, intervening points). In our studies, we demonstrate that the out-of-region bias occurs when visible boundaries are not present. Therefore our research is the first to investigate the effect of mere category structures on distance estimations. We test our hypotheses about the effect of the out-of-region bias on distance estimates across two studies. We also extend the literature on distance estimation biases by demonstrating that such biases impact not only distance estimations but also subsequent consumption decisions (i.e., store choice in study 1 and willingness to pay for travel in study 2).

In study 1, we demonstrate that participants are more willing to visit a store located in the city in which they live rather than a branch of the same store located in a neighboring city because they mistakenly think that a location in their city is closer to home than a location in a neighboring city. As a result, when consumers make travel decisions solely based on the city in which a given retail outlet is located, individuals may make suboptimal decisions, travelling greater distances than necessary to visit the desired store. In other words, just as other biases can lead to suboptimal decision

making, the out-of-region bias can lead consumers to make inaccurate distance estimations when two locations in different regions are actually closer to one another than are two locations in the same region.

In study 2, we show that the out-of-region bias leads consumers to express higher willingness to pay for an airline ticket that involves travel across versus within regions because they inaccurately estimate greater distance between cities that are located in different regions (vs. the same region). Importantly, when individuals in this study were provided with a map on which to base their judgments, the out-of-region bias is ameliorated, indicating that the bias does not occur due to online perceptual judgments. We also demonstrate that the effects we observe are distinct from on-line distance distortions (Burris and Branscombe, 2005) and that the bias is indeed due to spatial geographic categorization rather than other types of categorization. Finally, we show that the effects of the out-of-region bias are independent of such individual difference variables as need for cognition and travel experience.

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The Balance Metaphor and its Effect on Choice
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According to research on embodied cognition, our understanding of abstract concepts is grounded in physical experience (Lakoff and Johnson 1999). Metaphorical language ("warm" personality, idea "doesn't hold water") strengthens the association between perceptual motor experiences and abstract concepts.

One of the most pervasive metaphors is balance (Zaltman & Zaltman 2008). People eat a "balanced" meal; Lady Justice holds a balance; we strive for a good work-life "balance". Because physical balance is metaphorically associated with several abstract domains, we expect that the activation of physical balance will alter people's conceptual interpretations of stimuli, and thereby affect decisions.

Specifically, we expect that the balance metaphor will alter the way study participants react to choices with a compromise option. We hypothesize that activation of the balance metaphor will intensify the desire for balance, resulting in increased choice of the compromise option. To our knowledge, this represents the first empirical demonstration of the effect of the balance metaphor on choice behavior. The pervasive nature of the metaphor is evidenced by the variety of ways we successfully activate it—through physical activity (study 1), display of balance pictograms (study 2), mental simulation (study 3), and recall of experience (study 4). Additionally, we find that the activation of the balance metaphor and the choice behavior do not need to co-occur (studies 3 and 4).

In study 1, we investigated how the physical experience of balance impacts choice behavior. Participants verbally selected from a set of three options while performing a physical task. The physical task was one of three games on the Wii Fit™--Yoga (Tree Pose), Jogging, and Penguin Slide. We picked two balance activities—Yoga and Penguin Slide. Because Yoga and Penguin Slide require physical balance, the balance metaphor should be activated and increase choice of the compromise option. During the task, participants were asked to choose a car and then a printer from a set of three options.

As hypothesized, participants performing Yoga and Penguin Slide chose the compromise printer more than the Jogging participants (40% vs. 23%). They were also more likely to choose the compromise car (55% vs. 38%). The pooled test was significant ($t(79) = 2.51$, $p = .01$). Additionally, the balance tasks activated more thoughts on balance than the Jogging task ($t(79) = 8.08$, $p < .0001$), and we rule out the alternative explanation that the choices were due to differences in task difficulty ($t(79) = .02$, $p = .98$).

In Study 2, we activated balance via simple pictograms. In the balance condition, the four corners of the web survey displayed a balance. In the control condition, no pictogram was shown. The survey asked participants to make six meal choices. In each choice, participants saw two potential meals showing an appetizer and entrée. As hypothesized, participants in the balanced conditions were more likely to choose the balanced meals than participants in the control condition (68% vs. 56%, $t(399) = 2.3$, $p = .02$). Debriefing revealed that a majority of participants remembered seeing the balance pictograms, but none of them thought the pictograms affected their choices.

Study 3 manipulated balance incidentally. In the first part of the experiment, participants mentally simulated one of three physical actions. The mental simulation asked participants to picture themselves walking across a balance beam in perfect balance (balance condition), walking across a balance beam with poor balance (imbalance condition), or swinging around a high bar (control condition). Pre-tests showed that the three simulations did not differ on ease of imagery invoked ($p = .24$), but differed significantly on the degree to which they activated thoughts of physical balance ($p = .0002$).

We included two separate balance conditions to provide evidence for our proposed mechanism. Because balance is known as a "deep" metaphor (Zaltman & Zaltman 2008), we expect the activation of physical balance of any type, whether in the balance or imbalance condition, to subsequently activate the balance metaphor and affect choice. Thus, both the balance and imbalance condition should show an increase in compromise choice. If only the balance or only the imbalance condition shows increased compromise choice, an alternative mechanism might be responsible.
After undertaking the mental simulation, all participants chose from a set of three computers. This procedure added an intertemporal dimension to the activation of balance, demonstrating its ability to survive a delay. Evidence supported our hypothesized mechanism of a general activation of the

balance metaphor. In both balance conditions, choice of the compromise option (63% and 66%) was higher than in the control condition (45%), *p* = .04.

In Study 4, we aimed to show that both indirect and direct activation of the balance metaphor lead to the same effect, an increase in compromise choice. We manipulate either physical or metaphorical balance in a 2X2 factorial design. Physical balance was manipulated through simulation of a physical balance event (the balance condition from Study 3) or a physical event unrelated to balance (the control condition from Study 3). Metaphorical balance was manipulated directly by asking participants to write for three minutes about a time when their life was "out of balance". The control condition asked them to write about their typical day. Then, participants chose one of three computers described on two attributes. Thus, we have three conditions that activate balance (physically only, metaphorically only, physically and metaphorically). All three of these conditions should activate the balance metaphor and have a higher incidence of the compromise choice than the control condition. The hypothesized contrast between the three balance conditions and the control was significant (69.8% vs. 50.0%, *p* = .03). No contrast among the three balance conditions was significant.

Experiencing physical balance activates the balance metaphor, which changes people's conceptual interpretation of stimuli. We demonstrate the impact of the balance metaphor in multiple domains including computers, cars, printers and meals. Physical balance can be activated through pictures, mental simulation, or action, and all three methods of activation lead to a tendency to choose the balanced option.

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Session 7.6

Enhancing New Product Acceptance by Facilitating Extreme Incongruity Resolution
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Superior favorability ratings for moderately incongruent products over extremely incongruent ones seen under some conditions have been attributed to consumers' facility for resolving moderate incongruity (e.g., Mandler 1992; Meyers-Levy and Tybout 1989). While this finding suggests that companies launching new products would do well to make incremental innovations, some firms are looking for strategies to enhance product acceptance for radically new offerings. Drawing on the idea that the preference for moderately incongruent products over extremely incongruent product is based on the ability to resolve the incongruity, this research proposes that an extremely incongruent product might be evaluated as favorably as a moderately incongruent product provided that consumers have the ability to resolve extreme incongruity, and thus make sense of the new offering. This research proposes two ways to facilitate resolution of more extreme incongruity by increasing consumers' cognitive flexibility: (1) positive versus neutral affect and (2) a future versus past frame.

Prior work on positive affect suggests that positive affect facilitates flexible thinking (e.g., Isen and Daubman 1984; Isen et al. 1985, 1987). In other words, positive affect broadens perspective and thus helps people to relate and bring together divergent materials in a useful way. Similarly, recent work on temporal frame shows that people used broader (vs. narrower) sets of information when a product launch was described as a future (vs. past) event (Jung Grant and Tybout 2008). Taken together, these streams of research suggest that both positive affect and a future frame promote processing that can lead to satisfying resolution. Based on the expectation that broadened perspectives would foster cognitive flexibility and facilitate incongruity resolution, we hypothesize that extremely incongruent products will be rated as favorably as moderately incongruent products when participants are induced with positive affect (studies 1 and 2) and when a product launch is described as in the future (study 3).

The first study examined whether people would evaluate extremely incongruent products (alarm clock with voice recognition; smart-chip trash can) as favorably as moderately incongruent products (alarm clock with automatic daylight savings time change feature; soft-touch trash can) when they are induced with positive affect. Participants watched either positive or neutral video clips and then, they evaluated products with varying levels of (in)congruity varies (congruent products vs. moderately incongruent products vs. extremely incongruent products). Results indicated that extremely incongruent products were rated as favorably as moderately incongruent products by those induced with positive affect whereas they were less favored by those induced with neutral affect. The inverted-U effect from prior research was replicated only in the neutral affect condition. In contrast, those induced with positive affect equally favored extremely incongruent products and moderately incongruent products over congruent products. We argue that this enhanced favorability for extremely incongruent products in the positive affect condition was driven by participants' ability to resolve extreme incongruity, due to their increased cognitive flexibility under positive affect. The next study explicitly examined this conjecture.

Motivation for the second study was to replicate the findings of the first study with several extensions (different stimuli and different affect manipulation) and to further investigate the underlying processes. We specifically sought more direct evidence for the mediating role of extreme incongruity resolution. We reasoned that those induced with positive affect would be more likely to make sense of an extremely incongruent product than those induced with neutral affect. To test this, the degree of making sense of a product was measured and used for mediation analysis. Specifically, the difference between the degree of making sense and the perceived typicality of a product was calculated to construct a measure of incongruity resolution. Consistent with our reasoning, results showed that those induced with positive affect rated the extremely incongruent product (vitamin-fortified vodka) as favorably as the moderately incongruent product (vitamin-fortified coffee), while those induced with neutral affect rated the

extremely incongruent product less favorably than the moderately incongruent product. Furthermore, mediation analysis indicated that this effect was mediated by participants' incongruity resolution. However, this enhanced incongruity resolution was found not to be driven by attenuated perceived difference between the moderately incongruent product and extremely incongruent product (i.e. expanded category membership). Rather, the observed effect appeared to be solely driven by the ability to resolve the extreme incongruity.

In the third study, we examined whether a future frame would lead to more favorable ratings for an extremely incongruent product than a past frame. Except for the temporal frame manipulation, the remaining procedure was the same as in study 2. The results supported our hypothesis that the extremely incongruent product was rated as favorably as the moderately incongruent product when the launch was described as a future event (1 year later) while the extremely incongruent product was less favored than the moderately incongruent product when the launch was described as a past event (a few weeks ago). Mediation analysis also showed that this effect was driven by participants' resolving incongruity, rather than a change in categorization.

Our three studies replicate and moderate the inverted-U effect from prior research showing that moderate incongruity elicits the most favorable ratings relative to congruent and extremely incongruent products. Positive affect and a future frame attenuate the difference between moderate and extreme incongruity by eliciting broadened perspectives and therefore greater cognitive flexibility, which fosters incongruity resolution.

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The Congruency of Temporal Perspective with Visualization Aids and its Effect on New Product Evaluation

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Advertisements sometimes ask consumers to look forward and imagine how they could use a new product in the future; sometimes they encourage consumers to think back to their past and visualize applying the new product to past scenarios where the new product would have been useful. How will visualization aids impact new product evaluation under a retrospective versus an anticipatory view? In the new product domain, the common wisdom is that taking an anticipatory view and imagining the usage of a new product in a future scenario leads to higher evaluations than taking a retrospective view (Dahl, Chattopadhyay and Gorn 1999; Zhao, Hoeffler and Dahl 2009). In our work, we draw on research on retrospection and anticipation in terms of people's natural mental construal and use these results to propose different effects of visualization aids for retrospective and anticipatory visualization.

Existing work on retrospection and anticipation has indicated that past events are generally perceived or construed as more detailed and concrete whereas future events are construed as less detailed and more abstract (Krishnamurthy and Sujan 1999; Van Boven, Kane and McGraw 2008). At the same time, existing research on consumer decision making over time has demonstrated that the type of information had the greatest impact on evaluation when it fit consumers' natural mindset in terms of construal levels (e.g., high-level information such as feature upgrade had a larger impact on consumers' purchase intention for a distant future decision where consumers' natural thoughts were at a higher level, whereas low-level information such as coupon had a larger impact on purchase intention in the near future where consumers' natural thoughts were at a lower level (Thomas, Chandran and Trope 2007). Based on these previous findings, we predict that a match of the construal levels between visualization aids and temporal perspective would increase the evaluation of new products. Since people's natural mental construal for the past tends to be concrete, we hypothesize that concrete visualization aids will be more effective in increasing new product evaluation for retrospective visualization. However, since people's natural mental construal for the future tends to be abstract, abstract visualization aids will be more effective in increasing new product evaluation for an anticipatory visualization. In addition, we predict a reversal of this pattern when people's natural temporal perspective is reversed.

We test our hypotheses in three experiments. In all three experiments, the key constructs that we manipulated were level of concreteness of the visualization aids and temporal perspective of the visualization. To manipulate temporal perspective, we asked participants to either relate the target product to a past or future scenario. In terms of level of concreteness of the visualization aids, different operationalizations were used across the three experiments.

In experiment 1, a mock advertisement of a Tablet PC was used as our stimuli. We manipulated concreteness level by providing participants with either one or five examples about using the new product. The results showed that when participants were asked to take a retrospective view and look backwards, concrete visualization aids increased their evaluation of the new product. However, when they were asked to look forward to the future, it was the abstract visualization aid that enhanced product evaluation.

In experiment 2, we used a new technology (Tap & Go PayPass) as our stimuli. According to the construal level theory, usage process-related information was considered to be more concrete and product benefit-related information was considered to be more abstract (Liberman and Trope 1998; Vallacher and Wegner 1987, 1989). Therefore, we manipulated the concreteness of visualization aids by providing participants with either usage process-related aids (i.e., how to use this new technology) or benefit-related aids (i.e. why adopt this new technology). The results fully replicated our findings in experiment 1.

In experiment 3, we manipulated the concreteness of visualization aids by providing a similar activity of using a Tablet PC, but describing it with lots of details (concrete conditions) or general wording (abstract conditions). However, in this experiment, we shifted people's natural construal level by instructing them to think more abstractly for the past and more concretely for the future. If the match in construal level was the key driver of our

results in experiments 1 and 2, the effects that we observed in experiments 1 and 2 should be reversed upon shifting participants' natural construal level. Indeed, we found that abstract visualization aids increased retrospective evaluation and concrete visualization aids increased anticipatory evaluation after participants' natural construal level was shifted.

Our work contributes to recent research on visualization and new product learning by demonstrating the importance of the match between the specificity of the visualization aids and temporal perspective on new product evaluation.

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<div align="center">

The Effect of Evaluation Mindset and Mental Construal

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Consumers' initial exposure to information about a new product is critical as this experience plays an important part in determining the success of a newly introduced product. During the initial exposure, information about a new product can be presented at an abstract or a concrete construal level (the abstractness or concreteness of the mental representation of a target object such as product). For instance, information about a new product, in this case, a new cell phone, might be presented at an abstract construal that would elaborate on the desired end result of consuming the product, such as a sense of connection with family and friends (i.e., end). On the other hand, a concrete construal would focus on lower-level issues such as what voice and message plans would achieve the desired communication with family and friends (i.e., means; Vallacher and Wegner 1987).

Complementing this research, literature in psychology and marketing suggests that consumers possess abstract and concrete levels of mental construal for objects and events. Abstract thinkers construe information at a higher level and focus on the general meaning, purpose, and desirable end states achieved from engaging in an activity or purchasing a product. As such, abstract thinkers emphasize the superordinate goals of an action (i.e., why they should engage in an action or buy the product) and desirability of an outcome (i.e., the benefits of purchasing a product; Kardes, Cronley and Kim 2006). By contrast, the focal processing of concrete thinkers is at a lower level and primarily revolves around contextual details involved in accomplishing a goal (Hamilton and Thompson 2007; Vallacher and Wegner 1987, 1989). Concrete thinkers focus on subordinate goals or the instrumental means of achieving a consumer action or purchase. They consider the means that lead to the end rather than the end itself (i.e., how they might engage in an action or use a product to achieve a desired end state; Kardes, Cronley and Kim 2006).

 Our research examines how mental construal might enhance or detract from consumers' evaluations of new products. Will compatibility or incompatibility between the construal of new product information and consumers' mental construal lead to more favorable new product evaluations? A considerable body of research on information processing and persuasion investigating the intersection between message and recipient reveals a compatibility effect, that is, messages that are compatible with certain recipient characteristics, such as mental construal, tend to be more persuasive (e.g., Edwards 1990; Lee and Aaker 2004; Wheeler, Petty and Bizer 2005). Along these lines, a recent stream of research demonstrates the compatibility effect in the context of consumers' mental construal (e.g., Kim, Rao and Lee 2009; Trope and Liberman 2003). Specifically, when the construal level of the target object (i.e., whether the object is favorably described at an abstract, higher-level construal vs. a concrete, lower-level construal) is compatible with consumers' own mental construal level (abstract, higher-level construal vs. concrete, lower-level construal), favorable implications for consumer behavior result (e.g., favorable persuasion effect; greater choice likelihood; see Kim, Rao and Lee 2009; Liu 2008).

Yet, we propose that the aforementioned consequences of mental construal compatibility hold only for consumers under a "think-inside-the-box" thoughtfulness evaluation mindset and may not apply to those whose "think-outside-the-box" creativity evaluation mindset is stimulated. Drawing from research on creativity and information processing (e.g., Sassenberg and Moskowitz 2005; Yang and Smith 2009), we posit that consumers with a creativity evaluation mindset are more open-minded when processing new product information, seeking unique information that may be inconsistent with their own level of mental construal. Accordingly, unlike those with a thoughtfulness evaluation mindset who find new products with information compatible with their mental construal more appealing, consumers with an activated creativity evaluation mindset will find new products presented at an incompatible level of construal more compelling.

 We examined our hypothesis across three studies. In all three studies, we asked respondents to evaluate new products presented with abstract versus concrete product information. We employed alternative operationalizations of mental construal (chronic individual difference vs. direct manipulation) and various manipulations of creativity versus thoughtfulness evaluation mindsets. We found that when a creativity evaluation mindset is activated, abstract thinkers provide more favorable evaluations when new product information is presented at a concrete (vs. abstract) level, while concrete thinkers rate the new product more favorably when the product is presented at an abstract (vs. concrete) level, revealing an "incompatibility" pattern. By contrast, when primed with a thoughtfulness evaluation mindset, abstract thinkers find new products presented at an abstract (vs. concrete) level more appealing, while concrete thinkers rate new products with concrete information as more attractive, showing support for a "compatibility pattern." All of our studies are complete, and the data have been analyzed and are consistent with our predictions.

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Session 7.7

Ruffling the Right Feathers When I am Around Others: The Role of Social Goals in Consumers' Service Experience
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It is widely believed that customers often appreciate relationship-oriented approach to service encounters (Price & Arnould 1999). However, little research has been done to test the actual effectiveness of relationship-oriented service approach on customer perceptions of service quality and the likelihood of future patronage. It is not until recently that researchers have start exploring the backlash effect of relationship-oriented service encounters (e.g., Main, Dahl, & Darke 2007). In this line of research, consumers are assumed to be vigilant of the strategies service providers may employ to increase sales and therefore to become quite resistant to potential persuasion efforts (e.g., Main et al. 2007). Therefore, relationship-oriented service approach such as salesperson's flattery (Main et al. 2007) or generous return policy (Estelami & Maeyer, 2002) have been found to negatively affect consumers' service experience and evaluation of service quality when persuasion knowledge or suspicion was activated.

Previous research on backlash effect studies how *cognitive factors* such as cognitive capacity facilitate the activation of persuasion knowledge or suspicion when consumers encounter a friendly salesperson (e.g., Main et al. 2007). However, our research focuses on an understudied area--how *social factors* such as social goals, would affect consumers' evaluations and experiences of a friendly service encounter. This leads us to explore how negative social emotions such as embarrassment would serve as an alternative underlying mechanism (vis-à-vis persuasion knowledge or suspicion) of the backlash effect. Specifically, we explore a service context where a personalized service encounter involves the disclosure of consumers' previous orders. This personalized approach is intended to establish a bond or connection between the service provider and consumer. We argue that when social goals are dormant, a personalized service approach is appreciated and rewarded by customers. However, when social goals are activated by social contexts such as the dynamics between consumers and their dining partners, consumers will persistently and automatically fulfill these goals (Bargh 1982; 2002) by monitoring their surrounding social environment (Edelmann 1981). In this case, if personalized service approach involves disclosure of socially undesirable information about consumers, it will interfere with the pursuit of social goal such as projecting a desirable social image (Leary 1995). Therefore, personalized service approach in this case can evoke negative social emotions such as embarrassment, therefore, leads to negative service experience. We conducted two experiments to test these propositions, using scenario-based service research approach (Chan, Wan, & Sin 2009).

In Study 1, a one-factor (activation vs. absence of impression management goal) between-subjects experimental design was adopted. Participants were asked to imagine either dining with a date (i.e., an impression management goal is activated) or dining alone (i.e., an impression management goal is absent). In the scenario, the server brought up a past conversation with the customers which disclosed a fight with a family member. As predicted, compared to those in dining alone condition, participants in the dining with a date condition experienced a significantly higher level of felt embarrassment (M_{date} = 5.16 vs. M_{alone} = 4.09, $F(1,34)$ = 4.70, $p < .05$), showed less favorable attitude toward the server (M_{date} = 4.16 vs. M_{alone} = 5.07, $F(1,34)$ = 5.45, $p < .05$), and evaluated the service experience less positively (M_{date} = 4.04 vs. M_{alone} = 5.08, $F(1,34)$ = 4.42, $p < .05$). Embarrassment mediated the effect of impression management goal on the evaluation of server and overall service experience.

In Study 2, a 2 (personalization: present vs. absent) by 3 (social goal activation: dining with an old friend, with a date, and with a date who is a fitness instructor) between-subjects experimental design was adopted. A new service context was employed. We added a control condition where personalization is absent. In the new service scenario, the server either recommends a dish and mentions that the dish has been favored by the customer (in personalization condition) or simply recommends a dish (in control condition). We introduced another goal condition (i.e., dining with a date who is a fitness instructor) where multiple social goals are activated (Chartrand et al. 2008). As expected, ANOVA results showed that when social goals were dormant (i.e., dining with an old friend), personalization conditions witnessed more positive service evaluations ($M_{control}$ = 5.10, $M_{personalization}$ = 5.89; $F(1,153)$ = 3.39, $p = .06$) and did not incur felt embarrassment ($F < 1$). However, when the impression management goal was triggered (i.e., dining with a date), personalization evoked higher level of felt embarrassment ($M_{control}$=1.93, $M_{personalization}$ = 3.31, $F(1,153)$ = 9.02, $p < .01$) and did not influence service evaluations ($F<1$). When the specific health image goal was activated in addition to the general impression management goal (i.e., dining with a fitness instructor date), participants displayed even greater sensitivity to the disclosure of past unhealthy choices, experienced a higher level of embarrassment ($M_{control}$ = 2.61, $M_{personalization}$ = 4.43, $F(1,153)$ = 19.48, $p < .001$) and evaluated the service less favorably ($M_{control}$ = 5.39, $M_{personalization}$ = 4.28, $F(1,153)$ = 1.41, $p < .001$).

Moreover, we further examined the effectiveness of recovery strategies and the effect of time in mitigating the negative impact of personalized service when the consumer's social goals are activated. Based on research on emotion regulation (e.g., Keltner & Buswell 1997) and interpersonal relationship (e.g., Roloff & Soule 2002), we propose that: 1) explicit recovery strategies (e.g., directly addressing the problem; the server admitting having mistaken the customer for someone else) may exacerbate the negative emotional experience in the short run; however, these strategies would be effective at repairing a negative service experience in the long run; 2) the pattern is reversed for implicit recovery efforts (e.g., dodging the problem; the server offering a coupon of a free dessert). In Study 3, ANOVA analysis on the evaluation of service experience supported the propositions (explicit recovery: $M_{immediate}$ = 4.80, $M_{delayed}$ = 5.47, $F(1, 92)$ = 3.953, $p <.05$; implicit recovery: $M_{immediate}$ = 5.34, $M_{delayed}$ = 4.71, $F(1, 92)$ = 5.36, $p<.05$).

Taken together, our research demonstrates the power of social goals in transforming consumers' consumption experiences. A common practice such as service personalization can cause embarrassment and negative service experience when it jeopardizes consumers' social goals (e.g.,

impression management goal when certain co-consumers are present). Most interestingly, when it comes to recovery efforts, a server's immediate recognition of the problem and attempt to explain it may exacerbate the embarrassment and the negative service experience. However, these quick and explicit efforts get rewarded in a long run. This research enhances our understanding of consumers as adaptive social beings whose subjective experiences are susceptible to social goals and social contexts.

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Post-Choice Effects of Pre-Choice Uncertainty: Critical Influences of Uncertainty on Satisfaction and Repurchase

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That people make choices under uncertainty is a well-established tenet of decision-making literature. An expansive body of research has illuminated common drivers of uncertainty, coping processes brought to bear during choice under uncertainty, and eventual choice or choice-deferent behaviors. We know far less, however, about how uncertainty affects marketing-critical phenomena that occur *after* a choice is made. It is during this time frame that decision-makers evaluate the "goodness" of their decision and of the selected item and make key determinations regarding satisfaction and repurchase. Thus, an understanding of when and how pre-choice uncertainty is likely to cast a shadow into the post-choice phase is important to both the study and the practice of marketing.

Prior research does not offer clear predictions regarding the post-choice influences of uncertainty. Some research suggests that uncertainty will lead to higher satisfaction or increased repurchase while others argue for the opposite effect. For example, Mishra, Shiv, and Nayakankuppam (2008) suggest that pre-choice uncertainty borne of missing information endows the decision-maker with greater freedom to interpret the realized outcome and propose that this will lead to enhanced outcome evaluations. In contrast, Spreng, MacKenzie, and Olshavsky (1996) propose that such uncertainty leads to "aspirational" outcome expectations that are unlikely to be met, resulting in lower satisfaction. Given the diversity in the propositions from literature, we undertook an empirical investigation of the influence of information-related uncertainty on satisfaction and repurchase. Information availability is a factor that is largely under the control of the marketer. Following the lead of other authors (e.g. Levin, Chapman, and Johnson 1988; Kivetz and Simonson 2000; Mishra et al. (2008); Ross and Creyer 1992), we consider the effects of uncertainty generated by conditions of missing information about product attributes. We also consider possible moderators of observed effects.

The results from three experimental studies and one qualitative study are reported. In studies 1 through 3, participants selected one of three available digital cameras. The level of experienced uncertainty was manipulated by either taking out (high uncertainty) or leaving in (low uncertainty) different pieces of attribute-level information about the cameras. Outcome was manipulated by providing a set of six pictures that were purportedly taken with the selected camera. As suggested by the results of a pretest, a "better" outcome was manipulated by including one bad picture in the set and a "worse" outcome by including three bad pictures in the set. Participants made an initial choice under either high or low uncertainty and received an outcome. Following an unrelated filler task, they made a second selection. Key dependent variables were satisfaction with realized outcome and repurchase behavior in the second choice.

Findings from Study 1 revealed a significant effect of experienced uncertainty in that higher levels of uncertainty generated lower rates of repurchase than did lower levels of uncertainty. Not surprisingly, "worse" outcomes generated lower likelihood of repurchase than did "better" outcomes. Uncertainty also dampened the influence of outcome on satisfaction such that participants were less satisfied with "better" outcomes if they experienced high (vs. low) uncertainty.

In Study 2, we reevaluated the effects of uncertainty and outcome on satisfaction and repurchase. We also evaluated whether similarity/dissimilarity of choice context moderated the observed effects. Such moderation seemed plausible because choice conditions may change over time and render prior experiences (e.g. previous uncertainty or outcomes) less relevant or impactful. The main effects of uncertainty and outcome, observed in Study 1, replicated in Study 2. These effects were qualified by a significant three-way interaction between uncertainty, outcome, and similarity of choice context. When similarity was high, changes in outcome valence exerted a stronger influence on repurchase rates in the high uncertainty condition than in the low uncertainty condition. When choice similarity was low, the opposite pattern emerged. In Study 3, we replicated prior findings and evaluated the influence of need for cognitive closure and the possibility of order effects in our findings. Neither exerted significant influence. Thus, the findings suggest that pre-choice uncertainty exerts a persistent and negative influence on the likelihood of repurchase and on satisfaction with realized outcomes.

In order to better understand the possible mechanisms of the persistent, negative effect of uncertainty on repurchase we conducted a qualitative study in which participants described a situation in which they made a choice under uncertainty. Statements were content-analyzed to identify the stated reasons for uncertainty and the participant's post-choice behavior. Correlation analysis revealed a significant, positive correlation between reports of uncertainty related to missing attribute information and the continued search following the choice. This suggests that pre-choice uncertainty borne of missing attribute information may extend information search beyond the point of choice and into the post-choice phase. Such openness to new information is in line with the "deliberative mindset" described by Gollwitzer, Heckhausen, and Stellar (1990). These authors state that when people hold a deliberative mindset, they are more open to new information and less likely to ignore contradictory information. We propose that high levels of pre-choice uncertainty may extend deliberations into the post-choice phase, reducing the likelihood that any prior choice decision will be adhered to subsequently. Further, new information (such as a bad picture) may be more impactful on satisfaction determination.

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"Happiness" vs. "Satisfaction" Framing Effects in Product Evaluation

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Consumers often ask themselves or are asked by market researchers how they feel about products that they own or are considering for purchase. It is often assumed that consumers simply access or construct their attitude toward the product and report the affect associated with this attitude when prompted to do so. However, there may be occasions when consumers engage in further information processing, particularly when they are concerned about accurately reporting their attitudes. When consumers perform additional information processing, they may either engage in *cognitive validation*, where they attempt to recruit evidence that is consistent with their initial attitude, or *cognitive invalidation*, where they search for evidence to disconfirm their prior attitude. We propose that these two routes of information processing can differentially influence the attitude that consumers ultimately report. We also argue that a novel framing effect may determine whether cognitive validation or cognitive invalidation occurs. Specifically, our claim is that activating the concept of happiness leads to cognitive validation whereas activating the concept of satisfaction generates cognitive invalidation.

In this research, we focus only on those situations when consumers deliberate on their initial attitudes and develop a theory to explain when cognitive validation and cognitive invalidation are likely to occur. We posit that reflecting on one's attitude toward a product can generate different metacognitions. Consumers may feel relatively confident in their initial attitude (be it favorable or unfavorable), which we argue would cause them to seek out evidence from memory that is consistent with their initial attitude. Conversely, when consumers feel uncertain about their initial attitude, they search for evidence to disconfirm their earlier attitude. We suggest that the frame which consumers adopt when considering their attitude toward a product influences which of these two metacognitions prevail and the type of information processing (i.e., cognitive validation vs. cognitive invalidation) which follows. Across four experiments, we show that activating the concept of happiness [satisfaction] leads consumers to engage in cognitive validation [invalidation], which produces more extreme [moderate] judgments. We provide evidence that initially retrieved attitudes share an affective base with happiness frames. This match generates stronger metacognitions (e.g., greater confidence in one's initial attitude) and leads to cognitive validation. On the other hand, initial (affectively based) attitudes mismatch with the more cognitive satisfaction frame, resulting in weaker metacognitions and prompting cognitive invalidation.

There is some basis in the literature to support our view that happiness and satisfaction might vary along the affect-cognition dimension. A number of researchers have suggested that satisfaction and happiness map onto distinct affective and cognitive mental systems. Andrews and McKennell (1980) produced correlational evidence that happiness is more a function of past affective experiences than satisfaction. Others have hypothesized that the term *satisfaction* is highly cognitive with an evaluative tone (Brief and Roberson 1989; McKennell 1978; Organ and Near 1985). As a result of its cognitive basis, we surmise that a satisfaction frame may make consumers less accepting of their initial attitudes, which are typically based more on affect and less on reason. Thus, we hypothesize that satisfaction frames are more likely to encourage consumers to engage in cognitive invalidation whereas happiness frames prompt them to seek validation. We test these predictions in four empirical studies.

We conducted our first experiment in a field setting, since we believe that this research has important implications for market researchers. Participants were members of a museum who were randomly presented with one of two different surveys to complete. Based on pre-tests, most members considered their memberships to be generally attractive. Those in the product satisfaction [product happiness] condition were instructed to consider their satisfaction [happiness] with their museum membership. All participants then indicated their likelihood to renew their membership upon expiration. Consistent with our theorizing, participants in the product satisfaction condition were *less* likely to renew their membership than participants in the product happiness condition. To examine the relationship between frame type and (in)validation, participant thought listings were classified as one-sided (i.e., only positive thoughts were listed) or mixed valence (i.e., including both positive and negative thoughts). We determined that the relationship between frame type and renewal likelihood was fully mediated by thought valence. Our mediation analysis suggests that the greater propensity of those in a happiness frame (versus those in a satisfaction frame) to engage in one-sided thinking (presumably as a result of cognitive validation) may explain the more favorable behavioral intentions.

The primary objective of Experiment 2 was to provide initial support for our claim that product evaluation sometimes progresses in two stages: attitude retrieval followed by cognitive (in)validation. We believe that cognitive (in)validation (stage 2) is more cognitively effortful than attitude retrieval (stage 1). Thus, we anticipate that under conditions of low cognitive load (when cognitive resources are available), participants who assume a product happiness frame will generate more extreme evaluations than participants given a product satisfaction frame. However, under conditions of high cognitive load, we predict that sufficient resources will be unavailable for cognitive (in)validation to occur, resulting in undifferentiated product evaluations. We found support for these predictions in Experiment 2, using a 2 (frame type: satisfaction, happiness) x 2 (cognitive load: high, low) between-subjects factorial design. When asked to keep a 7-digit number in mind (high cognitive load) while evaluating their television set (a pre-tested generally attractive product), participants given a happiness frame evaluated their television no differently from participants who encountered a satisfaction frame. However, when cognitive load was low, those in the happiness condition generated more favorable product evaluations.

In Experiment 3, we directly manipulated product attractiveness using a 2 (frame type: satisfaction, happiness) x 2 (product attractiveness: high, low) between-subjects design. Participants first read a brief product review of an attractive or unattractive fictional camcorder. After reading the review, participants were asked to reflect on their likely satisfaction [happiness] with the camcorder. Next, all participants indicated the maximum price that they would be willing to pay (WTP) for the camcorder. As predicted, we found a significant interaction between frame type and product attractiveness. When the camcorder was attractive, participants in the happiness condition were willing to pay more than participants in the satisfaction condition. However, when the camcorder was unattractive, participants in the satisfaction condition were willing to pay more for it than

those in the happiness condition. These findings support our proposal that product happiness frames lead to polarized evaluations, while also ruling out a strict affective interpretation of our earlier data, since an affective-based explanation would predict that reflecting on happiness enhances evaluations irrespective of product attractiveness.

In Experiment 4, we provide additional evidence that metacognitions about one's initial attitude are responsible for subsequent cognitive validation or invalidation.

From a theoretical standpoint, a primary contribution of this work is to shed light on how satisfaction differs from happiness. Unlike extant work which has focused on the effects of being in different affective states (e.g. happiness), we study how simply activating the concept of happiness and satisfaction influences evaluations and subsequent behavioral intentions. We provide converging evidence that happiness and satisfaction frames may determine whether cognitive (in)validation of an initially retrieved attitude occurs. This research also has substantial managerial relevance, since current market research has focused predominantly on assessing product satisfaction. We propose measuring product happiness (i.e., reflecting on one's happiness with a product) as a novel alternative to measuring product satisfaction. Product happiness merits further consideration from marketing practitioners since it may lead to more favorable behavioral consequences under certain circumstances (e.g., when consumption experiences are generally positive). Further research should explore this intriguing possibility.

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Active Bidders versus Smart Bidders: Do Participation Intensity and Shopping Goals Affect the Winner's Joy in Online Bidding?
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Imagine two consumers, Michael and Jessica, shopping on eBay. Michael actively bids, counterbids, and ultimately wins the item, whereas Jessica waits until the last moment, places a single bid right before the auction ends, and wins. Who has the most satisfying buying experience, Michael or Jessica? Now, further imagine that before he started bidding, Michael had been searching eBay for a specific product – say a particular brand of digital camera, while Jessica had been browsing the site with no particular goal in mind, had accidentally encountered some nice sunglasses, and had decided on the spot to bid on them. Again, which shopper would be more satisfied? Would it be Michael after his searching and multiple-bidding experience, or would it be Jessica after her browsing and single-bidding experience? Consider another scenario: What if they were buying the products not for themselves but as gifts for someone else? Would that affect their pleasure in winning?

In Study 1, we contrast two lay theories of how consumers draw affective inferences about their buying experiences: the active-bidder hypothesis and the smart-bidder hypothesis. *Active Bidder Hypothesis* (H1.1) presumes that bidders use the effort heuristic (i.e., the more effort invested, the greater the satisfaction experienced), and thus predicts that: An active bidder who bids multiple times and wins the item will exhibit more positive affect than will a smart bidder who bids only once at the last moment and wins the item. On the other hand, *Smart Bidder Hypothesis* (H1.2) predicts the opposite: bidders use the efficiency heuristic (i.e., the less the cost, the greater the satisfaction experienced), and thus a smart bidder who bids only once at the last moment and wins the item will exhibit more positive affect than will an active bidder who bids multiple times and wins the item. Participants in the active-bidder condition were led to believe that on eBay *they* were bidding multiple times over several days (Figure 1), whereas participants in the smart-bidder condition watched *other buyers* bidding but waited until the last moment (Figure 2). As the bidding became more competitive in the last few hours, participants in the active-bidder condition placed the *last* bid one minute before the auction ended, and won the item for $250, whereas participants in the smart-bidder condition placed the *first* and *last* bid one minute before the auction ended, and won the item for the same price, $250.

The results from Study 1 (Figure 3) supported the smart-bidder hypothesis (i.e., the efficiency heuristic) but not the active-bidder hypothesis (i.e., the effort heuristic), suggesting that online bidders who win the target item with minimal effort feel happier than those who win the same item with active participation in the bidding process.

Figure 1: An example of the bidding history of an active bidder
(Note: The target bidder, tombryant123, is denoted in red, while other bidders are denoted in blue with underlines.)

2 minutes till the bid closes!!

Bidders: 32	Bids: 83	Time Left: 2 minutes
Bidder	**Bid Amount**	**Bid Time**
tombryant123(45)	US $217.00	Feb-05-08 13:38:55 PST
andy65guitar(90)	US $215.00	Feb-05-08 13:38:50 PST
tombryant123(45)	US $214.00	Feb-05-08 13:38:19 PST
andy65guitar(90)	US $213.94	Feb-05-08 13:38:09 PST
tombryant123(45)	US $212.00	Feb-05-08 13:38:00 PST
backintothepast(696)	US $211.00	Feb-05-08 13:38:19 PST
andy65guitar(90)	US $210.94	Feb-05-08 13:38:09 PST
tombryant123(45)	US $209.00	Feb-05-08 13:38:00 PST

Figure 2: An example of the bidding history of a smart bidder

Figure 3: Active vs. Smart Bidders for LCD TV
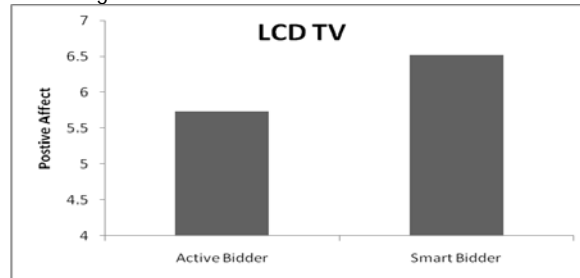
In Study 2, we propose that the extent to which auction bidders rely on the efficiency heuristic would be magnified when they have loosely defined shopping goals (*browsing mode*), but would be mitigated when they have concretely defined shopping goals (*searching mode*). Thus, H2 predicts that the heuristic-guided effect observed in Study 1 will be present if the consumer is in the browsing mode, but absent if the consumer is in the searching mode. We employed a 2 (Active Bidder vs. Smart Bidder) x 2 (Browsing Mode vs. Searching Mode) between-subjects design. Participants in the browsing mode condition were told that they were browsing on eBay and that they did *not* have a particular product in mind, and gradually narrowed the search to the target product: the ClearPhoto-Z360 digital camera. In the searching-mode condition, participants were searching for a digital camera and because they *did* have a particular product in mind, they typed into the search box the particular brand and model, ClearPhoto-Z360.

As shown in Figure 4, Study 2 replicated the findings from Study 1 using a different product: digital camera. More importantly, the results from Study 2 demonstrated that the smart-bidder effect was present when the bidder was in the browsing mode, but this effect was absent when the bidder was in the searching mode.

Figure 4: The Bidder x Mode Interaction for Digital Camera
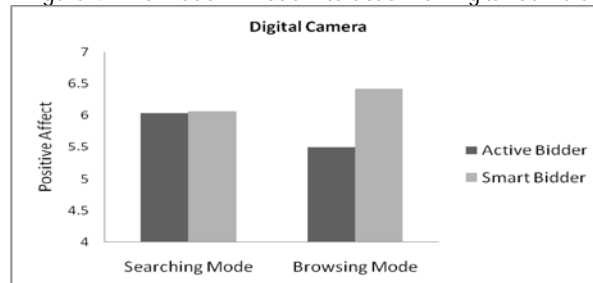
Study 3

In Study 3, we suspect that the effects of concrete versus loose shopping goals and high versus low participation on satisfaction (H2) might disappear when the bidding involves pursuing the item for someone other than the bidder. Thus, H3 predicts that the two-way interaction effect specified in H2 will be present if the consumer bids for the target product as a gift for oneself, but absent when the consumer bids for the target product as a gift for someone else. We employed a 2 (Active Bidder vs. Smart Bidder) x 2 (Browsing Mode vs. Searching Mode) x 2 (Gift for Oneself vs. Gift for Loved One) between-subjects design.

Participants were randomly presented with one of 8 scenarios, and were asked to imagine that they were browsing (searching) for a gift for *themselves* or a gift for *a loved one*, and they narrowed the search to the target product: CoolGlass-DC202.

The results from Study 3 (Figures 5 & 6) confirmed that the smart bidder effect was moderated by the browsing/searching mode. Study 3 also demonstrated that the moderating relationship between the high versus low participation rate and the browsing versus searching mode was again moderated by the third variable: the purchase for oneself versus the purchase for others.

Figures 5 & 6: The Bidder x Mode x Recipient Interaction for Sunglasses
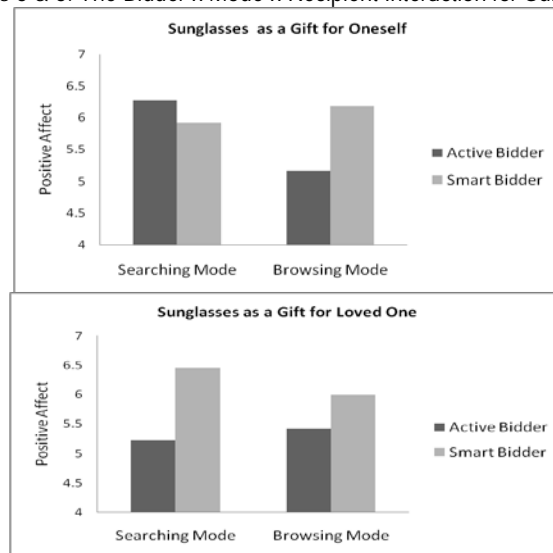
Our findings generally supported the smart-bidder hypothesis, rather than active-bidder hypothesis, across three different product categories: LCD TV, digital camera, and sunglasses. However, this heuristic-driven effect was not observed when bidders have a concrete shopping goal that can be switched on by being in the searching (vs. browsing) mode, which in turn can be switched off when the consumer is bidding for a gift for someone else (vs. for their own use). But when either of these two necessary conditions (i.e., searching and buying for self) was unmet, the heuristic-driven, smart-bidder heuristic became dominant.

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Session 8.1

The Use of Humor in Promoting Healthy Eating in Children: A Web-Related Intervention
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Laurette Dubé, McGill University

In the second part of the 20th century, an alarming increase in obesity rates has occurred throughout the world among young people[1], largely due to the ubiquitous availability of high-calorie low-nutrient foods and to reduced physical activity[2]. In North America, children have almost universal Internet access[3,4] and thus Internet-based interventions hold great promise because of their reach[5]. Consequently, the goal of this paper is to test the effectiveness of peripheral communication appeals, i.e., humor appeals, renowned to make information more enticing and more likely to be fully explored, in a web nutrition intervention developed to improve tween's dietary habits. The moderating role of parent-child relationships and gender, two variables known to influence lifestyles and choice[6,7], will also be investigated.

Humor, a fundamental ingredient of social communication[8], is the most common employed strategy in advertising[9] and wildly used in educational settings[10,11] because of its persuasive outcomes. Research shows that humor increases attention[12,13], memory[14,15], liking and enjoyment[13], and provokes laughter which facilitates approach behaviors[16,17] and decreases counter-argumentation[12]. Consequently, due to the persuasive qualities of humor appeals, we hypothesize that children in the humor (vs. neutral) appeal condition will be more likely to improve their dietary habits.

Gender mediates humor appeal effectiveness. As such, humor appeals are more effective with younger male populations[13] and fare better in promoting the adoption of healthy lifestyles in males (vs. females)[18] because humor appeals are in line with males' cognitive processing which relies on distraction as a main coping strategy[18-19]. Consequently, we hypothesize that humorous appeals will be more effective in influencing the dietary habits of boys than girls.

Attachment styles are formed in infancy and reflect caregivers' responsiveness to children's proximity-seeking attempts[20]. Optimal responses to proximity-seeking bids develop into secure attachment styles, promoting a sense of being worthy of care, while caregivers' unavailability or unreliability in providing comfort and soothing develop into insecure attachment styles[21]. Attachment styles influences exploration in children, with securely (vs. insecurely) attached children being more likely to engage in exploratory activities[22]. Thus, we hypothesize that humor, through its persuasive qualities, will increase the enjoyment and exploration of insecurely attached children making them more likely to explore healthy nutritional alternatives, and putting them on par with securely attached children.

Participants were 76 children (46 girls; 25 boys) aged 8-12 recruited from 28 primary schools in a major Canadian city. Within each class students were randomly assigned to a humor or neutral appeal condition. Children logged on twice a week from home to complete the online sessions.

The Marathon Nutrition is a 12-session intervention spanning over seven weeks where type of appeal is manipulated, e.g. humor vs. neutral. Content was created in collaboration with Quebec's Comedy School and includes nutritional content from Health Canada, the Canadian Produce Marketing Association and Dietitians of Canada websites.The 1st and 12th sessions of the Marathon are pre- and post-intervention questionnaires. The remaining 10 sessions last 20 minutes each and showcase different nutritional themes where children are taught how to introduce F&V into their everyday diets and, consequently, how to decrease high caloric food consumption. All sessions follow the same format: introduction of nutritional theme by virtual coach, nutritional content, and mini-quiz on content.

Type of appeal is manipulated through the virtual coach named Yip introducing the nutrition concepts. In the humor appeal condition, Yip wears contrasting colors, is shown practicing different sports in humoristic ways and introduces nutritional themes using puns and play on words, whereas, in the neutral condition, Yip wears green garments, smiles kindly, and introduces topics in a serious and direct manner.

Attachment style was measured using an adapted version of the Attachment Style Measure[23] questionnaire. F&V knowledge was assessed as the summative score of 31 fruits and 39 vegetables participants indicated they knew. F&V consumption was assessed as the daily average consumption of fruits, green salad, carrots and vegetables excluding green salad and carrots. High caloric meal (HCM) consumption was assessed as the daily average consumption of seven high caloric meals, e.g., hotdogs, fried chicken, etc…, and high caloric snack (HCS) consumption, as the daily average consumption of six snacks, e.g., chocolate, ice cream, etc....Final outcome scores for F&V knowledge, F&V consumption, and HCM and HCS consumption were all calculated as difference scores by subtracting pre- from post-test scores.

Results showed that participants in the humor (vs. neutral) condition did find the website funnier and laughed more, ps < .05, while, perception of technical qualities and attention did not differ between conditions, ps > .05.

Analyses showed significant main effects of humor for HCM and HCS consumption as well as for F&V knowledge, p < .05, in that children in the humor condition ate less HCM and HCS, and knew more F&V than those in the neutral condition. Results also showed a significant type of appeal by gender interaction for F&V knowledge, p < .05. Split means showed that boys in the humor condition learned more F&V (LSM_{humor} = 14.73 vs. $LSM_{neutral}$ = 3.56) than their counterparts in the neutral condition. Moreover, findings showed significant type of appeal by attachment style interactions for HCM and HCS consumption, ps < .05. Split means for insecure (or low) attachment and secure (or high) attachment showed that, contrary to expectations, humor (vs. neutral) appeals benefitted more children with secure (vs. insecure) attachment styles as shown by a more

marked decrease in their HCM and HCS consumption (HCF: $LSM_{neutral\ appeal}$ = 0.59 vs. $LSM_{humor\ appeal}$ = -0.24; HCS: $LSM_{neutral\ appeal}$ = 0.91 vs. $LSM_{humor\ appeal}$ = -0.19). Type of appeals did not influence F&V consumption.

In conclusion, nutrition interventions capitalizing on humor's persuasive qualities are successful in decreasing less healthy alternatives choices and increasing nutritional knowledge in children. Moreover, humor is particularly beneficial for boys' learning, a population that is less likely to make healthy choices. Future studies should test for more powerful humor manipulations to increase F&V consumption.

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Why Our Kids Are Fat? Nature and Nurture
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The startling growth in the obesity epidemic facing American children has been a leading public health concern over the past several decades. It is becoming clear that the consequences of this dramatic growth in childhood obesity are severe. The childhood obesity epidemic results in not only severe health consequences, but also the attendant medical, psychological, and social costs (Allison, Fontaine, and Naraya 1999; Rippe and Aronne 1998). A considerable body of research has focused on understanding various factors associated with childhood obesity. Past research has identified two main factors associated with childhood obesity: behavioral and environmental factors. Behavioral factors include a sedentary lifestyle and consumption of excess calories, which lead to low energy expenditure and high energy intake, while environmental factors consist of (1) family factors, (2) school factors, (3) community factors, and (4) media factors.

However, these relationships have often been examined individually without consideration for how these factors could jointly contribute or mitigate the effects of each other. Furthermore, due to the limitations of past study samples, it was often not possible to account for the child's psychological traits in these studies. In order to develop more effective intervention programs, we must consider these factors jointly (Davison and Birch 2001) and also test for possible effects of certain key psychological factors. With that in mind, the goal of this study is to develop and test a structural model of childhood obesity by incorporating both children's psychological traits (nature) and environmental factors (nurture) on children's obesity-prevention behaviors. Consumer socialization theory (Moschis and Churchill 1978) is used to explain the relationship between environmental and behavioral factors related to children's obesity-prevention. We postulate that children's behaviors related to obesity-prevention such as (un)healthy eating patterns and physical activities are (1) learned "consumer skills" through the socialization process and are (2) influenced by social agents (i.e., family, school, community, and media). In addition, Metcalfe and Mischel's (1999) hot/cool-system framework is adopted to explain dynamics of will power that influences children's obesity-prevention behavior.

We analyze data on fifth graders from the Early Childhood Longitudinal Study (ECLS-K) conducted by the National Center for Educational Statistics. The longitudinal survey was performed in the fall and the spring of kindergarten (1998-99), the fall and spring of 1st grade (1999-2000), the spring of 3rd grade (2002), 5th grade (2004), and 8th (2007) grade. The ECLS-K used the nationally representative sample of a cohort of children who entered kindergarten in the fall of 1998 from approximately 1000 schools. A multistage probability sample design was employed to select the ECLS-K sample. Information about children was obtained from parents (through CATI interview), teachers (through paper survey) and students (through in-person interview and paper survey). However, we focused on the 5th grade data (2004) because the ECLS-K started to include information on children's food consumption since 5th grade; furthermore, the 7th grade data are not yet available to the public. Among a total of 11,820 students from the 5th grade data, our sample was limited to 9,019 students who attended public schools and provided information on BMI.

For the purpose of testing the proposed model by incorporating multiple factors simultaneously, we use the structural equation modeling (SEM) approach. We first tested the measurement model to examine whether the measurement items have the appropriate properties to represent each construct included in the model. We then evaluated the structural model by examining overall model fit and structural relationships specified in the model. LISREL 8 (Joreskog and Sorbom 1993) was used for evaluating both the measurement and structural models. Multiple-group analysis was used to test a potential moderating effect.

The results from this study provide empirical support of identifying relative importance among multiple factors contributing to childhood obesity. The major findings from our study are: (1) When family, school, community, and media factors are considered jointly, the family factors appear to be the most significant determinants of a child's involvement with (un)healthy eating patterns and physical activities, (2) children's psychological trait such as self-control has consistently shown the most significant impact on children's obesity-prevention behavior, while children's internalizing problem has shown less significance, (3) school factors and community factors have relatively less significant impact on children's behaviors related to obesity-prevention, and (4) maternal work hours and children's gender and race moderate the relationships between environmental factors and children's obesity-prevention behavior..

The findings from our study are important in several ways. First, it might be the one of the first studies to look at the relationship between childhood obesity and multiple factors including both environmental, behavioral factors, and children's psychological traits simultaneously. In so doing, we overcome conflicting past findings based on largely bivariate relationships. Second, the relative importance of family or parental factors contributing to childhood obesity leads to a re-examination of the current intervention programs. More effective education materials and health communication tools targeting parents are critical in improving children's healthy eating and increased physical activities. Third, the significant effect of children's

self-control confirms that school records regarding children's test scores for psychological traits can be used as a tool to evaluate children at being risk of obesity. Political support that aids systematic intervention programs is needed.

While findings from this study may offer vital implications on the prevention of childhood obesity, we acknowledge several limitations of this study and offer possible directions for future research: (1) perform a longitudinal analysis of the models developed in this study, (2) include other potential environmental variables from the comprehensive model, (3) improve the measurements used in our study, and (4) incorporate qualitative insights from parents and children.

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Children's Ascribed Motivations for Smoking Learned via Associative Memory
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Critics of increased regulation on tobacco advertising and promotion seen by children argue that such regulation would result in small, if any, effects in reducing initiation of tobacco use among minors. After all, the argument goes, eight year olds do not smoke, so cigarette advertising is personally irrelevant to them. But this perspective assumes that advertisements must be actively processed to be effective. In contrast, we note that considerable research has documented advertising effects on attitude, even under very low involvement conditions (e.g., peripheral processing, mere familiarity, evaluative conditioning). Taking this perspective, we argue that exposure to cigarette advertisements and media images are likely to be processed and encoded into memory despite the lack of individual salience of tobacco promotional activity in childhood.
Our reasoning is consistent with the *associative processing model* of memory, which is one of the two memory systems proposed by Smith and DeCoster (2000). Associative processing operates preconsciously and automatically (Bargh 1994) and is learned over many experiences. Hence, individuals are typically not aware of the processing itself, but only the results of it. Because tobacco advertising and media images are not likely to be self-relevant to children, we argue that they are processed through such an associative mode.

Furthermore, such associative processing of smoking imagery may produce effects that extend beyond childhood. This is because bias correction is best facilitated when individuals possess both the ability and motivation to reconsider their attitudes). If positive psychosocial associations are learned at a nonconscious and automatic level, then the individual will not likely recognize his or her own biases held in memory, thereby inhibiting the ability to metacognitively reconsider attitudes (Petty and Briñol 2008).

The goal of this study was to aid in generating a theoretical model for the psychological processes involved in children's learning of lifestyle associations with adult-themed products. Given this objective, we pursued our empirical research in the spirit of discovery-oriented research (Wells 1993). Because we suspected that children's lifestyle associations might have been learned implicitly, and because social desirability biases are a threat to validity in substance use research, we employed projective interviewing techniques.

We conducted 271 projective interviews with second and fifth grade children from three different elementary schools. Two varieties of projective stimuli were used to elicit participant responses: print advertisements and pictures of people who have various personal and lifestyle characteristics. Each child saw two ads for cigarettes, which were embedded in a series of five ads (including three unrelated products). For each ad, children were asked to choose select pictures of specific people who might be likely or unlikely to use that product. Each child was probed with follow up questions to reveal the motivations he or she attributed to these people.

In the presentation, we will show: (1) the three images that were most strongly associated with smoking, as these images were attributed with multiple motives for smoking; (2) the four images that were also associated with smoking, and were attributed with one or two motives for smoking; (3) the six images that were strongly associated with non-smoking, and were attributed with motives for non-smoking; and (4) four images that were inconsistently associated with smoking, and were attributed with motives for both smoking and non-smoking. Typically, the second graders had difficulty in articulating these motives, often with responses such as "s/he just looks like s/he would smoke." Therefore, the emergent themes were drawn largely from the fifth grade interview dataset. Nevertheless, the second graders often made many of the same lifestyle associations as the fifth graders.

Qualitative data analysis revealed three broad areas of motives attributed to the characters in the images: social motives, esteem motives, and relaxation motives. Themes within the social motive included smoking for fun in social situations and smoking to impress others, whereas themes within the esteem motive primarily included issues with weight and thinness. Themes within the relaxation motive primarily included needing to escape one's troubles or smoking for leisure. Finally, for one of the images, general inactivity or lack of motivation in general was associated with smoking.

We argue that the similarity of lifestyle picture selections and attributed motivations between the second and fifth graders, in combination with the non-verbal nature of the second graders' associations, suggests that children did not purposefully and thoughtfully develop them. This pattern of data is consistent with the associative processing model of memory, in which advertisements, media images, and personal observations are encoded into memory preconsciously through associative processing.

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What are my Chances? The Persuasive Implications of Using Larger (vs. Smaller) Ratios and Visualization in Public Service Advertisements

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Persuading individuals that a societal issue (e.g., drunk driving) is a problem, thereby increasing individuals' willingness to act in ways that address such problems is the goal of many public service advertisements (PSAs). Oftentimes, these advertisements provide statistical information, such as informing individuals that X-in-10 individuals are affected by the problem. The present research examines (1) the effectiveness of presenting information in smaller numbers (X in 10) to the less common practice of presenting information in larger numbers (Y in 100) in heightening individuals' beliefs that a problem exists, thereby increasing their willingness to act to reduce such problems, and (2) how the use of visual information might reverse the effectiveness of providing ratios in larger versus smaller numbers. I propose that when ratios are provided as text, using smaller (vs. larger) numbers will be less effective in persuading individuals to act. However, when information is provided visually or when individuals are encouraged to visualize the information provided as text, presenting ratios in smaller (vs. larger) numbers will be *more* effective in persuading individuals to act.

According to cognitive-experiential self-theory (CEST), there are two independent processing modes: the rational system, which involves encoding information abstractly as words and numbers, and the experiential system, which involves encoding information in images and narratives (Epstein 1991). These different systems can produce different outcomes in judgments and preferences (e.g., Denes-Raj and Epstein 1994). Likewise, I argue that providing information abstractly as text or by using or encouraging the use of imagery will affect how individuals process ratios. Specifically, when information is provided abstractly as text, individuals are likely to process the information from left to right. Indeed, research indicates that individuals process numbers from left to right (Hinrichs, Berie. and Moseil 1982; Poltrock and Schwartz 1984), thereby leading to the advantage of ending prices in nines than zeros (Schindler and Kirby 1997). If the same effect applies to the processing of ratios presented as text, then individuals should be influenced by the first number presented, and thus perceive there to be less risk (and thus have lower intentions to act) when the ratio is presented in smaller than larger numbers. For instance, when the probability is 10%, individuals will likely perceive there to be less risk when the number of people afflicted is only one (i.e., a 1-in-10 ratio is given) than 10 (i.e., a 10-in-100 ratio is given).

I propose that presenting the same ratios with images will produce the opposite effect. Specifically, according to research on the ratio-bias (RB) phenomenon, when information is conveyed as a loss and processed using the experiential system, individuals consider the likelihood that they can avoid a loss. Thus, they convert the loss information to a gain such that, for example, a 10% loss becomes a 90% "win" (Pacini and Epstein 1999). If a similar phenomenon emerges when visual information is provided or when using visualization is encouraged, individuals should be influenced by the number of people *not* affected, and thus will perceive there to be more risk and thus have higher intentions to act when the ratio is presented in smaller than larger numbers because it will appear that they will have a lower chance of avoiding the problem. For instance, when the probability is 10%, individuals will likely perceive there to be more risk when only nine people avoid the problem (i.e., a 1-in-10 ratio is given) than when 90 people are unaffected (i.e., a 10-in-100 ratio is given).

Three studies were conducted that test these hypotheses by comparing the effects of different advertisements against drunk driving. The first and second study manipulated the ratios (larger vs. smaller numbers: 30-in-100 vs. 3-in-10) as well as information display (visually or textually). The third study held constant the information display as text but varied the ratios as well as the instructions (to visualize the information or not).

Specifically, in the first study, a ratio x information display interaction was significant for both support of stronger penalties against minors caught driving while intoxicated and higher willingness to donate time and money to Students Against Drunk Driving (SADD). As predicted, participants' reported less support for tougher penalties and less willingness to donate to SAAD when ratios were given in text as smaller (vs. larger) numbers. In contrast, participants' reported greater support for tougher penalties and expressed greater willingness to donate to SAAD when ratios were displayed visually in smaller (vs. larger) numbers.

The second study extends that of the first by varying the message source (an expert versus a novice), the numbers used in ratios and information display and examining the effects of these variables on beliefs about the extent to which drunk driving is a problem, how compelling they found the ad to be, and their intentions to perform a difficult behavior (i.e., taking the keys from someone who has been drinking). The results support the hypotheses as well as suggest that, consistent with CEST, regardless of the ad received, participants did not differ in processing involvement: all participants were persuaded more by the expert than the novice, and listed a similar number of thoughts. The third study extends the findings of the first two by testing the role of visualization in explaining the effects. Specifically, participants were presented with either larger or smaller ratios as text and either encouraged to visualize being in one of the 10 (vs. 100) cars or not. The results replicate those of the first two studies, lending support to the important role of visualization in producing the effects.

Collectively, the results of all three studies suggest that how ratios are presented in PSAs is not an arbitrary matter, but can have important implications for consumers' beliefs about the seriousness of an issue and their willingness to act. In fact, the more commonly used tactic of presenting ratios in small numbers and in text (i.e., X in 10) may be underutilizing ratios to convey the seriousness of a problem. Instead, the advertiser should convey this information visually, encourage visualization or use larger numbers.

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Session 8.2

When Adding Goals Is (De)motivating
Jinhee Choi, Korea University*
Ayelet Fishbach, University of Chicago

Any activity can be framed as an end itself or as a means to another end. For example, jogging is a means to the other end if a person jogs to lose weight, whereas it is an end in itself if a person jogs with no goal in mind. Can people experience the same activity differently based on how it is framed? If so, the factor that brings about this difference is whether there is any goal attached to an activity or not. This paper explores the effect of adding goals to an activity on its experience and pursuit.

Adding goals to an activity changes the structure of the activity in a goal system. If there is no goal attached to an activity, it should be positioned as an end itself, but once there is any goal attached to it, it can be positioned as a means to achieve this goal. Accordingly, when doing an activity is a means to another end, we define it as "instrumental," whereas when doing an activity as the end in itself, we define it as "experiential," since the main goal is to experience the activity. Thus, the same activity can be either instrumental or experiential based on whether there are any salient goals attached to it or not. This is related to the previous literature which distinguishes between extrinsic actions, which serve as a means to another end, and intrinsic actions, which are their own end (Kruglanski et al. 2002; Sansone and Harackiewicz 1996). People engage in an extrinsic action because there is some salient extrinsic goal that they expect to achieve. In contrast, people engage in an intrinsic action because the engagement is rewarding on its own and there is no salient external goal attached to the action. Hence, the engagement is the purpose. Notably, this differs from a content-based intrinsic motivation, which assumes an action is intrinsically motivating if it serves specific goal contents (i.e., competence and mastery, Deci and Ryan 1985). Then, how would this influence the activity?

Before engaging in an activity, people need to decide whether the activity is worthwhile to conduct or not, and the goals attached to this activity can signal the importance of the activity. In contrast, if no goal is attached to it and the activity stands out for its own sake, then nothing can signal the importance. Thus, adding goals to an activity renders the activity more important than focusing on the activity itself. And, motivation to initiate the activity is driven by the perceived importance, thus framing an activity as instrumental by adding goals will increase the initiation compared to imposing the same activity as experiential without such goals.

Once engaged in the activity, however, goals attached to an activity render the experience of the activity effortful because it is conducted to achieve these goals, which requires more psychological resources. In contrast, when there are no goals added to an activity, people will do it for its own sake and simply enjoy it, which would not require as many psychological resources. Thus, conducting an activity as instrumental by adding goals is experienced as more effortful and negative compared to conducting the same activity as experiential without such goals. It is supported by the previous literature suggesting that the motivation to engage in an action, whether extrinsic or intrinsic, influences people's experience during and after pursuing the action. Extrinsically motivated actions can be inferred as uninteresting and people might consider them as chores, whereas intrinsically motivated actions are inferred as interesting and people might experience them as goal attainment (Higgins and Trope 1990). Also, when an action is conducted for its own end, it evokes the positive experience of goal fulfillment (Fishbach, Shah, and Kruglanski 2004). Then, the likelihood of people pursuing the same activity afterwards would be influenced by this subjective experience while conducting the activity. Given that the activity framed as instrumental will require much effort and thus be experienced negatively, people will get tired of doing it and be more likely to quit. In contrast, experiential activity without goals will not require as much effort, but rather be enjoyable, and thus people will be more likely to continue it. Thus, framing an activity as instrumental by adding goals will decrease the further pursuit in the same activity compared to framing an activity as experiential.

Three studies demonstrate this effect in various goal-directed activities. Study 1 manipulated workout as experiential versus instrumental by directing people to focus on the workout itself versus focusing on the goals they can achieve by workout. For those not doing workout at the moment, coming up with the goals made people more motivated to initiate the workout compared to simply imagining doing it. In contrast, for those already engaged in a workout, those who focused on the goals (vs. workout itself) subsequently felt more depleted and spent less time on exercising. Study 2 replicates this effect in a less goal-directed activity, doing origami. Doing origami was framed as experiential versus instrumental by leading people to focus on doing origami itself versus focus on the benefits they can achieve by doing it. For those who were not engaged in origami at the time, coming up with the goals made people more interested in initiating it compared to simply imagining doing it. In contrast, after working on the origami, those who focused on the benefits (vs. activity itself) found it less enjoyable and also expressed less interest in doing more origami in the future. Also, negative experience by thinking about the goals mediates the subsequent interest in doing origami. Study 3 replicates this pattern in more goal-directed activity, flossing. Flossing was framed as experiential versus instrumental by leading people to imagine the experience of flossing versus think about the goals they can achieve by flossing. Before engaging in flossing, those who think about the goals were more motivated to initiate flossing compared to those who simply imagined doing it; but once engaged in it, they actually felt more negative and flossed less than those who simply imagined flossing.

Taken together, these three studies provide convergent evidence that that before engaging in an activity, posing an activity as instrumental by adding goals increases the initiation, but once engaged in the activity, it impairs the subjective experience and diminishes pursuit of this activity.

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The Stuck In The Middle Effect

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Achieving a goal often requires engaging in goal-consistent behavior for an extended period of time. For example, losing weight requires sticking to a diet and resisting temptations to indulge for a prolonged period of time. The classic goal-gradient hypothesis (Hull, 1932; see also Kivetz, Urminsky and Zheng, 2006; Nunes and Dreze, 2006) posits that motivation to reach a goal increases monotonically as distance from the desired end-state decreases. Thus, people should be more likely to engage in goal-consistent behavior the closer they are to the desired end-state.

In this research, we posit that motivation to reach a goal is not always a monotonic function of distance from the desired end-state. Specifically, our hypothesis proposes that *motivation decreases when about halfway toward reaching the desired end-state.* Across three experiments, we show that motivation to reach a desired end-state is higher when either far from the goal or close to the goal, and lower when halfway toward reaching the goal. We propose a psychophysical explanation for this tendency to get "stuck in the middle." In particular we posit that motivation to engage in goal-consistent behavior is influenced by the perceived marginal value of progress. The perceived value of an additional unit of progress varies depending on whether an actor monitors progress in terms of distance from the initial state or from the desired end-state.

According to previous research, people can monitor their progress toward a goal in terms of distance from a standard of reference (e.g., miles in running, pounds in dieting, dollars in saving, points in reward programs, etc.), (Carver and Scheier, 1998). Specifically, they can either use their initial state (i.e., their starting point) as the standard of reference, hence consider what they have achieved so far (e.g., to date frame), or they can adopt the desired end-state as their standard of reference, hence consider what they still need to achieve (e.g., to go frame), (Koo and Fishbach, 2008). We suggest that people tend to adopt the initial state as the standard of reference when far from the goal and the final state as the standard of reference when close to the goal. Furthermore, consistent with the psychophysical power law (Stevens, 2000), we suggest that the value of the same unit of progress decreases as the distance from the standard of reference adopted increases. For example, if the goal is to collect 100,000 frequent flier miles, flying 4,000 miles seems a lot when the account shows 5,000 miles (the standard) or when the account shows 95,000 miles (the standard being 5,000 miles to go). The same 4,000 miles, however, seem little when the account shows 50,000 miles because either standard yields a ratio of 4,000 to 50,000. Thus, "in the middle", when both standards of reference are far, an additional unit of progress is perceived to have less value, compared to when either close to the initial or to the final state.

Study One tested the hypothesis that motivation to reach a desired end-state is lower when about halfway toward reaching the goal. Respondents read a scenario depicting a person (Jane) who is currently on a diet. In particular, the scenario provided her weight when she began dieting (200 lbs), the desired weight she set to achieve at the end of her diet (140 lbs) and her current weight (varying across conditions: 190 vs. 170 vs. 150 lbs.). Motivation to reach the goal (her desired weight) was assessed in terms of a food choice (goal-consistent vs. goal-inconsistent). In particular, respondents imagined that Jane was out for dinner and she was deciding what to order from a menu offering a variety of options, ranging from a low calorie dinner (salad + fruit, i.e., goal-consistent) to a very tasty, but high calorie dinner (cheeseburger + cake, i.e., goal-inconsistent). They were then asked to indicate which alternative they thought she would choose, on a scale from 1 (cheeseburger + cake) to 9 (salad + fruit). Participants predicted Jane would choose a tastier but high calorie dinner when halfway toward reaching her desired weight, compared to when she was either far from or close to her goal.

Study Two aimed at testing the proposition that motivation decreases when about halfway toward reaching a desired end-state in a different context. Furthermore, whereas Study One measured motivation in terms of choice between goal-consistent and goal-inconsistent behavior, in Study Two we directly asked participants to judge how motivating an incremental unit of progress is perceived to be, as a function of the distance from the desired end-state. Respondents read a scenario depicting a person (Andy) who has a goal of running 10 miles. After running a certain distance (varying across conditions: 2 miles vs. 5 miles vs. 8 miles) he feels very tired and feels he has the energy to run at most about one more mile. Participants indicated how motivated Andy would feel to run the extra mile. Participants thought Andy would feel less motivated to run an extra mile when halfway toward reaching his goal, compared to when he was either far or close the desired end-state.

Study Three was aimed at assessing how the marginal value of a unit of progress changes as a function of the distance from a final reward. In particular, Study Three assessed the monetary value of choosing a goal-consistent over a goal-inconsistent option. In addition, whereas in Study One and Two participants were asked to predict a third person's behavior, in Study Three respondents were asked to predict their own behavior. Participants were invited to imagine they were enrolled in a frequent flyer program. The program would reward them with a free ticket after they had accumulated 10 flights. The number of flights already accumulated varied across conditions: 2 (far from the goal) vs. 5 (halfway) vs. 8 (close to the goal). Respondents then imagined they were about to buy a flight ticket. The price of the ticket with the airline offering the reward program was $300. We asked respondents to name the price at which they would be willing to fly with a competing airline which did not offer any reward program, hence foregoing the opportunity to advance toward earning the free ticket with their frequent flyer program. Consistent with the first study, participants halfway through the program were willing to switch airline for a smaller price difference than participants who were either far or close to the final reward.

Across three experiments, we show that motivation to reach a goal is not always a monotonic function of distance from the desired end-state. Specifically we show that motivation to reach a desired end-state is higher when either far from the goal or close to the goal, and lower when halfway toward reaching the goal. We call this phenomenon the *stuck in the middle* effect and argue that this tendency is due to the lower value an additional unit of progress is perceived to have when halfway toward reaching the goal. From a conceptual standpoint, this research sheds light on boundary

conditions on the classic goal-gradient hypothesis, showing that motivation to reach a goal is not always a monotonic function of distance from the desired end-state. In particular, we posit that the shape of the goal-gradient is a function of the standard of reference adopted to monitor progress toward a desired end-state.

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Does Buying Green Products Make Us Better People?
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Consumers' product choices not only reflect consumers' price and quality preferences but also their moral values. For example, in the past few decades consumers have become increasingly attentive to ethical considerations ranging from environmental concerns such as ecological impacts and energy consumption to ethical standards in animal husbandry and fair trading. This increased concern and feeling of responsibility for society has lead to significant adjustments in consumption patterns – a trend often described as socially conscious consumption (Anderson and Cunningham 1972) or green consumption (Shrum et al. 1995). 65% of Americans, 59% of Germans, and 31% of Japanese report to be willing to pay a premium on an eco-safe product (Gallup International Survey 1992) and 69% of U.S. adult consumers now buy organic products at least occasionally (The Hartman Group 2008).

Green consumption has had a profound influence on business and marketing strategies throughout time but only recently has picked up in significance and speed. For example, the U.K. Co-operative movement was established in the mid 19th century partly in response to customer concerns over the questionable ethics of existing retailers (Bonner 1961); likewise, the organized fair trade movement answers the call to promote sustainability and advocates the payment of a fair price. Today, the global market for green products is witnessing remarkable growth. The organic food and beverages industry alone was worth $22.75 billion in 2007, after more than doubling in five years (Reuters 2009). Despite the growth of green consumption and the ethical halo that is associated with it, however, this paper focuses on a possible counterintuitive downside. Based on recent psychological theories in moral regulation, we suggest that consuming green products can establish personal moral credentials, lowering the guard of moral regulation and hence licensing ethically questionable behaviors.

Traditional research on moral reasoning tends to focus on people's reaction to isolated, episodic scenarios (e.g., Kohlberg, 1981; Mazar et al. 2008) even though people often encounter moral dilemmas that occur sequentially and consecutively. And in fact recent contributions suggest that moral decision are significantly affected by our past behaviors as well as the anticipation of what we are going to do in the future (e.g., Khan and Dhar 2006; Mazar and Ariely 2009; Monin and Miller 2001; Sachdeva et al. 2009; Zhong et al. 2009). Jordan and Murnighan (2009), for example, showed that past virtuous behaviors licensed questionable actions in unrelated domains. In one of their studies, they asked participants to recall a previous moral (vs. immoral) action and then measured their intention to engage in prosocial behaviors in one study and put them in a situation with an opportunity to cheat in another. They found that compared to those who recalled past unethical behaviors, participants who recalled past good deeds were less willing to act altruistically; they were also more likely to cheat.

This licensing effect may be due to an internal balancing of moral self-image and cost inherent in altruistic behavior and inhibiting unethical behaviors (Sachdeva et al. 2009). Although people desire a positive moral self-image, they also have vested interests that may counter ethical norms or moral standards. Thus, people should be more motivated to engage in ethical behaviors when their moral self-image is threatened than when the moral self is affirmed through previous actions. In other words, engaging in some initial ethical behaviors may affirm to oneself that he or she is a good person, and this should reduce the motivation to behave ethically. Thus, the motivational force of moral regulation is like a rubber band. When one deviates from the ideal moral image, the band is stretched and produces the greatest motivational force that causes people to refrain from further transgressing the bounds of the moral self. When one's behavior matches or exceeds the ideal moral self, however, the band "relaxes," reducing moral sensitivity and licensing immoral behavior till it reaches a point when moral deviations signal a new threat to the self and the mechanism is once again activated (Jordan et al. 2008; Zhong et al. 2008; Zhong et al. 2009).

To the extent that consuming green products affirms individuals' value of being socially responsible and ethically conscious, we expect that purchasing green products will have the ironic effect of licensing subsequent unethical behaviors. Thus, our study examines the reversal of the relationship between moral regulation and consumption proposed by Khan and Dhar (2006). These authors found that people were more likely to purchase luxurious products after having imagined themselves helping foreign students to understand course materials or volunteering for community work.

We conducted three experiments to examine the licensing effect of green consumption. Experiment 1 establishes that people associate moral values with green consumption and shows that individuals who purchase green products (versus conventional products) were perceived to be more ethical and cooperative. Experiment 2 demonstrates the licensing effect by showing that participants who purchased in an online organic (versus conventional) store were more likely to cheat and steal in a later, ostensibly unrelated, task. Finally, experiment 3 extents the results to altruistic behavior and shows that the licensing effect only occurred when participants purchased green products but not when they were simply exposed to green products through a product rating task. In fact, simply being exposed to green products had the reverse effect: participants were more altruistic. Together, these studies suggest that our consumption behavior is an integral part of a moral regulatory system and is more closely connected to our moral behaviors in domains other than previously thought.

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Session 8.3

How the Numbers on Your Rating Scale Influence Taste Perception and Willingness to Pay
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Sensory scientists often assume that consumers are rational decision makers (Köster 2003). While much is understood about genetic differences leading to variations in taste perception (Bartoshuk, Fast and Snyder 2005), visual and verbal cues (Hoegg and Alba 2007) that impact perceptual and cognitive processes and can lead to biased judgment are only beginning to be understood. Similar to recent research demonstrating that factors undiagnostic to perception can lead to errors in judgment (Krishna 2006; Krishna and Morrin 2008), we investigate how information extraneous to sensory evaluation can lead to errors in perception.

Little is known about how factors completely unrelated to the product, such as the context, can influence utility derived from the sensation. It has been argued that perceptual systems have been optimized by evolution (Abdi 2002), and that sensory inputs are inherently evaluable (Hsee et al. 2009). Thus "sensory utilities" (versus prediction or memory utilities) should not be biased by contextual factors (Hsee et al. 2009). However, previous studies showing that context has no influence on sensory utility have manipulated context by creating contrasts of varying superiority (e.g., eating potato chips in the context of either a better – chocolate – or worse – sardines – alternative; Morewedge et al. 2009). Instead, we manipulate contextual factors completely unrelated to the consumption object: the format of the rating scale on which sensory reports are given.

Textbook discussions of rating scale formats usually focus on the number of scale points used and the extremity of the scale labels. What is often overlooked is that the numeric values of the rating scale can influence the interpretation of the scale labels (Schwarz et al. 1991, Schwarz 1994). Suppose, for example that you are asked to evaluate the intelligence of a public figure on a scale from "not intelligent" to "very intelligent". What does "not intelligent" stand for? Does it indicate the absence of superior intelligence or the presence of its opposite, some level of stupidity? To resolve this ambiguity, survey respondents have been found to draw on the numeric values of the rating scale (Haddock and Carrick 1999). In general, a unipolar scale (e.g., 0 to 10) pertains to different degrees of the attribute (intelligence), whereas a bipolar scale (-5 to +5) pertains to degrees of the attribute and its opposite. Accordingly, bipolar scales elicit higher ratings than unipolar scales.

We apply this logic to ratings of sensory experience. We gave participants a hedonic product to sample. Half of the participants gave their ratings on various attributes on a bipolar scale, using endpoints from -5 to +5. The other half gave ratings on a unipolar scale, using endpoints from 0 to 10. We predicted that participants who rate on a -5 to +5 scale should indicate higher hedonic evaluations of the attributes than those who rate on a 0 to 10 scale. We should see the same effect for willingness to pay, such that participants who rate on a -5 to +5 scale have a higher WTP than those who rate on a 0 to 10 scale.

The study was conducted in one session. We gave participants a glass of wine and allowed participants to taste it; they answered questions based on hedonic attributes of the wine (crispness, freshness, fruitiness and complexity), which were administered on either a 0 to 10 scale or a -5 to +5 scale. Next, we gave participants questions pertaining to the wine they had just tasted and their level of wine expertise. Of particular interest was the answer to the question, "How much would you be willing to pay for a bottle of this wine?"

Ratings on the 4 attributes (freshness, crispness, complexity and fruitness) were correlated ($\alpha = .51$); ratings were combined to produce a single evaluation index. To examine whether the numerical values manipulation affected evaluation, we examined mean differences between the two groups, with expertise as a covariate. Evaluation was higher for the -5 to +5 endpoint group ($M = 7.14$) than the 0 to 10 group ($M = 6.53$), $F(1,77) = 5.51$, $p < .03$. To examine whether the numerical values manipulation affected WTP, we examined mean differences between the groups, with expertise as a covariate. We found that WTP was higher for the -5 to +5 endpoint group than the 0 to 10 group (WTP means = $17.51 and $15.05; log(WTP) means = 2.80 and 2.61; $F(1,77) = 4.07$, $p < .05$).

In a follow-up study, to be conducted prior to the conference, we will use a two session procedure to replicate our results and examine the effects of scale labels on retrospective evaluations of taste (cf. Braun 1999).

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Will I Get My Money's Worth? Inferring Product Value Based on Predictions About Relative Use

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When considering the purchase of a durable product, will consumers be more likely to make the purchase if they think about using it every day or if they think about using it every week? From an economic perspective, using a durable product more frequently should increase its perceived value. However, we suggest that when considering the perceived value of a product, consumers also think about how often they will use it compared with other consumers. If consumers believe others will use the product more than they will (i.e., they are relatively light rather than relatively heavy users), they may not be willing to pay as much for the product. That is, we propose that product value is a comparative judgment rather than an absolute judgment.

In studies 1 and 2, consumers first reported their frequency of using a product with either a high- or low-frequency scale. After reporting their absolute frequency of use, they evaluated their interest in owning the product, and then they assessed whether their frequency of use was subjectively "a little" or "a lot." In study 1, half of the participants evaluated a USB drive and half evaluated a scientific calculator. Although those who initially used the high-frequency scale reported higher *absolute* frequency of use ($F(1, 194) = 45.1$, $p < .001$), consistent with earlier research (Schwarz, Hippler, Deutsch and Strack 1985), they reported lower *subjective* frequency of use ($F(1, 194) = 4.8$, $p < .05$) and were less interested in buying the product than those who saw the low-frequency scale ($F(1, 194) = 6.0$, $p < .05$). A mediation analysis shows that participants' subjective perceptions of how much they would use the product mediate the observed scale label effects (Sobel test = 2.06, $p < .05$).

Our second study replicated these results using a different product category, video games, and extended them by examining behavioral intentions towards specific products. Interest in the specific video game we showed participants was higher in the low- than in the high-frequency scale condition, $F(1, 121) = 9.6$, $p < .01$. Notably, this study also showed that participants in the low frequency scale condition reported more positive affect than those in the high frequency condition, and that positive affect was significantly correlated with perceived frequency of use relative to others ($r = .54$, $p < .001$). This suggests that consumers may experience an affective boost when they infer a positive comparison of their own use of a product relative to others.

Our third and fourth studies extend our analysis beyond frequency scale manipulations to show that advertising a product as appropriate for weekly use as opposed to daily use can lead to higher subjective frequency of use and higher purchase intentions. In study 3, respondents either read an ad for a sandwich press or for fitness shoes. The ad described the product as providing benefits experienced daily (high-frequency) or weekly (low-frequency). As predicted, those in the week condition predicted higher relative use compared to those in the day condition, $F(1, 83) = 5.57$, $p < .05$, even though the ad described less frequent product use. Moreover, using the words "this week" in the advertisement significantly increased participants interest in the product relative to using the words "today" ($F(1, 83) = 4.29$, $p < .05$). Confirming the proposed process mechanism, perceived relative use mediated the effect of the ad on interest in the product.

In our last study, we show that whether the respondent is a light or heavy user in the product category moderates the effect. Specifically, heavy users are motivated by high frequency positioning while light users are demotivated by high-frequency positioning. Participants reviewed the fitness shoe advertisements from study 3 and then reported their interest in the shoes as well as the number of times they exercised per week. As predicted, regression analysis showed that the "day" ads created more interest in the product for heavy users than the "week" ads, but the week ads created more interest for light users, $\beta = .73$, $t(172) = 4.12$, $p < .001$.

Counterintuitively, manipulations that encourage consumers to predict that they would use a product more frequently may result in less interest in the product category and lower purchase intentions. Our studies show that this effect is driven by consumers' beliefs about their own product usage relative to other consumers, and that the effect can be produced either by advertisements or by frequency scales that communicate that either a high frequency of use or low frequency of use is the norm.

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When 12 Months is Not the Same as One Year: Antecedents of Confidence in Consumer Plans
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Consumers' plans are influenced by the confidence felt while making these plans. For example, consumers feel less confident, and therefore provide larger budget estimates for the next year than for the next month, even after these budgets are unitized (Ulkumen, Thomas, and Morwitz 2008). Further, recent research (Simmons and Nelson 2006) has shown that people's confidence may not be always based on deliberative reasoning (often characterized as a System 2 process); instead it could be based on intuitions (System 1 process). In this research, we examine how temporal frames can affect intuitive confidence. Specifically, we examine how framing of the time period in a survey question (one year versus 12 months) can influence consumers' confidence in different planning domains, and consequently influence a variety of outcomes such as the magnitude of budget estimates and the likelihood of starting a diet.

In our first study, we asked participants to provide budget estimates for time periods that differed in length or framing. Budgets for the next week, month, three months, six months and 12 months were not significantly different from each other (M_{week} = $701, M_{month} = $832, $M_{3months}$ = $1117, $M_{6months}$ = $986, $M_{12months}$ = $1066), and they were all significantly lower than the budgets for the next year (M_{year} = $2,196). Consumers were less confident, and they provided larger budget estimates for the next year than for the next 12 months. Even though the temporal frames – 12 months vs. 1 year – are semantically identical, the framing of the budget period had an effect on intuitive confidence and budgets.

Study 2 tested whether mere familiarity with the time frame can moderate this framing effect on intuitive confidence. Participants estimated their budgets either for the next 12 months or the next year, and we manipulated familiarity by asking half of the participants to provide a series of estimates for the frame associated with their condition before providing their budget estimates. The results show that the familiarity manipulation did not affect confidence or budgets in the 12 month frame. However, confidence increased, and annual budgets decreased when the familiarity with the time frame increased.

The aim of study 3 was to examine whether locus of control can moderate this temporal framing effect. Reminding consumers of external uncertainty should make those in the 12 month frame less confident. To test this prediction, we manipulated the source of uncertainty by providing some participants with a paragraph that emphasized events in life that are within (internal) or outside their control (external), before estimating their budgets. The results revealed that priming the participants of the external sources led to a significant increase in budget estimates in the 12 month frame, but not in the year frame.

In study 4, participants were first presented with a strict diet plan, which required avoiding a long list of foods. This diet plan was framed as either a 12 month plan or a one year plan. The results suggest that participants were more likely to adopt the diet when it was framed as a 12 month diet than a one year diet. Participants were more confident, and found it less difficult to follow the diet plan when it was framed as a 12 month plan than as a one year plan. Perceived difficulty fully mediated the effect of time frame on confidence, and confidence partially mediated the effect of time frame on likelihood to adopt the diet. Further, the effect was stronger for those who were more careful about the calorie intake, suggesting that personal relevance enhances propensity to rely on intuitive confidence.

In summary, framing the same time period in different ways can influence consumers' plans, due to changes in confidence. Simply framing the budget period as 12 months versus one year in the survey question can increase intuitive confidence, and affect budget forecasts and likelihood of adopting a diet plan. We examine three factors that moderate the effect of temporal framing on intuitive confidence: (1) familiarity with the frame, and (2) locus of control, (3) and personal relevance. These results offer a new perspective on the antecedents and consequences of consumer confidence.

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Session 8.4

On the Psychology of Hedonic Adaptation – The Effects of Duration Knowledge on Forecasting Versus Actual Affective Experiences

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Lay people predict that knowing the duration of an aversive episode would improve their experience whereas knowing the duration of a pleasant episode would weaken their experience. The present research examines this intuition as well as the actual effect of duration knowledge on people's affective experiences. We hypothesize and show that the actual effect of duration knowledge is at odds with the lay predictions. That is, rather than weakening the experiences, duration knowledge actually intensifies affective episodes experienced over time by worsening unpleasant experiences and enhancing pleasant experiences.

To understand how duration knowledge influences people's affective experiences, we need to consider how subjective experiences change over time. Our theorizing is based on three assumptions. First, people adapt to hedonic experiences of repeated external stimuli relatively quickly (Kahneman and Snell 199; Nelson and Meyvis 2008). Second, the adaptation process may be interfered if people know when the experiences will end. Anticipated utility (AU) theory suggests that people derive enjoyment/pain from future events (savoring good things and dreading bad things) and the savoring/dreading intensifies as the events draw near (Elster & Loewenstein 1992). When an aversive episode is about to end, people savor the relief more, contrasting and worsening the on-going negative experience. Similarly, when a pleasant episode is about to end, people dislike the ending more, contrasting and enhancing the on-going positive experience. Third, people's retrospective evaluation of an affective episode is often highly correlated with the end point of the episode (Fredrickson & Kahneman 1993). Based on these assumptions, we propose that duration knowledge causes an affective experience to intensify as the end draws near and ultimately leads to a more extreme overall experience. Specifically, duration knowledge decreases the evaluation of aversive episodes and increases the evaluation of pleasant episodes because of the intensification towards the end.

We tested this hypothesis in study 1 with a 2 (person: experiencer vs. forecaster) x 2 (duration information: unknown vs. known) x 2 (valence: pleasant vs. unpleasant) between-subjects factorial design. Experiencers were asked to listen to a short song bite. Half of them were informed the duration of the song (30 seconds) and the other half did not know the exact duration. The song was either recorded by the original singer (pleasant conditions) or an experimenter with a terrible voice (unpleasant conditions). Experiencers evaluated their pain/enjoyment both online and retrospectively, whereas forecasters only predicted their pain/enjoyment without actually listening to the song. The results showed that the actual effect of duration knowledge was indeed the reversal of the lay predictions. Specifically, forecasters predicted that duration knowledge would weaken their experience (i.e., less enjoyment for the pleasant experience and less pain for the unpleasant experience). However, experiencers with duration knowledge actually rated the pleasant version of the song more positively, and the unpleasant version of the song more negatively than those without duration knowledge. As expected, online evaluation from the experiencers showed that experiences intensified towards the end when duration was known and experiences leveled off quickly when duration was unknown.

Similar evidence was obtained in study 2 (field study) where we further generalized our findings to relatively long experiences (45-minute after school sessions instead of 30- second sound clips). The results of study 2 fully replicated those in study 1 and demonstrated the discrepancy between forecasting and actual effect of duration knowledge on people's affective experiences.

Study 3 further tested the underlying mechanism and identified two boundary conditions. The study used a 2 (duration information: unknown vs. known) x 3 (subsequent episode: none, pleasant episode, unpleasant episode) between-subjects design. All participants watched a 1-min. video clip as the main task that was considered as pleasant. We predicted that when the movie clip is followed by a pleasant episode (funny story), which is a continuation of a positive state rather than a shift to a neutral state, the contrast effect would be weakened. Thus knowing the duration of the movie clip would not lead to intensification toward to end and would not increase the overall enjoyment. When the pleasant movie is followed by an unpleasant task (boring word-counting task), the enjoyment derived from watching the movie would be neutralized by the anticipatory disutility of dreading the unpleasant task, and the effect of knowing the duration would also be attenuated. Further, if the duration information is unavailable, the presence of the second episode played a negligible role. The results of study 3 fully supported our predictions. Presumably, the duration knowledge effect may not generalize to extreme episodes (e.g., separation due to the death of a beloved family rather than a short business trip) because the anticipated (dis)utility of an extreme event can be too overwhelming.

Our work contributes to research on affective forecasting and hedonic adaptation by identifying a circumstance in which the actual effect of duration knowledge contradicts people's intuition. Duration knowledge interrupts hedonic adaptation by intensifying affective experiences toward the end but people are in general unaware of this effect.

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Using a Rear View Mirror as a Crystal Ball: The Informational Value of Trends in Hedonic Profiles
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Research in contexts as diverse as gambling (Ross & Simonson 1991), medical treatments (Chapman 2000), queuing experiences (Carmon & Kahneman 1996) and service provision (Ariely & Zauberman 2003) has found that people prefer happy endings. The robust finding has been attributed to the idea that the trend at the end may hold information about future states (Ariely & Carmon, 1998; Ariely & Zauberman 2003). If the hedonic profile of an experience has a positive trajectory at the end, then people could imagine positive future outcomes and become hopeful that they will experience those states. If the hedonic profile of an experience has a negative trajectory at the end, then people could imagine negative future outcomes and become fearful that they will experience those states.

We propose that the projections into the future (what could happen), resulting from trends at the end of an experience, will affect future behaviour. In the gambling context, used for the empirical work here, we propose that a trend at the end of a session will stimulate imagined outcomes that will change the willingness to engage in risky behaviour in the future. A downward trend will result in less risky behavior, while an upward trend will instigate riskier behavior.

We also pose the question, what happens when the trend is interrupted? What if the hopes of a happy ending are dashed or if there is reprieve from a potentially tragic outcome? We predict that people's affective responses will be influenced by a trend even if it does not continue to the end of the experience. An interrupted upward trend will lead to disappointment (more negative affect response to the experience) and an interrupted downward trend will lead to a more positive reaction. We also predict that although affective responses will be impacted by thinking about what could have but did not happen, the thoughts will not provide 'reliable' information about future states and therefore, will not result in a change to risk taking. To investigate these questions, we designed an experience by manipulating outcome (win, lose), direction of the trend at the end (downward, upward), and interruption of the trajectory (no interruption, interruption). See figure 1 for the resulting 8 hedonic profiles.

FIGURE 1
Hedonic Profiles
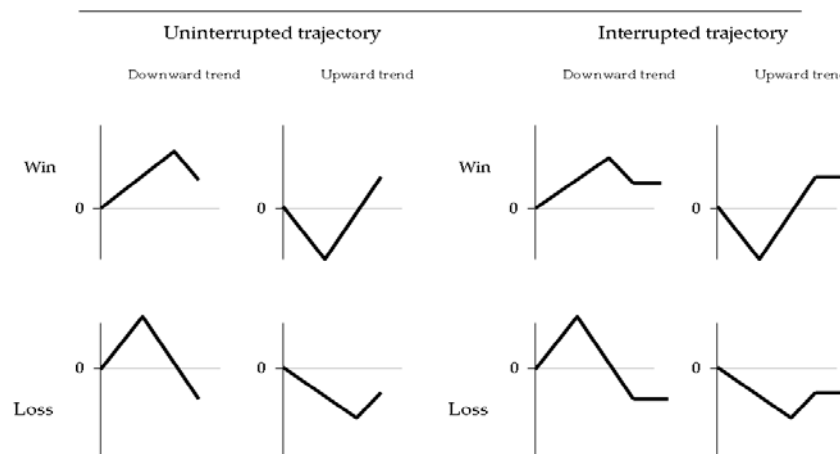
Procedure
The sample included 240 people recruited from a gambling establishment. Participants played a simulated gambling game with a real financial outcome. Participants then reported the pleasure, hope, disappointment, and resignation they felt on a 100mm scale. Participants also reported whether they would change the risk profile of the game by altering the maximum bet and number of gambles.

Results
Affective reaction. An ANOVA run on affective reactions with outcome, trend direction, and trajectory interruption as independent factors revealed a significant two-way interaction between trend direction and trajectory interruption ($F(1, 240) = 5.19$, $p < .05$). When the profile was trending downwards, the evaluation was lower in the uninterrupted trajectory conditions. When the profile was trending upwards, the evaluation was higher in the uninterrupted trajectory conditions. See figure 2.

FIGURE 2
Affective Reaction
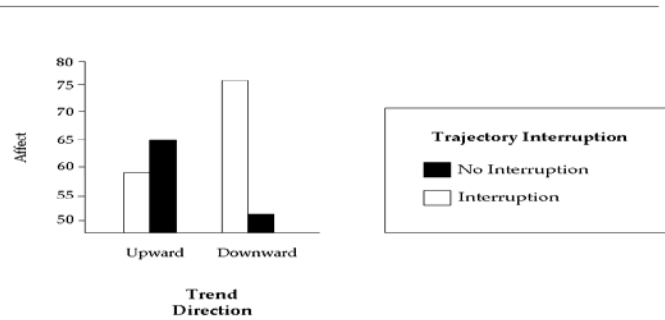
The analysis also revealed a significant two-way interaction between outcome and trajectory interruption ($F(1, 240) = 12.28$, $p < .001$). Two two-way ANOVAs reveal that the trend direction is the only significant factor in the uninterrupted conditions. The outcome does not influence the affective reaction of these players. The outcome was important in the interrupted conditions, as was the direction of the trend. Note that the trend at the end of these conditions was neutral. The trend at the end did not dilute the affective reactions. We contend that this is because there is no information about future states in the profile, therefore people focus on the game they just played.

Memory for within-experience peak. Consistent with our conjecture, the memory for the details of the game, such as the peak win or loss, was more accurate when the trajectory was interrupted. The result is in line with our thesis that the interruption in the trend caused the participant to think back to the experience when reporting affective evaluations. Conversely, the focus of the participants in the uninterrupted trend conditions was on what the game could tell them about the future.

Risk profile. An ANOVA run on the degree to which people were interested in changing their risk profile when playing again included outcome, trajectory direction, and trajectory interruption as independent factors. The analysis also revealed a significant two-way interaction between trajectory direction and trajectory interruption ($F(1, 241) = 6.08$, $p < .01$). The effect of the direction of the trajectory at the end was more dramatic when the trajectory was uninterrupted, compared to the interrupted conditions. In other words, when the profile was trending downwards, the willingness to be risky was lower in the uninterrupted trajectory conditions. When the profile was trending upwards, the willingness to take a risk was higher in the uninterrupted trajectory conditions.

FIGURE 3
Risk Profile for the Next Game
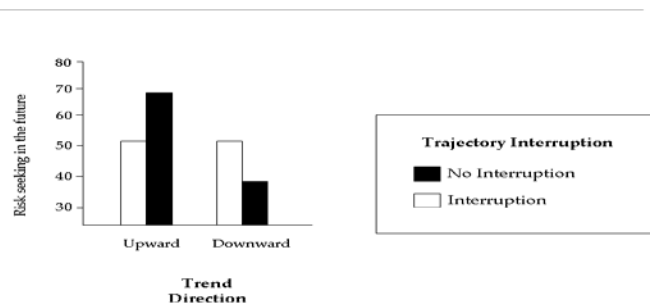
Discussion

We found that when the hedonic profile of an experience included an uninterrupted trend, which continued to the end of the episode, people were happier in the upward condition and less happy in the downward condition. We believe this is because they were thinking about an extension of the trend as information about something that could happen in the future which is consistent with their decision to alter their strategy in the next game. If the trajectory was interrupted, people still considered the trend when evaluating the experience, but focused more on what did happen. The profiles did not impact how the gamblers wanted to play the next game in the uninterrupted condition. Although affective responses were influenced by the interrupted trend, the trend had no effect on risk preferences.

The results suggest that the hedonic profile is not only important for the retrospective evaluation of the experience, but that the profile also has ramifications for people's beliefs about what the future will hold and whether they should alter their plans and actions based on those future states. The danger is that when people use a rear view mirror to navigate into the future, accidents often happen.

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Motivated Underpinnings of the Impact Bias in Affective Forecasts

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It is generally assumed that people base decisions on the pleasure they imagine alternatives to yield, and that errors in affective forecasting yield suboptimal outcomes (Gilbert & Wilson, 2007; Hsee & Hastie, 2006). One of the most pervasive biases in affective forecasting is the impact bias, whereby forecasters overestimate the intensity and duration of their hedonic response to future events (Gilbert, Pinel, Wilson, Blumberg, & Wheatley, 1998). The impact bias has been shown to occur unintentionally, resulting from biases in attention and memory (Morewedge, Gilbert, & Wilson, 2005; Schkade & Kahneman, 1997; Wilson, Wheatley, Meyers, Gilbert, & Axsom, 2000), a failure to correctly anticipate hedonic adaptation (Kahneman & Snell, 1990; Morewedge, Gilbert, Keysar, Berkovits, & Wilson, 2007; Riis et al., 2005), and erroneous lay theories about which features of events matter most (Hsee & Zhang, 2004). It is a robust bias. People not only overestimate the hedonic impact of events repeated once (Wilson, Meyers, & Gilbert, 2001), they overestimate the hedonic impact of events they have experienced frequently (Gilbert, Morewedge, Risen, & Wilson, 2004).

Given its resistance to feedback, it seems worth examining whether the impact bias might persevere because it confers some benefit to forecasters. People overestimate the hedonic impact of both positive and negative events, and negative emotions are more impactful than positive emotions (e.g., Baumeister, Bratslavsky, Finkenauer, & Vohs, 2001), so affective forecasts are unlikely to be exaggerated to merely increase the pleasure derived from anticipating experiences (Loewenstein, 1987). Perhaps the impact bias is, in part, due to motivated reasoning. As anticipated and experienced emotions are potent sources of motivation (Ditto & Lopez, 1992; Baumeister, Vohs, DeWall, & Zang, 2007; Loewenstein & Lerner, 2003), affective forecasters may exaggerate their forecasts to motivate themselves to produce desired outcomes.

This hypothesis makes three predictions which were tested in four experiments. First, the impact bias should be greater for events of greater personal importance. In line with the first prediction, Study 1 found that the more hockey fans considered a hockey game to be personally important, the more likely they were to overestimate how happy they would be if their team won. (Previous research has shown that sports fans believe that they can personally control the outcome of sporting events; Pronin, Wegner, McCarthy, & Rodriguez, 2006).

Second, the hypothesis predicts that the extremity of affective forecasts should influence the effort expended to produce desirable outcomes. In Studies 3 and 4, low and high standards of comparison were used to induce contrast effects that experimentally manipulated the extremity of affective forecasts for desirable outcomes. Subsequent mental (Study 3) and physical effort (Study 4) expended to produce those outcomes were recorded. As predicted, participants first exposed to a lower standard made more extreme forecasts than did participants exposed to a higher standard, and consequently expended more effort to produce the desirable outcomes. As the extremity of forecasts mediated the effect of the contrast manipulation on mental and physical effort expended, Studies 3 and 4 suggest that extreme affective forecasts motivate forecasters to produce desired outcomes.

Third, forecasters should make more extreme forecasts when they believe they can influence an outcome than when they believe they cannot. This was tested in Study 2. Participants forecasted how happy they would feel if they won $5 in a die-roll before rolling the die, or after rolling the die (while the outcome of the roll was unknown). Participants who made forecasts before rolling the die predicted they would feel happier if they won than did participants who made forecasts after rolling the die. In other words, participants made more extreme forecasts when they able to influence an outcome that had yet to be determined than when it was determined but unknown.

Errors in affective forecasting are often costly. They may lead patients to make medical decisions based on erroneous predictions of the impact that declines in their health will bring, partisanship among voters who overestimate the ineptitude of opposing parties, and so on. It is questionable, however, whether people would exercise, mend broken relationships, or spend late nights in the office if they accurately forecasted how easily they would adapt to sickness, solitude, and a larger income. This research is the first to suggest that errors in affective forecasting may confer some benefit-they may provide the motivation necessary to achieve the outcomes one desires.

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Fantasies and Expectations as Communication Tools

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Consider the following advertising messages. An ad for governmental programs states: "ExpectMore.gov. Expect federal programs to perform well, and better every year." Another ad for OSO food wrap claims:"Don't expect your food to look after itself." A third ad for ING Direct savings products reads: "Imagine being a rich old coot someday." Finally, an ad featuring post-secondary education in Canada says: "Imagine your children not reaching their potential." While the first two emphasize that a desired event is either likely or not likely to occur, the other two focus on eliciting a mental image of a desired event either happening or not happening. Do advertising messages based on the above forms of thinking about the future have differential effect on consumer's current evaluations and choices? The goal of the present research is to clarify this intriguing question. Drawing upon the research on self-regulation (e.g., Carver and Scheier 2000, Gollwitzer 1999), forms of thinking about the future (e.g., Oettingen and Mayer 2002) and state vs. action orientation (e.g., Kuhl 1981), we investigate whether framing an advertising message in terms of expectation (i.e., likelihood of occurrence) versus fantasy (i.e., thought image) about the future differentially affects consumers' motivation to act in the present and, in turn, influences current brand evaluations and choices.

Research in the area of self-regulation has found that thinking about one's future using different thought forms impacts the likelihood of achieving this future. For example, participants who had positive expectations about finding a job received more job offers and earned more money, while those who reported experiencing positive images or fantasies about finding a job received fewer job offers and earned less money (Ottingnen and Mayer 2002). While previous research has compared the effect of fantasies and expectations in the context of goals that are self generated, our study focuses on the effect of these two forms of thinking about the future on immediate judgments and behavioral intentions in the context of communication messages (externally generated and communicated goals). We not only manipulate positive and negative expectations and fantasies orthogonally in a systematic manner, but are also able to compare how effective they are on improving brand evaluations and behavioral intentions. In addition, we investigate the underlying process and show a boundary condition for the observed effects.

Four studies explore the effect of form of thinking about the future on evaluations and behavioral intentions. Study 1 uses a thought elicitation procedure to demonstrate the effect of thinking about the future in terms of positive or negative fantasies or expectations on consumers' willingness to pay. The results suggest that positive expectations but negative fantasies are more instrumental in increasing consumers' willingness to pay.

Study 2 focuses on the effect of advertising messages designed to manipulate positive or negative fantasies or expectations, and shows that they differentially influence consumers' behavioral intentions. In the context of a savings account advertisement, we demonstrate that positive expectations but negative fantasies increase consumers' likelihood to contact the bank for more information. We also rule out possible alternative explanations such as independent and interdependent self-views, task involvement, ad attitude and ad credibility.

Study 3 provides evidence for the robustness of the effect in a different product category (grape juice), and examines the underlying process. Our results indicate that adverting messages framed as positive expectations or negative fantasies lead to higher action orientation and lower state orientation as compared to advertising messages framed as positive fantasies or negative expectations. Action orientation, in turn, influences brand evaluations and the likelihood to buy the product. We also rule out outcome versus process oriented thoughts, and level of elaboration as possible alternative explanations for the results.

Finally, study 4 introduces a boundary condition for the effect, and suggests that manipulating an implemental mindset can increase brand evaluations for messages framed as positive fantasies. Because an implemental mindset makes people more likely to act on the chosen goal, it compensates for the lower action orientation induced by the positive fantasy message frame. Thus, implemental mindset improves evaluations and behavioral intentions in the positive fantasy message frame.

Our results provide consistent evidence that framing an advertising message in terms of expectation or fantasy differentially affects consumers' action orientation and, in turn, influences brand evaluations and choice. While messages framed as positive expectations lead to higher brand evaluations and behavioral intentions as compared to messages framed as positive fantasies, messages framed as negative fantasies lead to higher evaluations and behavioral intentions relative to messages framed as negative expectations. The reason is that positive expectations and negative fantasies lead to higher action orientation, but the opposite is true for negative expectations and positive fantasies. Finally, activating an implemental mindset improves evaluations and behavioral intentions in the case of positive fantasies as compared to when no mindset is activated. We add to the literature regarding how positive fantasies could be made more effective in eliciting goal pursuit. Previous research has shown that mental contrasting of the desired (imagined) future with the reality makes respondents more likely to act (e.g., Oettingen, Pak and Schnetter 2001, Oettingen et al. 2005). We demonstrate that manipulating an implemental mindset could have a similar effect on increasing the motivation to act in the case of positive expectations.

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Session 8.5

Marketing on the Map: Visual Search and Consumer Decision Making

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Dramatic improvements in the availability and technology to display geographic-based information has led to the widespread use of electronic map-based representations in many consumer settings including the ability to show nearby attractions in vehicle GPS displays, the ability to see the location of hotels in a particular area on Google Maps, and the ability to see nearby restaurants on Open Table's iPhone application. Although substantial research has been conducted on consumer search and decision making behavior in online environments in which information is acquired linearly (Diehl 2005; Johnson et al. 2004; Lurie 2004), there has been little research on map-based search and decision making by consumers.

Because map-based representations are visual, their use likely engages different cognitive processes than text-based representations. In particular, whereas text-based information is often evaluated using rule-based systems involving systematic and strategic decision processes with hard constraints on what determines a good outcome, visual information is often evaluated using associative systems involving gestalt and intuitive processes with soft constraints on outcome suitability (Holbrook and Moore 1981; Sloman 1996). Other research suggests that the perceptual system's ability to process large amounts of visual information means that consumers should be less subject to information overload when information is represented visually (Lohse 1997; Lurie and Mason 2007; Vessey 1994).

In addition to presenting information visually, map-based environments include a number of characteristics that are likely to influence consumer behavior. These include displaying information in ways that make it easy to see relative distances between points, showing contextual factors such as nearby parks and roads, and revealing which locations are adjacent to one another (Dennis and Carte 1998; Smelcer and Carmel 1997). Relative to text-based presentations, this should enhance the use of geographical distance in decision making. In addition, unlike traditional paper-based maps and geographic information systems studied in prior research (Dennis and Carte 1998; Mennecke, Crossland, and Killingsworth 2000; Smelcer and Carmel 1997), many of the current map-based tools available to consumers vary in the visual perspective they provide. These include the depth of field (i.e., the extent to which the consumer is provided with a focused versus overview display) and the extent to which the consumer can change the displayed zoom level. Changes in these features should affect the number of alternatives considered, search patterns, decision rules, subjective and objective decision quality (Lurie and Mason 2007).

In two controlled lab experiments based on Google maps, we compared information search and choice behavior in text versus map environments and examined how the visual perspective (i.e., interactivity and depth of field) of map-based representations interact with contextual factors—such as the location of alternative choices relative to the consumer's current location. Both studies involved an agent task in which participants needed to choose a restaurant for a friend in an unfamiliar city. Participants were told the friend's preference weights for food quality, ambiance, service, and closeness, and asked to use these in their decision making. These weights, along with the attribute values for the available alternatives, allowed the absolute and relative quality of participants' choices to be compared. Attribute values, including location, were generated from random distributions and the type of information available was identical across map and text conditions. Attribute values were revealed when the mouse hovered over restaurant names. To gain additional insights into how map-based representations affect decision processes, the number of alternatives on which information was gathered and the time spent gathering information was tracked. To see how map-based representations affect subjective as well as objective decision quality, participants retrospective evaluations of the available alternatives, the chosen alternative, the choice process, and the vendor were measured post-purchase using 100-point scales (Diehl and Zauberman 2005).

Results comparing decision making in map- versus text-based environments show that participants make higher quality choices (in terms of relative utility and the probability of choosing the best alternative) when using text versus map representations and that these differences are accentuated when the display allows only a few alternatives to be seen simultaneously. Similar results are found for retrospective evaluations. However, in terms of choosing from among the top three alternatives, those who make decisions using map-based representations make better choices than those using text-based representations when fewer alternatives are shown but worse choices than those using text-based representations when more alternatives are shown. These results suggest that although text-based representations lead to maximizing decisions, map-based representations can lead to satisficing decisions under certain conditions. Process-tracing results show that although participants using map and text-based representations take a similar amount of time to make a decision overall, those using text-based representations spend significantly more time accessing information about alternatives and significantly less time navigating between alternatives than those using map-based representations—particularly when fewer alternatives are displayed simultaneously. Those using text-based representations also acquire information on significantly more alternatives and consider more alternatives for choice.

Results comparing map-based decision making under high and low depth of field, high and low interactivity, and having restaurants distributed all around the consumer versus in a single quadrant of the map show that under low interactivity (i.e., participants are unable to change the depth of field), decision quality is higher when targets are located all around the consumer under low zoom and many targets are shown simultaneously but having targets all around the consumer lowers decision quality under high zoom. Providing consumers with the ability to interactively change the zoom level removes these differences. Process-tracing results show that interactivity increases information acquisition and, in the absence of interactivity, information acquisition is reduced when fewer alternatives at a time are shown.

These results suggest that, despite their promise, map-based representations may not help consumers make better choices or feel more satisfied in their choices. The effort involved with using map-based representations reduces consumers' ability to acquire information helpful to making a decision. Depth of field appears to have strong effects on decision processes and outcomes in map-based environments. Providing consumers with the ability to change the depth of field in map-based environments can improve decision quality.

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"What is Novel is Good?" The Value of a Novel Appearance for Evaluating a Product's Performance Quality and Ease of Use
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It is widely acknowledged that people use physical appearance to assess specific personal qualities of people. For example, physically attractive people are perceived to be more sociable and intelligent (e.g., Feingold, 1992). Correspondingly, consumers may use the appearance of a product to draw inferences about functional attributes that are difficult to verify at purchase (Bloch, 1995; Creusen & Schoormans, 2005). This suggests that in product perception the product's appearance and functional attributes are highly interdependent. However, research on consumer response towards products has mostly investigated either a product's functional attributes or the appearance, separately. Furthermore, the few studies that did explore this interdependence merely demonstrated that more attractive products are perceived to be of higher quality and easier to use (Page & Herr, 2002; Tractinsky, Katz, & Ikar, 2000; Veryzer & Hutchinson, 1998). These effects can most likely be explained by the 'What-is-beautiful-is-good' principle (Dion, Berscheid, & Walster, 1972), which implies that people have a tendency to attribute various positive evaluations to attractive objects. Nevertheless, research on person perception found that while glasses decrease attractiveness, they also increase perceived intelligence (Hellström & Tekle, 1994), suggesting that besides the 'What-is-beautiful-is-good' principle, other processes may be relevant as well. This paper contributes by investigating the effect of a product's novel appearance – a commonly recognized driver of aesthetic preferences – on consumers' perceptions of performance quality (i.e., how well one expects the product to perform its functions) and ease of use. A novel appearance is defined as a product appearance that consumers believe to be new for the product category.

Introducing novel functional attributes in products is usually associated with the usage of newer and more advanced technology (Mukherjee & Hoyer, 2001). Hence, consumers evaluate a product with a novel functional attribute as being superior and of higher performance quality than one that lacks such attributes. A novel appearance may help to communicate a product's technological innovation (Rindova & Petkova, 2007). Due to the novel appearance, people may expect the product to make use of advanced technology, even though these attributes are in fact not necessarily related. Consequently, people will evaluate a product with a novel appearance as having superior performance quality.

Based on the accessibility-diagnosticity model, Page and Herr (2002) concluded that an attractive appearance only affects the quality perception in the absence of a more diagnostic input (e.g., brand). Accordingly, we hypothesize that a novel appearance may only contribute to the perceived performance quality when no novel functional attribute is present. Whenever the product has a novel functional attribute, this functional attribute will be a more diagnostic input of performance quality, making the impact of the novel appearance negligible (H_1).

The cost-benefit framework suggests that consumers can also make negative inferences about novel functional attributes (Mukherjee & Hoyer, 2001). Because consumers are unfamiliar with the novel functional attributes in a product, consumers may feel uncertain about the performance. Consequently, novel functional attributes in products are expected to cause high learning costs and will thus negatively affect the perceived ease of use. We propose that as a novel appearance will be associated with newer technology, it may also prompt negative inferences about the product's ease of use. Based on the former arguments, we expect that a novel appearance only impacts the perceived ease of use in the absence of a novel functional attribute (H_2).

Study 1 had a 2 (appearance: familiar vs. novel) x 2 (functional attribute: familiar controls vs. novel controls) between-subjects design. A washing machine was chosen to generate the stimulus material. Pretests showed that this product category has a clear familiar color (white) and clear familiar controls (buttons). To manipulate the independent variable appearance, we created a white (familiar appearance) and a black (novel appearance) colored washing machine. For the manipulation of the functional attribute, the washing machine was operated using buttons (familiar functional attribute) or a display (novel functional attribute). Sixty subjects were presented with a picture of one of the four washing machines and responded to several multi-item measures.

In addition to a main effect for functional attribute, ANOVAs revealed significant interaction effects between appearance and functional attribute on perceived performance quality and ease of use. As hypothesized, subjects perceived the product with the novel appearance to have higher performance quality and as more difficult to use than those in the familiar appearance condition, but only when the product did not have any novel functional attributes. To control for the "What-is-beautiful-is-good" principle, we performed an ANOVA with attractiveness as the dependent variable. No significant effects were found, suggesting that the attractiveness of the appearance cannot explain our results.

In Study 2, we investigated the generalizability of the findings on performance quality using a digital single-lens reflex camera and again colors for the manipulation of a novel appearance. A pretest showed that this category is typically black. Five cameras were created varying in color from black to white, resulting in different degrees of novelty in the appearance. Members of a consumer panel (n = 162) were presented with one camera and responded to multi-item measures comparable to Study 1. A regression analysis revealed that novelty and attractiveness both positively affected the perceived performance quality, providing additional support for H_1.

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In conclusion, our research demonstrates that in addition to the product's attractiveness, consumers may use novelty in product appearance to draw inferences about functional attributes. Because consumers associate novelty with technological advancement, products with a novel appearance can prompt positive inferences about the product's performance quality but negative ones about its ease of use. These opposing effects have to be carefully managed when designing new products.

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Does a Small Coke Taste Better? Effects of Package Size on Quality Judgment
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Judgments of quality can be affected by numerous factors, including price, brand name, advertising content, and brand alliance. However, we are not aware of research that has directly examined whether and how package size affects quality judgment. The failure to examine the effect of package size is particularly surprising in light of its strong impact in the marketplace. For example, on websites such as "Yahoo! Answers" or "Answers Bag", it's not uncommon to observe questions like "why does soda taste better in a small bottle than in a large bottle". In addition, many consumers "found" similar pattern in other product categories such as beer, cosmetics, and chocolate. These examples suggest that consumers associate small package size with higher product quality while large size with lower quality. The present work is to experimentally examine this hypothesis and to explain the underlying psychological mechanisms that contribute to the size-quality association.

THEORETICAL BACKGROUND
The central notion of this research is that small (large) package size leads to high (low) quality judgment. There are several lines of research that could support this hypothesis and we primarily focused on the unit price framework. For most products, the unit price of small sized products is greater than that of large sized products (Granger and Billson 1972). For example, a 355 milliliter bottle of Coca-Cola and a 2000 milliliter bottle are sold for $0.99 and $1.99, respectively. Thus, the unit price per milliliter is $0.28 and $0.10, respectively. Consumer researchers have repeatedly demonstrated that judgments of a product's quality increases with its price (McConnell 1968; Shiv, Carmon, and Ariely 2005). If consumers perceive that product quality increases with unit price, and if the unit price is high when the product is contained in a small package, this could explain why products in small packages are judged to be of higher quality.

EXPERIMENT 1
Ninety-five undergraduate students were informed that the purpose of this study is to understand consumers' judgments of Pringles potato chips. In the small size condition, we presented participants with a picture of a 43 gram package, whereas participants in the large size condition saw a picture of the 170 gram package. After seeing the picture, all the participants were required to rate the taste and quality of Pringles potato chips. We also asked participants to indicate the price of the product. As expected, participants judged the potato chips to be tastier if they were contained in a small package than if they were contained in a large one, and judged their quality to be higher in the former condition Moreover, participants' estimates of the unit price of small sized products was higher than that of large one. Mediation analysis was successful.

EXPERIMENT 2
In experiment 2, we tested the hypothesis by manipulating subjective size. Participants were told that a company is planning to introduce a new chocolate bar in Hong Kong. The brand name of this product was ostensibly either Superbar or Minibar, thus, conveying the impression that the bar was large or small. All participants were then presented with a description of the product that was the same in both conditions, including price, weight, and nutrition facts. Participants then were asked to predict the quality of this chocolate bar, and to indicate the likelihood they would purchase the product if it became available.

First, participants in the Minibar condition perceived the product smaller than those in the Superbar condition. Second, consistent with predictions that participants would rely on size as a cue in making quality predictions, they predicted that Minibar would of higher quality than Superbar, and indicated a greater likelihood of purchasing it.

EXPERIMENT 3
Experiment 3 examined whether package size can influence consumers' perception of their actual experience with the product. In this study, participants were asked to evaluate the taste of a new orange juice that they believed was packaged in a small or large container. In addition, we examined the possibility that the effect of size on subjective quality judgments depends on whether the objective quality is high or low. When product quality is objectively fairly high, we expected that putting it in a small package would increase judgments of its quality for reasons noted earlier. If the objective quality is low, however, selling it in a small package might increase perceptions that it was inferior and might lead to lower subjective quality ratings.

Supporting our prediction, analyses of quality judgments yielded a significant interaction of package size and quality. When the product's quality was high, participants judged it to be even higher when the package was small than when it was large. When the product's objective quality was low, however, the reverse was true.

SUMMARY

To our knowledge the present work is an initial step that examines the effect of package size on quality judgment. Briefly to say, this research contributes to quality research by identifying a new antecedent and contributes to packaging research by introducing a new consequence. Managerially, this research suggests that increasing package size is a two-edged sword. On one hand, it has been found that big package size accelerates consumption (Wansink 1996). On the other hand, as found in this research, larger package size leads poorer or less favorable quality perceptions.

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Exaggeration and Structural Alignment in a New Design Launch
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New designs are often presented by means of exemplars featuring an exaggeration of the items that will then be delivered to the market in a more moderate form. The most vivid example are fashion shows, which twice a year present new designs in the form of wacky showpieces. This paper examines whether this strategy of introduction of novel designs enhances the evaluation of target design more than a standard launch strategy in which consumers are exposed directly to a marketable version. In addition, we show how this effect is contingent upon the level of consumer expertise and upon the structural alignment between the showpiece and the target design.

Exaggerated showpieces are prototypes based on the same design concept as their marketable counterparts, which emphasize and exaggerate the central visual features of the design (Bolton 2007). For example, a concept car emphasizes the design features of a marketable car belonging to the same line. Exposure to exaggerated showpieces might initially prompt a negative reaction since such exemplars are typically perceived as unusual and bizarre in comparison to marketable products. However, we argue that the feature of exaggeration, by emphasizing the central and distinctive features of a design while discarding the less relevant ones, may enable an effective elaboration and retention of the visual information contained in the exaggerated exemplar. Once this information is stored in implicit memory, it may in turn favor a more fluent processing of other exemplars within the same design category, thus enhancing their evaluation, in line with theories on aesthetic appreciation (Ramachandran and Hirstein 1999) and with findings on the effectiveness of caricatures (Mauro & Kubovy 1992; Rhodes, Brennan & Carey 1987).

Experiment 1 shows that initial exposure to exaggerate showpieces generates a more favorable evaluation of a moderate target design than initial exposure to moderate exemplars or no initial exposure, with this effect being driven by the evaluations of experts (measured expertise). We argue that experts' advantage is due to their greater familiarity with non-prototypical stimuli such as exaggerated showpieces, which makes them less distracted by exaggeration per se, and more focused on the information contained in the showpiece (Alba and Hutchinson 1987; Rhodes and McLean 1990). Experiment 2 adds external validity to Experiment 1, and replicates its results by making use of a group of real experts (fashion design students and young fashion professionals) compared to a group of non-experts (management students). This effect could again be explained by the fact that experts, compared to non-experts, are able to process exaggeration and to decode the structure of the design in a more effective way and are able to elaborate more fluently the same structural elements of the showpiece featured in the target design. This idea is explored in Experiment 3, where we test the hypothesis that experts' stronger shift in the evaluation of the target design is not a function of expertise per se, but of higher ability of perceiving the structural alignment between the showpiece and the target design. We manipulate a visual feature of the design able to make the structural alignment between the two stimuli (exaggerate showpiece and moderate target design) more salient, and therefore improve the processing of the visual information contained in the target design (Markman and Gentner 1997). Results show that experts' advantage is eliminated in the condition of high redundancy, as both experts and non-experts evaluate the target more favorably when exposed to exaggerate and highly redundant exemplars, whereas experts evaluate the target significantly more favorably than non-experts when exposed to exaggerate but low-redundancy exemplars. These results suggest that it is not expertise per se, but rather the perception of alignment in the structure of the set of stimuli that determines the enhanced evaluation of the target. Consistent results are obtained in Experiment 4 by using only low-redundancy sets of stimuli and by training subjects to recognize the structural alignment between the exaggerate showpieces and the moderate target design. When receiving this type of training, again, experts and non-experts showed comparable evaluations of the target design, while this was not the case when subjects received an alternative type of training that provided them only with some general information on fashion shows. In addition, the perceived structural alignment between the showpiece and the target mediates the effect of expertise and of training on the evaluation of the target design.

Across four studies we find that overall evaluation of a target design improves by initially exposing subjects to exaggerated exemplars featuring the same design, when this exposure occurs under certain conditions: i) expertise increases the effectiveness with which the visual information in the exaggerated showpiece is decoded, thanks to more developed knowledge structures and higher familiarity with non-prototypical exemplars such as the showpieces; ii) redundancy between the two exemplars improves the detection of relevant visual information in the exaggerated showpiece and subsequently enhances the ease of processing the moderate target design, resulting in more favorable evaluations by both experts and non-experts; iii) even in the presence of low redundancy between the two stimuli, when novices receive training on structural alignment, their evaluations match those of experts.

These results contribute to several areas of research. First, they shed new light on how expertise affects the nature of information processing: expertise involves the ability to represent products in term of deep structures, as hypothesized by Alba and Hutchinson (1987), thus leading to more efficient detection of the structural alignment between different items. We also contribute to research on the effects of exaggeration by showing that this visual feature, despite making stimuli less attractive, or more shocking, improves the clarity of a visual message, which is decoded more

effectively, and helps the subsequent elaboration of similar visual messages. In addition, our study explores the effect of redundancy on processing fluency (Reber et al. 2004). Redundancy, by increasing the structural alignment among a set of stimuli, enables the extension of processing fluency effects to structurally similar but non-identical stimuli, consistently with Gordon and Holyoak's (1983) finding with respect to the extensibility of exposure-based fluency to different stimuli that share some structural elements.

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Same Destination, Different Paths: The Effect of Observing Others' Divergent Reasoning on Choice Confidence

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After Barack Obama's victory in the 2008 election, strategists convened to analyze John McCain's loss. Pundits generally grouped McCain's supporters into Moderates and Conservatives and suggested that divergence in perceptions of the importance of various issues among these two groups led to fragmentation within the Republican party (Rodgers, 2008). Could observing others' *divergent reasoning* for a *convergent choice* have dramatically undermined the confidence of McCain's supporters in their choice of candidate? More generally, can the observation of divergent reasoning for convergent choices have such a strong influence on consumers' choice confidence? Certainly, social influence research shows that observing others' behavior can have a strong influence on our own, raising our evaluations of the commonly chosen entity (Escalas and Bettman, 2005) and bolstering our confidence in that choice (Burnkrant and Cousineau, 1975). We contend, however, that convergence or divergence of choice does not fully explain the influence that observing others can have on one's own choice confidence. Rather, results from three studies suggest that when an observed other's justification for making the same choice as our own diverges from our justification, choice confidence can be substantially undermined. We argue that in such cases others' reasoning is seen as highly diagnostic in determining the validity of our own choice.

We propose a framework which recognizes that both observed choice and reasoning may either converge or diverge with an observer's own. Reasoning is a key element in evaluating the validity of a thought process (Simonson and Nowlis, 2000). As such, models of reason-based choice assume that individuals choose by considering the reasons for choosing one alternative versus the other (Shafir, Simonson, and Tversky, 1993). That is, consumers believe that good choices are based on good reasons and that good reasons will lead to good choices (Barber, Heath, and Odean, 2003). Seeing someone choose what we do based on the same reasoning that drove us to choose it (i.e., perfect choice and reasoning convergence) should be doubly affirming – we have convergent support for our choice and know that we made it well.

However, we propose that knowing that someone else has different justifications for a choice can be quite damaging to our choice confidence, particularly if the choices are convergent. Research on group behaviors shows that it is extremely important to find "noncontroversial reasoning" for a decision, such that the majority of group members are likely to accept the validity of the choice (Irwin and Davis, 1995). Similarly, we propose that an individual consumer who observes another making the same choice s/he does will see the underlying reasoning of the observed other as highly diagnostic in determining the validity of his/her own choice. Therefore, the consumer will question his/her choice if the reasoning of the observed other for making the same choice diverges from his/her own. For example, a student who arrives at their chosen university to find that most people in their dorm chose the school primarily because it was a "party" school (while the student in question chose it primarily for its academic rigor) will, rather than feeling encouraged by the fact that everyone chose the same school, experience significantly lower choice confidence than had they arrived to find the reasoning of other students convergent with their own.

We also predict that observing divergent reasoning for the same choice may shake confidence more so than does observing another consumer making a completely different choice. Unexpected reasoning attracts more attention and elaboration than does expected reasoning (Greenwald and Sakumura, 1967; Simonson and Nowlis, 2000). Divergent reasoning for a shared choice is likely to be less expected than is any reasoning related to divergent choice – while shared choices promote tendencies to anchor on one's own thought processes as the norm, divergent choices may cue consumers to recognize heterogeneity among those around them (Gilovich, Savitsky, and Mevec, 2000) and, therefore, to be less surprised if they report divergent reasoning. The direct applicability of divergent reasoning to convergent choice behavior will also make it more persuasive than reasoning related to a different option (Goldstein, Cialdini, & Griskevicius, 2008). Thus, we anticipate that individuals will question the validity of their decision processes more when faced with reasoning relevant to their own choice versus reasoning irrelevant to that choice. We also propose that these effects on choice confidence can be moderated by (a) suggesting that another's choice is not, in fact, diagnostic for the validity of our own (in the case of a rejection vs. selection task) or (b) reducing concerns about whether one's own choice process is perceived as valid because this information is anticipated to remain private.

Results from three studies support our hypotheses. Specifically, in study 1, we use the context of political decision making to demonstrate that while observing convergent choice of a presidential candidate and reasoning for making the choice evokes the greatest confidence in our own choice, observing someone make a convergent choice based on divergent reasoning actually undermines confidence such that confidence in choice becomes less than when the observed other chooses a different alternative. This effect, however, only exists when choices are framed in terms of selection rather than rejection, highlighting the difference in the diagnosticity of reasons for liking versus disliking an alternative (Gershoff, Mukherjee, and Mukhopadhyay, 2007). In study 2, we show that individuals do not correctly intuit the deleterious effect on choice confidence that encountering another individual who made the same choice but for completely different reasons might have. The results of study 2 may reflect the fact that we

tend to think ourselves less prone to social influence than we are, tending to believe our own individual thoughts will outweigh our tendency to conform (Pronin, Berger, and Molouki, 2007). Finally, study 3 suggests that the effects we demonstrate on choice confidence are attenuated when individuals do not anticipate having to defend the validity of their decisions (i.e., no public discussion of their choice or reasoning is anticipated) and extends our results to another decision making context (choice of university for graduate school).

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Metacognitive Experience, Overconfidence, and Decision Making
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Consumers often make decisions based on estimates or predictions, and their confidence toward those judgment estimates often guides their decisions (confidence heuristic). Thus, how well an individual's confidence level matches that person's actual performance or quality of decision-making is a central question in this domain. Findings in prior literature have revealed that people's judgments are routinely overconfident. Overconfidence occurs when the average judgment of the probability that one's previous deterministic judgment was correct is larger than the proportion of times those deterministic judgments were actually correct (Yates, 1990). Overconfidence poses practical problems. It implies that we might fail to recognize the need to improve our judgments, and in turn lead to decision deficiencies. For example, overconfidence of a witness might lead to an unfair testimony against the accused. Probability judgment by physicians determines their communication with the patients, and the final medical treatment chosen. Several accounts (i.e. self-enhancement, confirmation bias, sampling bias, heuristic biases) were proposed to explain overconfidence. For example, the *optimistic overconfidence* account suggests people are subject to wishful thinking and self-enhancement, and thus provide probability estimates that are distorted by these self-serving motivations (Griffin & Brenner, 2004).

In this paper, we proposed that the theory of metacognitive experiences, which include the ease or difficulty with which some information can be brought to mind (accessibility experience) and the fluency with which new information can be processed (processing fluency) (Schwarz, 2004), could be applied to explain increased overconfidence bias. That is, feelings serve informative functions when people form confidence judgment. We hypothesize that these perceived feelings of ease drive inflated confidence estimate, which in turn leads to greater overconfidence bias.

We conducted three experiments to investigate our research proposition. The research paradigm followed the classic two-stage process: a subject answering a series of true (false) or two-alternatives general knowledge questions, and then estimating his/her confidence in the form of probability that the chosen answer is correct. Prior literature has suggested overconfidence is most extreme with tasks of great difficulty; as tasks get easier, overconfidence is reduced (*difficulty effect*, Lichtenstein & Fischhoff, 1977). Therefore, we calculated the average response accuracy rate and performed a median split to arrive at sets of easy and difficult questions. Furthermore, because overconfidence bias is determined by individual average accuracy rate and confidence judgment, and because there are individual differences in general knowledge, individual accuracy rate across all questions was calculated and included as a covariate in the following analyses.

Experiment 1 is to assess the role accessibility experiences play. In a 2 (number of support reasons: 1 or 3) x 2 (focal answer choice being justified) x 2(question ease: high or low) mixed design, participants were asked to generate either one or three reasons in support of either one of the two choice alternatives for thirty general knowledge questions. We surmised that an ease of information retrieval would enhance confidence – in other words, generating three reasons in support of an option should depress overconfidence levels compared to generating one reason in support of an option (which would be easier than generating three reasons). Analyses yielded an interaction between question ease and ease of retrieval. The effect of the accessibility experience on overconfidence level only surfaced for difficult questions ($F(1, 176)=3.21$, $p=0.075$; $M_{diff, 3reasons}=0.26$, $M_{diff, 1reasons}=0.33$). In other words, when a question was difficult, the difficulty of the question was enough to depress overconfidence biases. When a question was easy, there was a greater tendency to rely on the ease of retrieval of reasons supporting one of the answers. That is, ease of retrieval appears to be considered diagnostic when the question is easy.

In experiment 2, we assessed the effect of processing fluency, which was manipulated with differential visual clarity. Experiment 2 was a within-subject design where half the general knowledge questions were presented in a blurred font, while the other half were presented in a non-blurred font. The overall response accuracy on each question was used to perform a quartile-split and thus form four groups of questions with varying question difficulty level. Analyses showed (1) there was no significant difference between the two different font clarity conditions when the questions are extremely difficult or easy; (2) an interaction effect between font and question difficulty surfaced in the comparison between moderately difficult and moderately easy questions; the overconfidence difference between easy and difficult questions in the blurred condition was significantly larger than the one in the non-blurred condition ($F(1, 235)=4.88$, $p=0.028$); the blurred font resulted in greater overconfidence bias for moderately difficult questions ($M_{m-diff, blurred}=0.14$; $M_{m-easy, blurred}=0.01$), whereas the non-blurred condition showed more overconfidence in the easy group ($M_{m-diff, nonblurred}=0.05$; $M_{m-easy, nonblurred}=0.09$). Participants presented with both difficult and easy questions, accompanied by blurred font, might attribute the differential processing fluency to differential blurry levels. Accordingly, people attribute the processing difficulty externally to environmental disturbance when difficult questions are posed in a blurred font, whereas they tend to attribute the processing difficulty internally to personal knowledge for difficult question posed in a non-blurred font.

In experiment 3, before the general knowledge test, participants were asked to perform a categorization task on items coming from either one of the two choice alternatives from twenty-two general knowledge questions. The categorization task and the general knowledge test were framed as two separate tasks. We propose that alternatives exposed beforehand would be perceived as more familiar, and this feeling of ease would lead to inflated confidence. The overconfidence bias scores from the exposure group were compared with those from the control group where there was no

categorization task. Analyses yielded a significant exposure main effect (F(1, 326)=7.7, *p<0.01*). People in the exposure condition had higher overconfidence bias than people in the control condition ($M_{exposure}$=0.11, $M_{control}$=0.07).

Taken together, the findings across three experiments shed light on the ease of retrieval effect and the processing fluency effect on overconfidence. This research provides another potential route to understand the mechanism underlying overconfidence.

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Tell Me Your Opinion and I'll Figure Out Mine: The Role of Popularity Cues and Assortment Size in Consumer Choice

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Existing consumer choice research suggests that having more choices is not always beneficial to consumers. With more options, consumers have a better chance of finding an enjoyable choice, but they can also feel less confident about their decisions, experience greater decision difficulty, perform at a lower level, and choose more hesitantly (Dhar, 1997; Iyengar & Lepper, 2000; Shugan, 1980). Should assortment sizes be reduced to avoid the possible negative effects of choice overload, thus relinquishing the enjoyment gained from choosing and finding the right choice? We answer this question by exploring conditions under which consumers can make confident decisions when faced with ample options despite the greater decision difficulty, by using more information and processing it carefully. Specifically, we investigate the impact of popularity cues on epistemic motivation, choice confidence, and intention to purchase from a larger (versus smaller) assortment.

Research on information overload has demonstrated that consumers with abundant options are less motivated to process the options carefully because of the cognitive load presented by the large amount of information (Fiske & Taylor, 1984; Hauser & Wernerfelt, 1990). Instead, they tend to adopt seemingly easier and more efficient decision-making strategies (Payne, Bettman, & Johnson, 1988). Consumers facing choice overload tend to be less motivated to think through their options comprehensively, inducing less choice confidence (Berger, 1992). In addition, the literature on social influence has indicated that in uncertain situations, individuals are inclined to follow the judgments and evaluations of others. In particular, people interpret others' opinions about unfamiliar products as crucial information sources during their decision-making process, resulting in greater conformity (Burnkrant & Alain, 1975; Fitzsimons & Lehmann, 2004; Griskevicius et al., 2006; Wooten & Reed, 1998).

Thus, when consumers have an increased number of choices and more information to process, they appear to engage in less cognitive activity to make decisions. Moreover, when consumers encounter a potential cognitive load, they may perceive following others' opinions as an easier way to cope with complex decisions. That is, when given a large (vs. small) assortment, consumers may pay more attention to others' opinions because conforming to others seems simpler than considering all the available information.

We propose that rather than making choice easier, signals of others' opinions (e.g., popularity cues) can motivate consumers to deliberate among the given options and generate their *own* evaluations, resulting in greater, rather than reduced, cognitive effort and confidence in their choices. Specifically, when consumers choose from an unfamiliar assortment (i.e., non-existing preferences), they may consider others' opinions a coping strategy to reduce the choice overload or to make good decisions (Wood, 2000). At the same time, others' opinions can trigger their motivation to deliberate (epistemic motivation) because individuals are motivated to assess others' opinions carefully before they accept, discount, or combine them with their own (Yaniv, 2004).

Therefore, when consumers must choose from large (versus small) unfamiliar assortments,
we propose that, despite the increasing decision difficulty caused by having additional information, indicators of others' preferences (i.e., the presence vs. absence of popularity cues) will be associated with greater deliberation (H1), will lead consumers to have greater confidence in their choices (H2), and an increased willingness to purchase from large (versus small) assortments (H3). Furthermore, the increased motivation to process information will mediate the influence of this assortment size × cue interaction on consumers' choice confidence and purchase intentions (H4).

Our experiment used a 2 (large vs. small size) × 3 (no popularity cue vs. popular cues vs. unpopular cues) between-subjects design. After pretesting, we selected an assortment of relatively unfamiliar cheesecakes with a variety of flavors. We manipulated the assortment size based on previous research (Iyengar & Lepper, 2000; White & Schlosser, 2006) by using 24 types of cheesecakes in a large-sized assortment and 6 in a small-sized assortment.

The names and descriptions of each cheesecake were provided in all conditions. In addition, three people-shaped icons indicated each item's popularity in the popular (unpopular) cue conditions: two (one) of the three icons were (was) highlighted to indicate popular (unpopular) items.

After viewing the cheesecake list, participants chose the cheesecake they would be most likely to buy. They then reported the extent to which they had carefully considered the cheesecake descriptions when selecting a cheesecake, their intention to purchase, and their confidence, difficulty, and enjoyment in making a decision.

Consistent with prior research, in the conditions with no popularity cues, participants showed less confidence and decreased purchase intentions in the large (versus small) assortment condition. In contrast, participants who chose from the large assortment in the presence of a cued (popular or unpopular) condition, compared with a no-cue condition, showed greater confidence and increased purchase intentions. These respondents

appeared to use the popularity cues as the basis for their choices: cheesecakes accompanied by popularity cues were more likely to be chosen than those accompanied by cues of unpopularity. However, in contrast to the explanation that respondents processed (ignored) items that were popular (unpopular), resulting in a smaller - and therefore easier - consideration set, we find that those in the large assortments with popularity cues reported more (vs. less) decision difficulty and considered the product descriptions more (vs. less) carefully when choosing a cheesecake (H1). These respondents also reported feeling more confident about their final choices (H2) and greater purchase intentions (H3). Further, motivation to deliberate product information mediated the interactive effects of assortment size and popularity cues on consumers' choice confidence and purchase intentions (H4).

In summary, our argument that cues indicating others' opinions help consumers make decisions confidently by activating their motivation to process information was supported. Thus, in contrast to the growing literature indicating that having more options can demotivate consumers, our research appears to be among the limited studies highlighting the circumstances under which consumers make confident decisions from a large (vs. small) choice set. When exposed to others' opinions, consumers may be motivated to generate their own opinions - even when they are experiencing choice overload.

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Seeking Optimality in the Consumer Waiting Experience: The Good and Bad of Waiting Time
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A considerable amount of time each day is spent in a state of 'waiting.' When consumers purchase products, for instance, they often have to wait for a few moments after choosing their product while the transaction goes through. Similarly, when planning travel online, it is not uncommon to choose a particular itinerary (or hotel) and then wait for the website to search for available flights (or dates). The purpose of the present research is to gain insight into the consumer waiting experience. That is, what effect does waiting time have on consumers' attitudes and preferences? We explore the possibility that, under some conditions, waiting time can cause consumers' initial attitudes and preferences to polarize—that is, to become even more extreme than they were to begin with.

To investigate this issue, we adopted a classic persuasion paradigm from social psychology investigating the so-called *mere thought effect* (Tesser 1978). In this paradigm, individuals are presented with varying amounts of time to think about their attitude toward an issue. As the opportunity for thought (i.e., time) increases, individuals' attitudes become more extreme in their initial direction (i.e., they polarize; see Tesser et al. 1995). This polarization effect has been attributed to the generation of attitude-consistent thoughts. As the opportunity to think increases, one tends to generate more attitude-consistent thoughts, which makes one's attitude even more extreme. According to this logic, increased time should have a linear effect on polarization: more time should yield more attitude-consistent thoughts, which should lead to greater attitude extremity.

Building on this classic work, we explored the effect of varying degrees of waiting time on consumers' preference polarization. In contrast to the classic work on the mere thought effect, however, we took a *metacognitive perspective*, informed by recent research on the self-validation hypothesis (e.g., Petty, Briñol, & Tormala 2002). Specifically, we examined the possibility that waiting time could influence consumers' confidence in the reasons supporting their initial choice. As opportunity for thought (i.e., waiting time) increases, thought confidence might increase as well, but only up to a point, after which consumers might begin to question the validity of their initial reasons. If true, then the effect of waiting time on preference polarization might be *curvilinear*, such that going from short to moderate waiting time yields more confidence and polarization, but going from moderate to long waiting time begins to undermine confidence and reverse this polarization effect.

These issues were explored across three experiments, with each experiment employing a similar design. Participants were presented with a dichotomous choice—between either different vacation locales (Experiments 1 and 2) or digital cameras (Experiment 3)—and indicated their degree of preference for the chosen alternative. After making their choice, participants waited for varying amounts of time: short, medium, or long, with the specific length of time determined by pretesting. As a rationale for waiting, participants were led to believe the computer was having connectivity problems (Experiment 1), that the computer was uploading their responses to our research database (Experiment 3), or that we wanted to record their thoughts about their reasons for their choice (Experiment 2). Following the waiting time manipulation, participants were presented with the same choice and asked to report their preference once more.

Consistent with prior research on the mere thought effect, results of the first two studies demonstrated that consumers' preferences did indeed polarize following sufficient opportunity for thought (in this case, waiting time). Interestingly, however, these studies also demonstrated that preferences did not polarize when consumers' waited for either too little or *too much* time. In other words, waiting time had a curvilinear effect on preference polarization such that participants polarized (further favoring their initial choice after waiting) in the medium time condition, but not in the short or long time condition. Meditation analyses indicated that this curvilinear effect of waiting time on preference polarization was due to consumers' *metacognitive* sense of confidence in their thoughts toward their choice. That is, consumers' were most confident in their reasons for their choice following a moderate waiting period; too little or too long a wait led to lower levels of thought confidence and a lack of preference polarization.

In Experiment 3 we examined whether consumer's optimality of waiting time (defined in terms of the conditions under which polarization is greatest) depends on consumers' salient mindsets while waiting. To test this possibility, we primed participants with a hedonistic or utilitarian mindset at the

outset of the study. The results of Experiment 3 illustrated that optimality in waiting was moderated by the prime. Specifically, individuals primed with hedonism showed the most polarization at low levels of waiting, whereas individuals primed with utilitarianism showed the most polarization at high levels of waiting. This result offers support for the notion that optimality in waiting time, and the polarization it engenders, depends on salient mindsets.

Waiting is an important part of the consumer's daily experience. Building on work on the mere thought effect, the present research sought to identify whether there exists an optimal consumer waiting time for inducing preference polarization. The results across three studies suggest that there is indeed an optimal waiting time. In short, inducing consumers to wait post-choice can increase the extremity of their initial preferences as long as that wait is not too long or too short. Furthermore, this effect appears to be due to the amount of confidence consumers have in their reasons supporting their preferences. Moderate waiting periods offer the opportunity to bolster thought confidence, but too much time can undermine this effect. Additionally, optimality appears to be flexible and dependent on salient mindsets. Taken together, these results offer important insight into the consumer waiting experience and offer novel recommendations for strategic implementations of post-choice 'waits' to influence consumers' preferences.

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Session 8.7

Mind the Gap: On the Well-Being of Social Capitalists
Lalin Anik, Harvard Business School*
Michael Norton, Harvard Business School

Many of us know people (and some of us are people) whose sole aim in life appears to be to connect other people to each other – from more innocuous behaviors such as grabbing two strangers by the arm at a party, introducing them to each other, and telling them they must have a lot to talk about since they are both named Ted, to more involved behaviors such as playing matchmaker and brokering romantic connections between often unwitting or unwilling victims. We investigate this proclivity to connect others, demonstrating that such "social capitalism" – creating ties between others – pays in the form of increased well-being. In five field and laboratory studies, we show that people who chronically connect others – social capitalists – are happier people, that people derive utility from connecting others to each other that is distinct from utility derived from connecting others to themselves, and, most importantly, that encouraging people to become social capitalists – forcing them to connect others – has a causal impact on well-being.

In Study 1, we examined how people's well-being related to their self-reports of their social capitalism. Participants (N = 283) rated the extent to which they engaged in behaviors related to creating social capital, such as introducing friends to each other and setting people up on dates, and completed measures that assessed their chronic well-being. As predicted, an increased frequency of engaging in social capitalism was associated with increased well-being; importantly, these correlations held even when controlling for the size of participants' own social networks, suggesting that creating connections between people has utility over and above the possible benefits to the self on introducing others (enlarging one's own network)

We then turned to real-world networks to explore the personal benefits of being the unique connector in the social network. We map out the social networks of Harvard MBA students (N = 168) by having each student check off each classmate they considered to be their friend. We calculate the betweenness centrality of each student, or the extent to which one is the unique connector between two people. In line with results from Study 1, being a connector between others was a significant positive predictor of life satisfaction, and this relationship again held even when controlling for the size of participants' networks.

Our results thus far reveal that people's self-perception of being an active connector in social networks as well as their location as connectors in real in networks are associated with well-being. We were also interested, however, in showing that engaging in social capitalism has a causal impact on well-being. In Studies 3 and 4, therefore, we experimentally manipulated the ways in which people made connections between others.

In Study 3, we manipulated social capitalism by having participants (N = 128) either connect themselves to others, or other people to each other, by searching for similarities. Our results showed that building connections between other people has as large an impact on well-being as building connections between oneself and others. In order to understand whether crating social connections between others is necessary or whether making *any* kind of connection between others is sufficient to increase well-being, we randomly assigned participants in Study 4 to one of three tasks. Participants were either asked to match pictures of people in terms of which pairs they thought would get along best (*get along condition*), which pairs they thought would get along least (*not get along condition*), or which pairs they thought were most physically similar (*physical similarity condition*). We informed participants that they could complete as many trials of this task as they wished before switching to another, somewhat boring task. We found that participants in the *get along condition* preferred to do significantly more trials – reflective of the utility they derived from completing this task – than those both in the *not get along condition* and the *physical similarity condition.* Thus these results suggest that the benefits of connecting others is tied specifically to creating social capital – bridging the gaps between others.

Thus far, we have not examined the role of success of creating connections – in Study 1, for example, people's reports of their chronic tendencies to connect others were correlated with well-being, but we do not know whether the people they fix up on dates end up getting married, or end up with a dating horror story. In one view, the act of connecting others creates well-being regardless of the success of the connection; in another, if the goal of social capitalism is truly to create lasting social capital, then the success of the match should be crucial. In Study 5, in a 2x2 design, participants were assigned to either recall a time where they introduced themselves to another (*self condition*) or two other people to each other (*other condition*),

and when the connection was successful (*get along condition*) or not (*do not get along condition*). Similar to Study 3, results showed that connecting others to each other had similar benefits for well-being to connecting oneself to others. Most importantly, however, success mattered: Feedback that a connection was successful was a key contributor to their satisfaction.

Across a series of field and laboratory studies, we found evidence for both a correlational relationship between chronic social capitalism and well-being (Studies 1 and 2) and a causal role for social capitalism in increasing well-being (Studies 3, 4, and 5). Indeed, the benefits of social capitalism were such that creating connections between others created as much utility for connectors as creating links between themselves and others, suggesting that building and shaping networks – even when one is not a direct part of that network – creates utility in and of itself. Our current work is exploring how people's desire to connect others can be used by market's to help grow inline social networks in ways conducive to the firm; rather than asking consumers to sign up their friends for some service offering, our results suggest that providing consumers the opportunity to create connections between others is an engaging way to increase consumer involvement.

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Neither Vetted nor Vouched: Online Consumer Behavior and Reputation Systems in High-Risk Social Networks
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The case study of a popular worldwide network for making connections between travelers and the local communities they visit offers an online social network that departs from the contexts typically studied in sociology, social psychology, and behavioral economics. As reputation systems are extremely important in such networks of exchange that operate with little knowledge of other actors, we examine the cues that are most predictive of negotiated agreements and successful interactions, and whether we are aware of the cues that actually influence our perceptions of whom to trust. We also look at the cues that are perceived as indicative of reputation, but actually reveal little relationship with outcomes highly correlated with trustworthiness and successful agreements. Within the framework of social networks, we integrate theories from social psychology to help explain not only the development of loose networks with little formal structures for sanctioning behavior, but also how such networks thrive through engendered trust at both the individual and structural levels.

Through a random sample of the profile information in the network (N=1,000), we delve into whether those who reciprocate in hosting others do indeed have higher success rates in getting hosted themselves, and the most frequently cited cues used in assessing others and determining whether to host someone or to select someone as a host. It is noteworthy that while the organization espouses the values of reciprocation and passing good will on forward, cues typically used to assess reputation cannot be used as a cue with reliability in assessing the trustworthiness in certain online social networks, but it may be used as a cue to evaluate levels of integration in the network.

We turn to an investigation of espoused values in social networks and whether they impact outcomes. While chi-square tests indicate that those who have been vouched for have a significantly more references and successful agreements than those who have not been vouched for (p<.05), of those who chose to signal their trustworthiness through vouched status, only 18.3% indicated that they would be receptive to hosting others, suggesting that the vouching mechanism may be more indicative of individual propensities to trust others, rather than as an instrument of signaling their own trustworthiness. While espoused values such as vouching status seem to reveal differences in levels of trust, such that those who have been vouched for have higher average agreements, we must also take into account the potential confounding factor of level of identification with and commitment to the social network. Here, it may be that the effort to display cues of trustworthiness are correlated with how much individuals believe they are core members of a network, and, accordingly, able to benefit from such efforts.

We supplement our first analyses with more rigorous regression models to understand the individual cues that are most predictive of negotiated agreements and successful interactions, and whether such attributes are deliberately anticipated, and actually relevant to engendered trust. Of the top 100 most active members, we find that there is little reliance on reputation systems available through the online social network. Stepwise linear regression models reveal that references left by interaction partners and verification level were not significant predictors of desirability as a host or a guest; instead, the number of photos included in the profile and the number of network groups the member joined mattered most in the members' decision making and were the most significant predictors in the choice of interaction partners. When we examine the population of 1,000 randomly selected network members, we find a similar pattern, such that again, information from reputation systems in place are not used and the number of network groups and length of membership in the network are the significant predictors of desirability as a host and as a guest. In addition, some cues that reveal little information about whether an individual is trustworthy or not---the quantity of profile text---was a significant predictor, suggesting that quantity is perceived as quality not only of the profile or product, but attributed as quality in the character of the individual.

This line of research reveals new insights regarding how the digital economy reallocates and creates value through the resources embedded in social networks, or investment in social relations with expected returns. This site offers many intriguing departures from the traditional conceptions of social networks, online forums, and economic premises and may have important implications for our understanding of how individuals interact with and develop trust with each other, not only in social networks and online forums, but also in multi-national companies and in our global economy, when our very first impressions of others may well not include the types of cues that we have typically relied on to assess trustworthiness.

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Creating Contagious: Cascades in Spatially Dispersed Social Networks

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What drives social epidemics? Cultural information and practices (e.g., products, websites, songs, or ideas) often spread like viruses across social ties between people. This diffusion is a key process through which consumers learn about new products. Further, it can be responsible for a product's amazing success (or dismal failure) with relatively little, if any, investment in conventional marketing communications or promotion strategies. But what drives these situations where products spread like wildfire through a population? How does (a) the number and network position of the early adopters and (b) characteristics of the cultural item being shared influence whether the item catches on?

This paper explores these questions by studying how information spreads across a realistic social network. People belong to physical communities (e.g., geographic centers) and are socially tied to other people both within and outside their communities. We use a stochastically generated social network of 1,000 people and an agent-based simulation model to consider the diffusion of a new product across a range of conditions. In this model, information about an innovation spreads over social network ties, and consumers are "infected" on a continuous scale. Consumers who have higher infection levels can be seen as more aware or enthusiastic about the innovation, and thus more likely to influence other consumers. Every period, one of each consumer's friends is randomly chosen as a potential influencer. We then use a simple influence model where consumers' influence one another based on their own level of awareness or infection.

We examine how characteristics of the early adopters and of the innovation itself determine how widely and quickly a product catches on. Regarding early adopters, we vary the proportion of the population that is initially infected (via advertising, for example). We also vary how the early adopters are spatially distributed over the network (i.e., where they are positioned) and their connectivity characteristics (e.g., are they well-connected with many friends or less connected but within reach of many others?). The positions of the early adopters can also be thought of in terms of the "seeding strategy" that a marketer might use to try to initiate a cascade (e.g., select the well-connected people, randomly select people). Regarding the innovation itself, we vary how conducive it is to spreading. Some products or information spread easily while others are more difficult to diffuse. Specifically, some innovations are easy to try whereas others require much greater interest. Thus, we vary the trial (or adoption) threshold. Also, while products or ideas may be top of mind right after a person hears about them, their accessibility, or how enthusiastic people are about the innovation, soon declines. We therefore vary the rate at which this decline or decay occurs, with higher decay rates meaning that the innovation is harder to remember over time.

We then examine how these factors influence product adoption. In particular, how quickly and broadly the product catches on. We find that the network positions of early adopters can dramatically impact diffusion outcomes, particularly in cases that are not conducive to diffusion (e.g., information being hard to remember or adoption requiring high awareness or enthusiasm). Even when the innovation's characteristics are well suited to it catching on the network positions of the early adopters influences adoption outcomes. Interestingly, when early adopters are well-connected (the traditional definition of a social hub or an opinion leader), the innovation does not diffuse widely and does not take-off. However, when early-adopters are positioned between many other people (i.e., social intermediaries) the innovation is much more likely to achieve widespread success. In fact, even when the early adopters have few connections, but are randomly dispersed throughout the network, more people eventually adopt the product than when early adopters are well-connected. This suggests that how well-connected early adopters are is largely inconsequential; rather, where they are positioned in the network is what influences whether they trigger a successful cascade. We also find evidence of some compensatory effects between the characteristics of the innovation. In particular, the adoption-dampening effects of high adoption thresholds can be mitigated by low decay rates (although the reverse is not true: high decay rates are not offset by low adoption thresholds).

In contrast to recent findings (Watts and Dodds 2007) our results suggest that easily influenced people are not necessary for cascades to occur. Rather social epidemics depend on the positions of the early adopters. In fact, cascades can still occur "against all odds" (i.e., when conditions are not conducive to diffusion) provided that the early adopters are positioned throughout the network. Overall, these results provide insights into how different initial conditions and micro-level behaviors influence macro-level outcomes in social contagion processes. They have direct implications to research on word of mouth, social influence, and diffusion more broadly.

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Session: Good and Bad Judgments – Attributions, Language, and Other Biases

Effects of Training on Sales Supervisors' Evaluations of Ability
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Do salespeople benefit from participating in training programs to improve their job skills? It might be tempting to assume that effective training will improve a salesperson's skills and thus favorably impact future supervisor evaluations and future salary. However, existing research suggests that this might not be a valid assumption – Gilbert and Silvera (1996) found that, although external assistance (help) improves ability evaluations of average performers, it detracts from ability evaluations of excellent performers. To clarify their findings, these researchers distinguished between *behavioral* benefits of help, which refer to the positive impact of help on performance quality, and *attributional* costs of help, which refer to the fact that observers might view the help, rather than the performer's ability, as the primary cause of a high quality performance. For an average performer, behavioral benefits are likely to outweigh attributional costs due to the tendency for observers to see behavior as primarily driven by dispositional characteristics of the performer (i.e., correspondence bias; Gilbert & Jones, 1996). However, for an excellent performer, performance is likely to start at such a high level that behavioral benefits of help are minimal; consequently, attributional costs are likely to outweigh behavioral benefits, resulting in a negative impact of help on ability evaluations.

There are, however, a few aspects of Gilbert and Silvera's (1996) research that potentially limit the generalizability of their results to the context of salesperson evaluations. First, the artificial nature of the evaluation task (anagram-solving performance) in this research can potentially create biased judgments that would not be observed in more externally valid judgment contexts (see Fiedler, 2007 for a review). This is potentially exacerbated by the fact that evaluators were students who were neither experts on the experimental task nor particularly motivated to make accurate judgments about the performer. Salesperson supervisors should typically have both greater expertise about selling and a stronger motivation to make accurate evaluations, and both of these factors can potentially influence ability evaluations.

In the present research, Ss in two studies were asked to play the role of supervisors at a university calling center that employed college students to call alumni to solicit donations. Information about the typical number of calls per hour and typical caller success rates in soliciting donations was provided, followed by descriptions of the previous week's performance of two student caller targets (one average performer and one excellent performer). Ss were then asked to rate the calling ability of each target.

In Study 1, Ss were presented with two callers (an average performer and an excellent performer) who received varying degrees of help at the start of the previous week: in the good help condition, targets received personalized training that focused on their own qualities as a salesperson; in the poor help condition, targets received a generic training program; and in the no help condition, targets received no training. A 2 (target: average vs. excellent performer) x 3 (help: good vs. poor vs. no help) ANOVA was conducted with the target's calling ability as the dependent measure. The key result from this analysis was a significant interaction between the target and help manipulations. One-way ANOVAs conducted for each target indicated that help had no effect on ratings of the excellent performer, but that higher quality help significantly increased ratings of the average performer. Thus, results for the average performer replicate Gilbert and Silvera's (1996) findings, but the results for the excellent performer do not. An additional analysis showed that quality of help significantly influenced the degree to which Ss viewed the help as a strong explanation for the excellent target's calling success, indicating that Ss recognized the contribution of help to the excellent performer's success but failed to "correct" their judgments of calling ability for the situational constraint provided by that help.

Study 2 examined whether evaluations might be different if the salesperson requests the training, perhaps due to the fact that requested help is more salient or due to social implications of requesting help (e.g., ingratiation). Ss were presented with two callers (an average performer and an excellent performer) who received help during the previous week. The source of help was manipulated as follows: in the solicited help condition, the salesperson requested additional training; and in the unsolicited help condition, the salesperson was instructed to take additional training by the employer. A 2 (target: average vs. excellent performer) x 3 (source: solicited vs. unsolicited vs. no help) ANOVA was conducted with the target's calling ability as the dependent measure. The key result from this analysis was a significant interaction between the target and source manipulations. A one-way ANOVA for the average target indicated that both solicited and unsolicited help improved ability judgments compared to no help. A similar analysis for the excellent performer showed no difference between no help and unsolicited help, but that ratings for solicited help were significantly more negative. In other words, solicited help appears to incur greater attributional costs for excellent performers than does unsolicited help.

Perhaps the most important result from the present research is that training appears to improve evaluations of average performers, but that excellent performers are in a "no win" situation with regard to training. This is an important concern both for excellent performers who want to reap the benefits due to them in employee evaluations and for companies that want to retain their excellent performers and keep their job satisfaction levels high. Future studies will examine other employee characteristics (e.g., organizational citizenship behavior) and supervisor characteristics (e.g., motivation for accuracy) that might induce more favorable evaluations of excellent performers.

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The MPG Illusion
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Jack B. Soll, Duke University

Overview: Decision makers often accept the surface features of a decision problem and neglect the underlying problem structure. Gas consumption is an inverse (curvilinear) function of an automobile's miles per gallon (MPG), as shown in this graph:

http://faculty.fuqua.duke.edu/~larrick/bio/Reshighlights.htm#GPMgraph

In three studies (Larrick & Soll, 2008), we show that people incorrectly believe that gas consumption decreases as a linear function of improvements in MPG. Linear reasoning leads decision makers to undervalue small improvements on inefficient cars (e.g., trading a car that gets 15 MPG for one that gets 20 MPG), and overvalue large improvement on efficient cars.

The MPG illusion is corrected when fuel efficiency is expressed as gallons consumed over a distance driven (e.g., gallons per 10,000 miles, or GPM). See this table for the translation of MPG to GPM:

http://www.fuqua.duke.edu/news/mpg/table.pdf

GPM is a "nudge" (Sunstein & Thaler, 2008) that leads consumers to more efficient car choices. Our talk will consider the practical consumer benefits of using gallons per 10,000 miles as a complement to MPG in consumer magazines and on the EPA website (fueleconomy.gov). Each study is briefly described below. Study 1: In the first study, college students were asked to rank each of the following vehicle changes (old car vs. new car) in terms of total gas saved, assuming that all the vehicles were driven 10,000 miles (shown in a random order): (A) 34 to 50 MPG; (B) 18 to 28 MPG; (C) 42 to 46 MPG; (D) 16 to 20 MPG; (E) 20 to 22 MPG. The majority of participants ranked the changes in order of the linear increase in improvement in mpg, (16 mpg for A, 10 mpg for B, etc.) However, in reality, B and D save more gas than A; D and E save more gas than C. Only 1 participant in 77 gave the correct order in terms of gas saved per 10,000 miles: B, D, A, E, C.

Study 2: A second study asked college students to price the gas savings from adding more efficient engines to a car that gets 15 mpg and costs $20,000, where the only feature that varies across vehicles was the mpg. Linear reasoning led them to undervalue improvements to 19 and 25 mpg and overvalue improvements to 55 mpg (under a range of discount rate assumptions).

Study 3: A third study showed that the mpg illusion could be corrected by expressing efficiency as gallons per 100 miles. In this study, we asked a cross-section of adults to think about a town that has a fleet of 200 vehicles that are each driven 10,000 miles in a year. 100 cars in the fleet got 15 mpg and 100 cars got 34 mpg. Respondents were asked to choose between A) replacing the 15 mpg cars with vehicles that get 19 mpg, or B) replacing the 34 mpg cars with vehicles that get 44 mpg. Three-quarters preferred option B when efficiency was expressed as mpg. However, when efficiency was stated as gallons per 100 miles, 64 percent correctly preferred option A, which saves about 1.4 gallons per 100 miles for every vehicle replaced (compared to roughly .7 when replacing the 34 mpg vehicles). In this scenario, option A saves 7,000 more gallons of gas than does option B.

Summary: The problem with MPG is a special case of a more general problem. If we want consumers to be aware of how their decisions influence global warming, we need to provide them with an accurate, useful metric for assessing greenhouse gas emissions. GPM is a step in the right direction because it can be directly translated to greenhouse gas emissions: Burning one hundred gallons of gas releases one ton of carbon. However, consumers need additional metrics in order to choose wisely across a number of major decisions. Greenhouse gases may be reduced more by replacing an old air conditioner or eating less meat than by replacing a car that gets 33 MPG with a car that gets 50 MPG. This calculation is currently impossible with our limited metrics.

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Targeting Effect of Multilingual Product Packaging

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There has been great deal of research into country-of-origin effect on product evaluations (Li and Wyer 1994; Maheswaran 1994) and its determinants (Gurhan-Canli and Maheswaran 2000). The basic remise of the country of origin effect is that consumers classify products into categories (categorization) and apply organized prior knowledge about the categories (schemas) to evaluate new products (Meyers-Levy and Tybout 1989; Sujan 1985). These classifications and application of prior knowledge is based on inferences made from whatever information is known about the product at that point rather than on any observations made about the product. In the country of origin effect one of the pieces of information known to the respondent at the time of making the evaluation is regarding the country where the product was created. The purpose of this paper is to investigate the effect of another similar piece of information available at the time of formation of such references. This is the perceived targeting of the product based on languages appearing on the product packaging.

Different products sold in US have descriptive product information in different languages. Some products have information in several languages including Spanish, a few European languages such as French and Asian languages. Integration of available information to form a judgment is an accepted theory on how consumers arrive at judgments. (Miyazaki, Grewal and Goodstein 2005). According to theory consumers arrive at judgments by combining all available information like product attributes and other extrinsic cues. When verifiable product information is scarce or not deemed useful, or when there is no opportunity to process it, extrinsic cues (like country-of-origin) are more likely to be used to asses product quality resulting in an evaluation that is more heuristic in nature (Miyazaki, Grewal and Goodstein 2005, Monroe 2003, Suri and Monroe 2003). When such verifiable intrinsic information is unavailable, we hypothesize that one extrinsic information that consumers fall back on to draw inferences about the perceived targeting of the product is from the languages used in the product descriptions on the product packaging. Of late more firms are putting French on their packaging along with Spanish. This paper explores the differences in impact of adding Spanish as opposed to Spanish and French. The rationale for the expected difference is that when Spanish is seen on the product packaging, consumers assume the product is targeting the Spanish market as opposed to when both Spanish and French are seen on the product it is expected to be targeting the international market.

In this paper we determine how, if at all, these multiple languages impact beliefs, attitudes, and intentions toward the product.

Hypothesis.
1. Multilingual messages in Spanish and English on packaging will be evaluated as targeting the Hispanic market.
2. Multilingual messages in Spanish and English on packaging will be evaluated lower than English only messages.
3. Multilingual messages in French, Spanish and English on packaging will be evaluated as targeting international market.
4. Multilingual messages in French, Spanish and English on packaging will be evaluated as good or better than the English only messages.

Methodology
We use actual photograph of a microwave oven and edit it for our manipulations. We have designed three studies. Data collection is complete for study 1 and preliminary analysis show support for our hypotheses. Data collection is in progress for study 2.

Study 1
This study has a 3 X 2 design. Three levels of language with English, English and Spanish and English Spanish and French attributes of the microwave listed on product packaging is the first factor. Two levels of price (high-$89 and low $49) is the second factor. Study 1 was done in three stages.
> Week 1: Survey (same for all Ss) that measures Spanish language fluency, Hispanic identity, Hispanic affinity, prejudice, attitudes about Hispanics etc.
> Week 2: First wave of the experiment (half the subjects see lower price, half see higher price).
> Week 3: Second wave (the prices are switched).

The goal of introducing the price factor is to examine if the 'language effect' is more predominant at the lower price. This would not be (solely) due to the use of peripheral vs central cues, but rather because the low price may reinforce cultural stereotypes about Hispanics being targeted 'cheaper' products. Data was collected from 180 students at a University in South West part of US.

Study 2
This is a 2X2 study with two levels of language (English, English Spanish) and two level of country of origin.(Made in USA, Made in Japan). Here we explore whether country of origin will have and interaction effect with targeting perceptions in product evaluations.

Study 3 will examine if English and Spanish on the same side of the box is viewed differently from English and Spanish on different sides. Three alternate explanations for the hypothesized effect of difference between English only and multilingual messages on packaging.
1. The Spanish messages are targeting the Hispanic market which makes those who are high in prejudice to lower their evaluations of Spanish messages. Here the evaluations are pushed lower. If this explanation works, then we should see Spanish messages rated lower but international messages (one with French and Spanish) not rated differently.
2. The English messages as opposed to the Spanish and Spanish-French messages are targeting the American market which makes those who are high in ethnocentrism to raise their evaluations of English only messages. Here the evaluations are pushed higher just for English only messages. If

this explanation works, then we should see English only messages rated higher but international messages (one with French and Spanish) and Spanish messages rated lower.

3. This explanation is based on the using language as a heuristic cue to judge quality without the prejudice or ethnocentrism related judgmental evaluations. In places where Spanish products are more likely to be of less quality and low price, the presence of Spanish is taken as a heuristic cue for these characteristics of the product.

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Session: Good and Bad Consumption – The Meaning of Things, Conflicting Emotions, and Materialism

Uncovering the Affective and Cognitive Dimensions of Consumer Desires: An Exploration
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BACKGROUND
This research is concerned with an unexplored issue in the field of consumer psychology, i.e., the affective and cognitive dimensions of the desires for consumption goods. More precisely, the objectives of this research are twofold: (1) to construct and validate a scale to assess these dimensions and (2) to explore the links with other related concepts of interest such as materialism, the subjective well-being of consumers, and anti-consumption attitudes.

In this research the desire for a consumption good is seen as an emotionally ambivalent experience (Ramanathan and Williams 2007) that possibly integrates a combination of pleasurable and discomforting emotions (Belk, Ger, and Askegaard, 2003) and that involves the interplay of the heart (emotion) and the mind (cognition). Consumption desires refer to the set of objects, products, brands or experiences that a consumer wants to possess or to experience.

METHOD
Since there is no research that has examined the affective and cognitive dimensions of consumption desires, a qualitative research was deemed appropriate as a first step to explore the topic. Four dimensions emerged from a thorough analysis of the interview data. Three dimensions (pleasure, discomfort, and guilt) reflected the affective side of the desire for consumption objects, and a fourth dimension reflected the cognitive side (control) of the concept. The results of the qualitative investigation (see Boujbel 2007) serve as a basis for the development of the present scale.

Scale development
Generation of items
The generation of items was based on the qualitative data collected during the exploratory investigation. An initial set of 56 items were generated to operationalize the four dimensions. The pleasure dimension was composed of 15 items (e.g., "To desire a product or a brand gives me as much pleasure as to buy it"); the discomfort dimension comprised 13 items (e.g., "I get in a bad mood if I can't satisfy my desire to get a product or a brand"); there were 14 items for the guilt dimension (e.g., My guilt is greater when I buy a product that I desire very much but don't really need"), and 14 items to tap the control dimension (e.g., "In general, I can control my desires to buy products and brands that I really want").

Content validity
A pilot study was conducted to assess the content validity of the items. Four adult consumers acting as judges (2 males, 2 females) were shown the entire set of items, with a description of each dimension, and asked to allocate each statement to one of the dimensions. They were also asked to indicate the degree of confidence in their classification of each item (1= absolutely certain of my classification, 7= not at all certain of my classification). Items wrongly classified by one or more judges and items classified with a level of confidence lower than 5 were removed. This resulted in the elimination of 15 items.

Latent structure and scale purification
A convenience sample of 235 adult consumers was used to assess the latent structure of the scale. A principal components analysis (PCA) was conducted on the scale data. Several factorial solutions were displayed (4, 5, 6, and 7 factors), but based on the scree plot, a solution with four dimensions appeared as the most appropriate. Because the total number of items was still high (41 items), additional purification steps were taken which led to a final set of 19 items. An additional PCA was conducted and revealed that a four factor solution explained 64.96% of the variance, with the first factor accounting for 32.01% of the variance, and the fourth factor accounting for 8.61% of the variance. The reliability coefficients of the factors varied between 0.747 and 0.876.

Psychometric properties of the scale
Stability checks. The stability of the factor structure was assessed by conducting separate PCAs among different subgroups of the sample, e.g. males and females, younger (37 years and less) and older participants. In addition, other extraction methods (principal axis factoring, maximum likelihood) were used to analyze the scale data. In general, the factor structure was found to be very stable across age, gender, and factor extraction methods.

Construct validation study. Discriminant validity was evaluated using responses to three measures that are similar but conceptually different from the desire for consumption objects: materialism (Richins 1986), consumer impulsiveness (Rook and Fisher, 1995), and consumer innovativeness

(Ahmed, d'Astous, and Eljabri 2002). A factor analysis was performed on the entire set of items, i.e., the items of each concept and the 19 items of the developed scale. As expected, each item loaded on its appropriate concept.

Survey
The objectives of this final phase of research were (1) to confirm the factor structure of the scale, and (2) to further assess the scale's stability and psychometric properties. To achieve these objectives, a survey was conducted among a sample of 261 French-Canadian adults. A principal components analysis incorporating a varimax rotation was conducted on the scale data. The total variance explained by the four factors was equal to 73.05%. The reliability of the affective and cognitive dimensions, as assessed by Cronbach's alpha coefficient, was very good, ranging from 0.84 to 0.93. The stability of the factorial structure was evaluated through a series of PCAs conducted with various sub-groups and discriminant validity was examined through PCAs involving items of related concepts (e.g., materialism, impulsiveness, and innovastiveness). In general, the results of these analyses confirmed that the scale was stable and that its items were not associated with other related concepts.

CONCLUSION AND ANTICIPATED CONTRIBUTIONS
This research is a first attempt at developing a valid instrument to measure the affective and cognitive dimensions of the desire for consumption goods. Several statistical analyses showed that the scale has good psychometric properties. It should therefore be relevant in the context of various streams of research such as materialism, the subjective well-being of consumers, and anti-consumption attitudes.

The relationship between the affective and cognitive dimensions of the desire for consumption goods and materialism is worth studying. Although the two concepts appear to be similar, they have distinct dimensions. The present research will try to further explore the relationship between these two concepts and to study their effects on consumers' subjective well-being.

The developed scale should also be useful to study the impact of consumption desires on aberrant consumer behaviors. These behaviors include credit misuse and abuse, compulsive buying, and the purchase of counterfeit goods (Budden and Griffin, 1996). It would be important to examine whether higher scores on dimensions such as pleasure or discomfort are associated with aberrant behaviors and, if this is the case, how that contributes to incite consumers to engage in these behaviors.

From another perspective, the study of the affective and cognitive dimensions of the desires for consumption goods could bring new insights to the literature of anti-consumption attitudes, especially with regards to voluntary simplicity. Studying the psychological profile and the individual characteristics of consumers who freely choose to embrace this social movement will enable researchers to understand their attitudes and motivations.

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Materialism and Maladaptive Psychosocial Tendencies: What Accounts for the Relation?
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Research has indicated that materialism is related to maladaptive psychological tendencies and may be detrimental to human optimal functioning. In this paper, we seek to examine what may account for materialism's harmful associations. First, we examine whether materialism's harmfulness is mainly accounted for by the nature of people's relationships with the material world (i.e. an overly high emphasis on external entities and attributes) that characterizes materialism in general. This would be consistent with a "crowding-out" hypothesis, which states that given the limited amount of time and attention each individual has, an overly high emphasis on external entities and attributes would distract one from addressing areas in life that are fundamental to well-being (cf. Kasser, 2002). Second, recent findings by Shen-Miller and Saucier (2008) have suggested that materialism is a construct with multiple facets, with each facet characterized by a different way through which materialists relate to the material world. We thus examine whether and which specific facets of materialism are likely to account most strongly for materialism's relations with maladaptive psychological tendencies. Third, we explore Unmitigated Self-Interest (Saucier, 2000), a worldview construct broader than materialism which represents an elevated valuing of self-serving behavior, as accounting for materialism's relations with maladaptive psychological tendencies that may not be completely accounted for by materialism. This is consistent with a "hidden hand hypothesis," which states that what is responsible for materialism's harmful effects may not purely be materialism per se, but a relatively heavy emphasis on self-interest while disregarding the welfare of others and the larger world (cf. Lane, 2000). Further, a content analysis of Unmitigated Self-Interest by Saucier (2008) suggested that the construct contains multiple facets. As such, we also examine whether and which aspects of Unmitigated Self-Interest account for materialism's relations with well-being deficits.

Study One of this paper addresses the research question of which facet(s) of materialism is (are) more likely to account for materialism's relations with maladaptive psychological tendencies most strongly. We have collected data from 711 undergraduate students from the Department of Psychology at the University of Oregon. Multiple facets of materialism content, including: (1) Buying, (2) Possession Guarding, (3) Hoarding, (4) Valuing Money and Status, (5) Valuing Attractiveness and Sexiness, (6) Believing Owning Things Makes for Happiness, and (7) Philosophical Materialism, were measured by a mix of items from multiple materialism scales (Belk, 1984; Richins & Dawson, 1992; Saucier, 2004). Three categories of maladaptive psychological tendencies were measured, including (a) Internalizing Symptoms (with emotional instability, negative emotionality, reversed resiliency as indicators), (b) Externalizing Symptoms (with psychopathy as an indicator), and (b) Well-being Deficits Indicators (with subjective well-being and social well-being as indicators).

Preliminary regression analyses suggested that different aspects of maladaptive psychological tendencies were predicted by different facets of materialism. Whereas Externalizing Symptoms were more likely to be predicted by Buying, Valuing Money and Status, and Valuing Attractiveness and Sexiness, Internalizing Symptoms were more likely to be predicted by Buying, Possession Guarding, and Hoarding. Well-being Deficits Indicators were more likely to be predicted by Believing Owning Things Makes for Happiness. Study Two of this study further addresses the research questions of (a) whether materialism's relation with maladaptive psychological tendencies is accounted for by materialism per se, or Unmitigated Self-interest, and (b) what other aspects of Unmitigated Self-Interest are related to maladaptive psychological tendencies. We have collected data from 632 members of a community sample in the Eugene-Springfield, Oregon, area. Unmitigated Self-Interest was measured by a fifty-two item instrument developed by Saucier (2001), which, in addition to materialist values, measures thirteen other clusters of worldview beliefs, including Absolutism/Monarchism, Animalism, Antiwelfarism, Commercialism, Egoism/Solipsism, Elitism/Plutocracy, Ethnocentrism, Exploitation of Nature, Hedonism, Illusionism, Machiavellianism, and Physicalism. Maladaptive psychological tendencies were measured by Emotional instability, negative emotionality, psychopathy, and subjective well-being scales. Preliminary regression analyses suggested maladaptive psychological tendencies were not only predicted by materialism but also by other aspects of Unmitigated Self-Interest, such as Ethnocentrism, Hedonism, and Machiavellianism.

In sum, this research supported previous findings in that maladaptive psychological tendencies are predicted by materialism. However, materialism's relations with different aspects of maladaptive psychological tendencies tended to be accounted for by different facets of materialism. As such, rather than treating materialism as a unitary construct, it is useful to divide materialism into multiple facets. Further, what accounts for materialism's seeming relations with maladaptive psychological tendencies might not be merely materialism per se, but a self-serving worldview orientation that concerns only an individual's immediate interest and benefits, as characterized by Ethnocentrism, Hedonism, and Machiavellianism. Research questions addressed will be tested more thoroughly through structural equation modeling in the final analyses.

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Upstream Model of Everyday Action and Brand Behavior
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Following a long tradition in academic consumer psychology, current discussions of preferences (e.g., Simonson, 2008; Bettman, Luce & Payne, 2008) address such concepts as brand choice from the standpoint of existing "objects" (goods and services). Regarding the issue of brand behavior, this present paper discusses two issues: 1) the special place within a model of everyday human action of such diverse constructs as attitude, relationship, attachment, commitment, and others including motivation, and selective attention, and 2) how management, in a competitive environment, uses such a model of everyday action, along with a model of the relevant universe, to guide brand strategy. The present approach is based on the premise that marketing and advertising, operating in a competitive environment, build on and adapt to the way people are disposed to allocate their resources (see, e.g., Yang, et al., 2002; Allenby, et al., 2005).

Goods and services fit into people's lives in highly particularized ways, as they serve features of the context in which people engage in the activities of daily living. First, then, we present a model of a single occasion of everyday human action. Starting with a motivational component, the model addresses the function and diverse kinds of condition that allocate human resources to effecting adjustments. Such conditions select the kinds of attribute that the individual believes will improve his/her state of being, and searches for in imagination. As motivational constructs, they direct choice among option(s) that the individual generates and searches for in the current environment selecting one to try to put into effect (action).

Such aspects of the model provide the contemporaneous upstream context for the constructs of attitude, attachment, commitment, relationships as applied to brand strategy and brand use. We then discuss how management uses such a model to generate options for brand strategy and, in a competitive environment, possibly selecting one to invest its resources in, as likely to yield a satisfactory return on investment (ROI). Once strategic direction is selected, management produces the brand and promotes it to targets, i.e., the individuals in a market of prospects for whose conditions the brand has been tailored.

Management's use of the model of action is discussed both at the level of an individual occasion of brand use (i.e., an applied version of the general model of everyday action), and also at the level of the relevant universe. Promoting and delivering the brand involves a two-stage task for marketing and advertising management, i.e., within a population as found in management's domain of geographic interest, marketing management defines a relevant universe within which to 1) study the nature of demand as found (market segmentation) and the existing state of want-satisfaction and 2) select a direction for brand strategy.

Advertising management follows a parallel process as it 1) selects from the general population an audience to which to expose promotional messages, and 2) creates and executes an advertising strategy to engage, within that audience, the attention of targets i.e., those prospects for whose conditions the brand has been formulated. In sum, the paper discusses the contemporaneous behavioral and managerial contexts for a brand application of selected psychological constructs.

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Session: Persuasion – Countering Prejudice, Implicit Attitudes and the Olympics

Examining Prejudice-Reduction Theories in Antiracism Initiatives
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Introduction
Despite decades of legislative reforms pushed by governments and activist groups, current research suggests that racism of all types is still prevalent and permeates all segments of our communities (Billig, 2001). In addition to exclusion of ethnic minorities through racial discrimination from a variety of sectors such as employment and housing, the threat of racist violence has become more imminent for many minority groups (FBI, 2007).

As a result, the last two decades have seen the introduction of a number of new prejudice-reduction strategies employed in a variety of settings ranging from community-based initiatives to national and international anti-racism campaigns on TV, print media and the internet. However, it was suggested that many anti-racism campaigns are ineffective in reducing prejudice (Donovan & Vlais, 2006), may have not have the intended effect on all segments of a community (Pedersen, Walker, & Wise, 2005), or produce negative results because they fail to incorporate current best practices from the prejudice literature (Vrij, Akehurst, & Smith, 2003). Yet, formal evaluations of the campaign material, target audience and effectiveness in reducing prejudice have been infrequent, inconsistent and insufficient (Donovan & Vlais, 2006). In the present study, we identified world anti-racism campaigns and described them in terms of their initiator, components and target group, as well as how they correspond with Duckitt's (2001) multi-level framework for prejudice reduction. We also provide recommendations for practitioners.

Duckitt's (2001) Model for Anti-racism Strategies
Duckitt (2001) suggests that efforts to reduce prejudice should address four causal levels of intervention: (1) perceptual-cognitive, (2) individual, (3) interpersonal, and (4) societal. The perceptual-cognitive level of intervention refers to changing negative social categorizations of racial minorities through favorable personal contact with members of another racial group and establishment of a new shared identity. Prejudice reduction at the individual level attempts to correct false beliefs about out-group members or create cognitive dissonance between a person's perception of him/herself as a tolerant person and his/her racist attitudes. Inter-personal level approaches often promote norms of tolerance, positive media images of minorities, and multicultural educational curricula, as well as facilitation of inter-group contact experiences. Last, the societal level of intervention refers to social activism pushing public policy and anti-discrimination legislation in order to change the social conditions through which minority groups are discriminated against and marginalized.

Qualitative Research
This research involved conducting a content analysis of English-language anti-racism campaign materials available on the Internet. We searched for keywords including "racism," "anti-racism," "discrimination," "xenophobia," "prejudice," "immigrants," etc. We also searched relevant government websites such as the United Nations, Canadian Heritage, and similar websites from other English-speaking countries.

Our search revealed 35 anti-racism initiatives from the United Kingdom, Canada, the United States, Australia, New Zealand, and other countries. The campaigns included a variety of mass-media components such as Public Service Announcements, brochures, newsletters and websites. Many also arranged social events, contests, and concerts to facilitate positive inter-racial contact. A minority of the campaigns incorporated demonstrations and other opportunities for the target audience to help facilitate political change. While most of these were developed by governments and/or activist organizations, some private sector corporations such as Nike, Formula One, Tommy Hilfiger, and United Colours of Benneton have also become involved in developing anti-racism initiatives. Although some of the identified initiatives focused exclusively on conveying an anti-racist statement through the use of catch-phrases, most initiatives also included information about racial minorities and the prevalence of discrimination within a particular community or a country. A smaller proportion of initiatives sought to elicit empathy for racial and ethnic minorities by stressing the difficulties and consequences of racial discrimination and anti-immigrant policies. Many initiatives also encouraged positive inter-racial contact, either through multicultural events or through the use of respected speakers from racial minorities. Anti-racism campaigns devised by activist groups often included some means of encouraging social change through letter writing or participation in public demonstrations and local events. Campaigns were categorized as either (1) individual level, (2) interpersonal level, or (3) societal level.

Individual level strategies (1) were sub-divided into cognition- and affect-driven campaigns. The campaigns aimed at cognition (i.e., RACE – Are We So Different?, All Equal in Diversity), focused on racial equality, the problematic definition of race, roots of racism, and encouraged the audience to think about multiculturalism in a positive manner and celebrate diversity. Affect-driven campaigns (i.e., Fatal Realities of "Fortress Europe", Racism Makes Me Sick) aimed to invoke empathy as a means to reduce prejudice. At the individual level, anti-racism interventions will be most effective if they are context-specific (e.g., specifically targeting racism in employment, or racist slurs in schools) (Guerin, 2005).

Inter-personal level campaign components (2) were subdivided into social influence campaigns relying mainly on mass-persuasion advertisement and campaigns focused on inter-personal contact experiences. Social influence campaigns (i.e., Everyrace, Stand Up, Speak Up) aim to heighten awareness of racism, support norms of tolerance and underline the unacceptability of racism or prejudice. Campaigns facilitating inter-personal contact experiences (i.e., Love Music Hate Racism, Let's Kick Racism Out of Football) provide multicultural contact experiences in which racial

groups are considered equal and gathered for a common cause (music/ soccer). Indeed, anti-racism initiatives should be accompanied by opportunities for the target audience to interact with members of the out-group in a positive context.

Finally, societal level campaigns (3) (i.e., Fight Dem Back, Unite against Fascism) included opportunities for participation in protests against racist acts of far-right political parties and promotion of a left-wing political ideology. More anti-racism initiatives need to include components engaging audiences in activism to promote anti-racist/ anti-discriminatory policies in public and corporate domains, as well as in the media.

Discussion
Our analysis of contemporary anti-racism campaigns revealed that many campaigns continue to use only a limited amount of prejudice-reduction strategies often concentrated on changing individual cognition/affect and downplaying the inter-personal and societal context in which prejudice is conceived. Incorporating campaign components addressing individual, inter-personal and societal level racism, in conjunction with better adherence to the socio-psychological prejudice literature may be key to the development of more effective anti-racism campaigns in the future.

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Explicit and Implicit Attitude Formation Through Advertising
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Introduction
The advertising paradigm is a means by which people form attitudes about an unknown attitude-object.To investigate how explicit and implicit cognitions apply in the domain of marketing, the advertising paradigm was appropriated in an experimental setting to examine the formation of explicit and implicit attitudes towards a brand.

Study 1
We sought to examine how explicit and implicit attitudes form towards an unknown brand (a fictional bottle of wine) as a result of exposure to different kinds of marketing material. It was expected that as they were exposed to more detailed and higher quality of information, they would have increasingly positive attitudes toward the brand.

Method
Undergraduate students from Ajou University, South Korea, were assigned to one of four conditions. After completing pretest measures (semantic differential and an IAT about "Cultura" a bottle of wine fabricated for the study) they were either; given a 10 minute break (control N=55), given a brochure that contained information about the region in which the wine is made (low, N=31), given the brochure and a bottle of wine with a convincing label (medium, N=35) or given a brochure with tasting notes, expert opinions and a bottle of wine with a convincing label (high, N=34). Participants then completed posttest measures identical to pretest measures.

Results and Discussion
A difference score between the posttest measures and the pretest measures were subjected to a one-way analysis of variance. Results for the semantic differential indicated that all manipulation conditions resulted in a favorable attitude toward "Cultura" compared to controls $F(3, 143)=19.23$, $p=10-9$, but there were no differences among manipulation conditions. Identical analysis of the IAT showed that there was no positive implicit preference toward "Cultura" in all of the manipulation conditions $F(3, 150)=.93$, $p=.43$. While it is clear that explicit but not implicit attitudes could be formed by examining brochures and seeing the product, it may be difficult to draw conclusions from this study alone because either the fabricated materials may not have been convincing or there may be a confound about how the participant feels about "Cultura" and red wine in general.

Study 2
Study 2 sought to replicate Study 1 while addressing the concerns above. Information about a real, but unfamiliar brand of wine (Penfolds) was given to participants through a website which they believed was the company's own homepage.

Method
Undergraduate students from Ajou University, South Korea, participated in the study. After completing pretest measures (semantic differential, thermometer scales, IAT) about a real but unfamiliar brand of wine "Penfolds", they were randomly assigned to one of three conditions; a ten minute break (control, N=28), exposure to a website which they believed was real with little information (low, N=26) and exposure to a website with detailed information (high, N=27). Participants then completed posttest measures identical to pretest measures.

Results and Discussion
The pattern of results replicated findings in Study 1. Both semantic differential and thermometer scales indicated that while more positive than control, there were no differences among manipulation groups $F(2, 81)=13.02$, $p=10-4$, $F(2, 80)=6.83$, $p=.002$. In addition, there were no positive implicit attitudes about "Penfolds" compared to controls $F(2, 80)=.98$, $p=.38$. Marketing materials enhance explicit, but not implicit attitudes.

Study 3
In Study 3, we introduced a second real but unfamiliar brand of wine in an attempt to create a situation where participants had to evaluate between a brand of wine they were given information about and another which they were told existed, but were given no information about, in the hope of making the target brand appear more favorable.

Method
66 undergraduate students from Ajou University, South Korea participated in the study. All procedures were identical to Study 2 except at pretest, where they were told about a second brand of wine "Yalumba". However, they did not receive information of any kind about this brand. They completed two sets of semantic differential and thermometer scales, one about "Penfolds" and one about "Yalumba". The IAT assessed implicit attitudes towards "Penfolds" versus "Yalumba".

Results and Discussion
The pattern of results indicated no preference toward either product. Semantic differential and thermometer scales showed preference toward "Penfolds" compared to controls, $F(2, 63)=2.05$, $p=.14$, $F(2, 63)=1.93$, $p=.15$ respectively, and in addition, there were no implicit preferences toward "Penfolds" compared to controls $F(2, 63)=.76$, $p=.47$.

Study 4
Since one-time exposure toward a brand did not increase implicit attitudes in previous studies, we sought to artificially associate a brand with positive valences through supraliminal priming. It was thought that repeated associations between a brand and positive valences, rather than a single positive exposure would enhance implicit attitudes, in line with the definition of implicit cognitions (Greenwald et al., 1998).

Method
Undergraduate students from Ajou University, South Korea participated in the study. After completing pretest measures (identical to Study 4), they were assigned to one of two conditions:- a "Penfolds" biased priming condition (N=28), and a "Yalumba" biased priming condition (N=27). In the priming conditions, participants were exposed to 100 pairings of a brand with a positive word, and 100 exposures of the other brand, without any evaluative pairing. Participants then completed the posttest measures, identical to pretest measures.

Results and Discussion
Results indicated that supraliminal priming had positive effects on both explicit and implicit attitudes. Both semantic differential and thermometer scales showed preference towards the biased brand $F(1, 53)=28.88$, $p=10\text{-}5$, $F(1, 53)=21.37$, $p=10\text{-}4$. The IAT indicated that participants implicitly preferred the experimentally biased brand $F(1, 53)=5.50$, $p=.02$.

General Discussion
While reading marketing material about a brand can influence explicit attitudes, it could not positively influence implicit attitude. However, repeated associations between a brand and positive experiences may enhance not only explicit but not implicit attitudes. The pattern implies consumers form positive explicit attitudes about a brand from consciously gathering information about a brand, but that quantity or quality of information may not necessarily result in a more positive view. Implicitly, consumers may need higher frequencies of positive interactions with a brand beyond quality or quantity of marketing material.

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Effect of Sponsorship of Important International Events (Olympics) on Brand Awareness, Attitudes, and Purchase Intentions

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There is a common understanding within the practitioners' world that sponsoring an international event positively impacts on consumer's brand awareness, brand attitude, and purchasing intention. However, not many academic studies have addressed this topic yet. In addition, due to the lack of empirical study on such topic, what still remains unknown is the magnitude of the impact of international events on marketing elements. Thus, the current study was interested in investigating and empirically testing the psychological consequences of the Olympics for consumer's awareness, attitude, and purchasing intention of the Olympic sponsor brands.

50 college students in the U.S. took a survey online approximately two weeks after the 2008 Beijing Olympics. They were exposed to ten Olympic sponsors' logos, such as GE, Coca-Cola, Visa, etc. In addition, they were also exposed to ten non-sponsors' logos from the same product categories as the sponsors' brandsl. For each logo, they were asked to rate their familiarities, attitudes, and purchasing intentions toward that brand.

Furthermore, this test also involved a priming manipulation in which half the participants were primed with a Beijing Olympic promotional video while the other half was not primed. This priming effect was thought to make the impact of the Olympics more immediate. Therefore, any priming effect in the test was expected to exaggerate the Olympic effect on the attitudes between the sponsor brands and the non-sponsor brands. Therefore, we hypothesized that

H1a: Consumers will have higher level of brand awareness on Olympic Game sponsors' brands than non-sponsors' brands.
H1b: Such gap of brand awareness will be higher in the priming group than in the control group.

H2a: Consumers will have higher level of brand attitudes on Olympic Game sponsors' brands than non-sponsors' brands.
H2b: Such gap of brand attitude will be higher in the priming group than in the control group.

H3a: Consumers will have higher level of purchasing intentions on Olympic Game sponsors' brands than non-sponsors' brands.
H3b: Such gap of purchasing intention will be higher in the priming group than in the control group.

The data collection has been completed. Currently, we are in the process of cleaning up, organizing, and analyzing the data and should be ready to present our findings at the 2009 APA conference in August. This is arguably the first study which empirically tests the magnitudes of the impact of an international event on consumers' awareness, attitudes, and purchasing intentions of sponsors' brands. This study fills in the blank of relevant theory in marketing literature and contributes to marketing practice in various ways.

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